

**SoFIE-Health Baseline Report: Study Design and  
Associations of Social Factors and health in Waves  
1 to 3.**

**SoFIE-Health Report 2**

*Version 1.0*

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### ***Statistics New Zealand Security Statement***

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### ***Reference***

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# Chapter 1 Introduction

## 1.1 Background

There are a number of well established socio-economic determinants of health inequalities.(Marmot, 2005) However, many of the determinants are inter-related and inter-twined and can not be examined in isolation, such as through cross-sectional analyses. We have the opportunity to examine the co-relationships between the socio-economic determinants of health and the effects of changing determinants and changing health using longitudinal data. Determining what changes in social factors are associated with changes in health status has much greater validity for causal inference than cross-sectional survey analyses.

## 1.2 Purpose of Report

The main objective of this report is to compile information from the Statistics New Zealand led Survey of Family, Income and Employment (SoFIE) study along with the SoFIE-Health sub-study. This report focuses on the first of the three main goals of SoFIE-Health, determining the impact of labour market factors, asset wealth, income and family dynamics on health. Baseline tables of numbers of the original SoFIE cohort are produced to provide estimates of the association of socioeconomic status and early changes in socioeconomic status with health outcomes, among participating original sample members (OSMs) at Wave 3. This will provide a basis for planning and future analyses of longitudinal changes in socioeconomic status and changes in health status. The primary audience for this report is users of the SoFIE-Health data. Note: the numbers presented in this report are not weighted to the New Zealand population or age- or sex-adjusted.

## 1.3 Structure of Report

This report is mainly an archival document to be used for planning future and more complex longitudinal analyses. This report:

- Describes the SoFIE study and the SoFIE-Health substudy
- Describes the modules and variables collected within the study
- Provides an investigation into attrition in the SoFIE study

- Provides a detailed analysis of the health measures
- Provides an extensive list of cross-tabulations of socioeconomic variables, by health measures by demographics.

#### **1.4 The SoFIE study**

Statistics New Zealand was granted funding from the Foundation for Research, Science and Technology in 1997 to conduct a feasibility study for a longitudinal survey of income, employment and family dynamics. Following on from the feasibility study, the SoFIE study was developed and first went into the field in October 2002. SoFIE is the largest longitudinal survey ever run in New Zealand.

SoFIE is a single fixed panel longitudinal survey with an expected maximum duration of eight years. It will collect information once a year from the same individuals on income levels, sources and changes; and on the major influences on income such as employment and education experiences, household and family status and changes, demographic factors and health status. Every two years (Waves 2, 4, and 6) it will also collect information on assets and liabilities to monitor net worth and savings. Every other year it will collect detailed information on health.

The overall objective of SoFIE is to provide information about changes over time in the economic well-being of individuals and their families, and about factors influencing those changes.

The longitudinal objectives of the SoFIE are to:

- identify the pattern of income level experience over time for individuals and their families
- measure significant shifts in income levels for individuals and their families and explore the relationship of these shifts to labour market activity, receipt of government income support and family status
- determine patterns over time of labour market activity, participation in education and training, and receipt of government income support

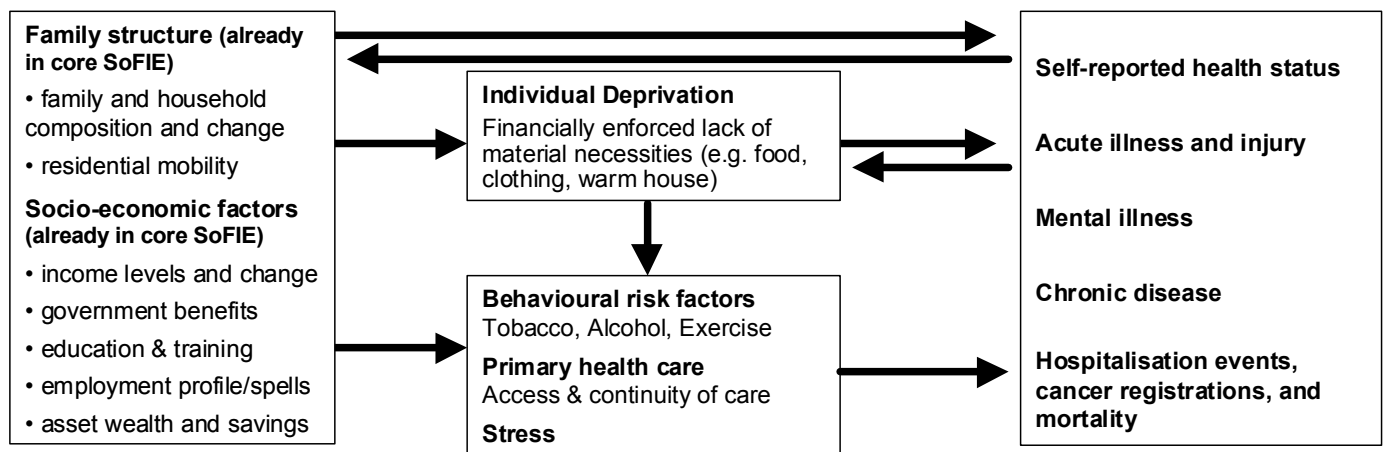
- identify transitions between spells of labour market activity, education and training participation and receipt of government income support, and examine the factors that influence transitions from one status to another.
- determine patterns of saving for retirement and relate these to income dynamics and life cycle stages
- determine patterns of change in family status.

The cross-sectional objectives of the SoFIE, are of lesser priority and concern the measurement and estimation of distributions and relationships at points in time for:

- individual, family and household income
- family and household composition
- labour market activity
- assets and liabilities

### **1.5 SoFIE-Health**

In 2003 researchers from the Department of Public Health, Wellington School of Medicine and Health Sciences, University of Otago, applied for funding from the Health Research Council (HRC) of New Zealand to add on a health module to the core SoFIE questionnaires to be asked every alternative year. The SoFIE-Health add-on is comprised of 20 minutes of questionnaire time in waves 3 (2004-05), 5 (2006-07) and 7 (2008-09), in the following health-related domains: health status (SF36 & Kessler scale), perceived stress, chronic conditions (heart disease, diabetes, and injury-related disability), tobacco smoking, alcohol consumption, health care utilisation, and access and continuity of primary health care, and an individual deprivation score.



**Figure 1: Domains of SoFIE-Health**

In Figure 1 the information on family structure and socio-economic factors is placed on the left of the diagram, and constitutes the ‘upstream determinants’ of health already collected by the core of SoFIE. In the mid-stream determinants (data collected by the SoFIE-Health) are individual deprivation, behavioural risk factors, primary care and stress. The right-hand box includes measures of self-reported health status and disease outcomes. The arrows identify likely causal relationships. Note that these domains cover in some way all four possible intervention points to reduce social inequalities in health identified by the Ministry of Health strategy for reducing inequalities in health.

### **1.5.1 Goals and Objectives**

There are three major and ongoing goals within SoFIE-Health: (1) Determining the impact of labour market factors, asset wealth, income and family dynamics on health; (2) Determining the impact of health status on labour market factors, income trajectories, asset wealth and family dynamics; (3) Determining the contribution of access, continuity and co-ordination of primary health care to health status and to social inequalities in health. Within these goals are a number of objectives funded by the HRC for 2004-08 inclusive.

#### **Goal 1: Determining the impact of labour market factors, asset wealth, income and family dynamics on health**

Objective 1: Do labour market factors such as hours of work and job separations influence subsequent health status?

Objective 2: Does change in income predict change in self-rated health?

Objective 3: How do labour market factors, family structure, asset wealth and income trajectories relate to health risk factors and health status?

**Goal 2: Determining the impact of health status on labour market factors, income trajectories, asset wealth and family dynamics**

Objective 4: Does pre-existing health status predict labour market, income and family mobility?

Objective 5: Do sex, ethnicity, and socio-economic position buffer the impact of pre-existing health status on subsequent labour market, income and family mobility?

Objective 6: Does pre-existing health status predict job separations for respondent-reported reasons other than “health status”?

**Goal 3: Determining the contribution of access, continuity and co-ordination of primary health care to health status and to social inequalities in health**

Objective 7: Are access to, continuity and coordination of primary care associated with better health?

Objective 8: Do access, continuity and coordination of primary health care explain some of the associations of ethnicity, family structure, and socio-economic factors with health?

The remainder of this section considers the justification and rationale for these objectives for the 2004-08 period.

*Goal 1: Determining the impact of labour market factors, asset wealth, income and family dynamics on health*

*Objective 1: Do labour market factors such as hours of work and job separations influence subsequent health?*

Aspects of labour market position cause adverse health outcomes. For example, job insecurity was associated with poorer health outcomes in the Whitehall II study (Jane E. Ferrie, Shipley et al., 2005; J. E. Ferrie, Shipley et al., 2002) and unemployment has been associated with poorer mental health and higher suicide rates.(T. A. Blakely, Collings et al., 2003; Fergusson, Horwood et al., 1997; Fergusson, Horwood et al., 2001; Graetz,

1993; Montgomery, Cook et al., 1999) However, it has been shown in a British panel study of workers “that in general temporary work conditions and part-time employment did *not* have long-lasting detrimental health effects on male or female workers in 1990s Britain.”(Bardasi & Francesconi, 2004) Injury rates, in particular work-place fatalities, have been found to vary greatly between occupations, with the different occupational structuring between Māori and non-Māori explaining crude ethnic differences.(McCracken, Feyer et al., 2001)

Labour market characteristics throughout the world have changed dramatically. In New Zealand structural reforms of the labour market during the 1980s and 1990s led the world in both speed and extent of change.(Belich, 2001) Coincident with the first waves of data collection for SoFIE, New Zealand has been undergoing one of the largest economic expansions in decades, with record low levels of unemployment. The effect of these reforms on health is largely unknown. SoFIE-Health will determine:

- The association of a range of labour market factors (e.g. hours of work, multiple job changes, working at two or more jobs simultaneously) with mental and physical health status, and health risk factors (e.g. patterns of alcohol consumption and exercise).
- Whether any such associations vary by age, sex, ethnicity, and baseline socio-economic position. We hypothesise that the impact of labour market factors on health will be more marked among Māori, Pacific and lower socio-economic groups.

*Objective 2: Does change in income predict change in self-rated health?*

Higher incomes are generally associated with better health status.(Backlund, Sorlie et al., 1996; T. Blakely, Kawachi et al., 2004; Lynch, Kaplan et al., 1997; Martikainen, Makela et al., 2001; Sorlie, Rogot et al., 1992) However, income is associated with many other things that may affect health, such as education and labour force status. One way to examine whether income has a causal association with health is to look at the impact of income change on changing health status. This requires longitudinal studies rather than the more common cross-sectional study designs. A review of longitudinal studies found that most studies demonstrated that when income decreases, a subsequent deterioration in health status is more likely.(Benzeval & Judge, 2001) The independent association of income with health can also be estimated by controlling for possible confounders – most

such studies still find a persistent, albeit much reduced, association with health.(Benzeval & Judge, 2001; Martikainen et al., 2001) Our current work demonstrates a relatively modest association of income with mortality after adjusting for labour force status in New Zealand.(T. Blakely et al., 2004) However in New Zealand there are few longitudinal studies that enable research into the effects of income on health. SoFIE-Health's best assessment of the income-health relationship will occur after 2008. However, waves 1 to 3 in SoFIE include income and the single-item self-rated health question: "In general, how would you say that your health is: Excellent, Very Good, Good, Fair, Poor". This allows us to undertake some longitudinal repeated measures analyses examining change in both income and health. We will also examine whether health status at wave 3 is more strongly predicted by current, 3-year average, or changing (decreasing or increasing from wave 1 to 3) income. Based on similar international research,(Benzeval & Judge, 2001; P. McDonough & Berglund, 2003; P. McDonough, Duncan et al., 1997) we hypothesise that average income and decreasing income will be the stronger predictors of health status than, say, a one-off dip in income.

*Objective 3: How do labour market factors, family structure, asset wealth and income trajectories relate to health risk factors and health status?*

In addition to the two objectives above, there are many other possible baseline associations of social trajectories in waves 1 to 3 with health status and risk factors that may be of interest to researchers and/or policy makers. Some particular research questions include:

- What is the association between asset wealth and health risk factors and health status?
- Do income and asset wealth have independent or interacting associations with health status?
- What is the (independent) association of individual deprivation with health status and risk factors?
- Are ethnic variations in health explained by a range of socio-economic variables over a three year period, or is there still residual variation attributable to other factors (e.g. racism(C. Jones, 2001; Nazroo, 2003; D. R. Williams, 1999))?
- What is the association of particular family or whanau structures with health status?



*Asset wealth* is often speculated to be a more important determinant of health than income because it is a better measure of long-run income and of overall material resources. There is little research on the independent associations of income and asset wealth, however one study has shown an independent association of both with mortality.(Menchik, 1993) Few studies include measures of income, asset wealth and health. Instead, housing tenure and car access are used as proxies for asset wealth.(Filakti & Fox, 1995; Goldblatt & Fox, 1979; Macintyre, Hiscock et al., 2001) SoFIE-Health is well placed to explore the effect of asset wealth compared to other socio-economic factors, including the nature of the asset wealth, for example liquid versus fixed assets (although that distinction may be blurred), and Māori assets such as land. The breadth of the SoFIE data will allow a consideration of the prerequisites for or barriers to acquiring important assets (e.g. individuals' education and income/ expenditure patterns), incorporating a life-course perspective to the association of assets (and overall material factors) with health status.

Explanations for why health status varies by ethnicity are the subject of increasing research and policy interest.(Carr, Robson et al., 2002; Reid, Robson et al., 2000; Te Rōpū Rangahau Hauora a Eru Pōmare, 2000) The inequitable distribution of socio-economic factors explains only part of these ethnic differences.(C. Jones, 2001; D. W. Jones, Sempos et al., 2000; Reid et al., 2000) SoFIE-Health includes a rich inventory of socio-economic and family variables to explore as potential contributors to ethnic health inequalities.

Likewise, does health status change following change in marital status? There is a well established association between marital status and health, psychological well-being and longevity(Wade & Pevalin, 2004; K. Williams, 2003), but it is not clear whether the association is due to selection into marriage or protection of marriage.(Joung, van de Mheen et al., 1998; Lillard & Panis, 1996) Using the longitudinal nature of the SoFIE data we can explore the role of health selection in marital transitions,(Joung et al., 1998) as well as changes in health outcomes (particularly mental health) after marital transitions.(Strohschein, McDonough et al., 2005; Wade & Pevalin, 2004)

*Goal 2: Determining the impact of health status on labour market factors, income trajectories, asset wealth and family dynamics*

Good health is a desirable goal, at both personal and societal levels, is a broadly agreed human value. The Ottawa charter conceives health as a resource for everyday living, rather than an objective for living. Good health is a major resource for social, economic and personal development and an important dimension of quality of life. Yet, the contribution of health to the social and economic well-being of New Zealanders has been little researched. SoFIE-Health provides a unique opportunity to examine how the health of New Zealanders impacts on their employment, income and other economic measures, and, in turn, contributes to the social and economic wellbeing of the country as a whole. At another level, there has been considerable debate in the research literature over the dynamic relationship between health and socio-economic outcomes, and the contribution of two apparently opposite explanations for the observed social inequalities in health.(Blane, 1999; Fox, Goldblatt et al., 1985; Manor, Matthews et al., 2003; Martikainen & Valkonen, 1999; Peggy McDonough & Amick, 2001; Townsend, Davidson et al., 1988; van de Mheen, Stronks et al., 1998; van de Mheen, Stronks et al., 1999)

While there is a broad consensus from the literature that health selection exists (although it is not thought to ‘explain’ inequalities in adult health),(Cardano, Costa et al., 2004; Chandola, Bartley et al., 2003; Hammarstrom & Janlert, 2005; Manor et al., 2003; Peggy McDonough & Amick, 2001; van de Mheen et al., 1999) there is considerable heterogeneity reported in the experience of this phenomenon. For example some studies report that health selection occurs within occupational class structures,(Chandola et al., 2003) others have found it is important for overall labour market participation.(Peggy McDonough & Amick, 2001; van de Mheen et al., 1999) Other studies have noted that health selection is an inconsistent experience: varying by gender, education and ‘ethnicity’, (Cardano et al., 2004; Hammarstrom & Janlert, 2005; Peggy McDonough & Amick, 2001) and may be more important at some points in the lifecourse than others.(Manor et al., 2003; Power, Matthews et al., 1998; van de Mheen et al., 1999) We are interested in whether trajectories in socio-economic and social factors (e.g. income,

labour force status, family make-up) change following a new major health event (health selection).

*Social causation* explanations posit social and economic factors as causing poor health and higher mortality. *Health selection* explanations argue that poor health results in unemployment, lower income, poorer educational achievement, less opportunity to marry and other social disadvantages. (Goldblatt, 1989; Goldblatt & Fox, 1979; Koivusilta, Arja et al., 2003; Anton E Kunst & Groenhof, 1996; Manor et al., 2003; Peggy McDonough & Amick, 2001; Pless, Power et al., 1993; van de Mheen et al., 1999) Health selection, depending on the type and social context, may increase or decrease the measured association between socio-economic status and health or mortality. (Arrow, 1996; Bartley, Blane et al., 1997; T. Blakely & Fawcett, 2005; T. A. Blakely, Kiro et al., 2002; Cardano et al., 2004; Elstad & Krokstad, 2003; A. E. Kunst, Groenhof et al., 1998; Manor et al., 2003; Martikainen & Valkonen, 1999) For example, health selection out of the labour force tends to (spuriously) reduce the measured association of occupational class with health as people from lower occupational classes are more likely to leave work in the event of poor health (i.e. differential health selection). Understanding the impact of health on socio-economic outcomes is thus integral to understanding the very processes by which socio-economic disparities in health are produced and maintained.

*Objective 4: Does pre-existing health status predict labour market, income and family mobility?* This will describe how labour market participation, income trajectories, and family dynamics over the wave 1 to 3 period vary by pre-existing health status (hospitalisations and cancer registrations up to wave 3, and self-rated health in wave 1).

*Objective 5: Do sex, ethnicity, and socio-economic position buffer the impact of pre-existing health status on subsequent labour market, income and family mobility?* This examines the variation in impact of health on social mobility by baseline socio-economic characteristics and ethnicity, and the moderating influence of asset wealth on associations. We aim to identify circumstances where health selection mechanisms contribute to, or mediate, SIH in New Zealand, and also throw some light on those types of mobility (not necessarily the same) that might be most amenable to intervention to reduce SIH.

*Objective 6: Does pre-existing health status predict job separations for respondent-reported reasons other than “health status”?* This follows an analysis by Magee (2003)(Magee, 2003) of the Canadian Survey of Labour and Income Dynamics (the international study upon which SoFIE was most closely modelled) that specifically analyses whether health status predicts job separations. In addition to a detailed employment history, SoFIE asks about reasons for job and labour market transitions, including “health reasons”. One would expect a strong association of pre-existing health status with the respondent reporting poor health as a reason for leaving a job. However, some interesting and policy-relevant questions lie behind this starting point:

- are job separations for non-health related reasons occurring more commonly among those with a pre-existing health condition, and do any such associations point to either discrimination on the basis of health status or mechanisms that might be amenable to policy intervention?
- are job separations reported to be for health reasons more likely to occur in certain occupation groups or ethnic groups?

This Goal is not a major focus of the current report and will be reported in a series of papers.

*Goal 3: Determining the contribution of access, continuity and co-ordination of primary health care to health status and to social inequalities in health*

There has been a tendency for social epidemiological frameworks to de-emphasise the role of health services as determinants, or mediators, of health status. This is despite a well-established body of international evidence that suggests that primary care, in particular, is important both for health status and SIH. For instance, numerous ecological (Gulliford, Figueroa-Munoz et al., 2002; Macinko, Starfield et al., 2003; L. Shi, 1994; L. Shi & Starfield, 2001; Starfield, 2002) and multi-level studies (L. Shi & Starfield, 2000; Leiyu Shi, Starfield et al., 2002) in the US and elsewhere have established associations between primary care and population health. At an individual level, research linking the

defining attributes of primary care with health has also demonstrated associations between accessibility,(Franks & Fiscella, 1998) continuity(Hjortdahl & Laerum, 1992; Mainous, Baker et al., 2001; Parchman, Pugh et al., 2002; Safran, Taira et al., 1998) and coordination(Safran et al., 1998) with health outcomes. These studies, however, have a number of limitations: 1) conclusions about causal relationships between primary care attributes and health outcomes, such as ambulatory sensitive hospitalisations, cannot be made using cross-sectional data; 2) most studies are limited by selective samples and disease-specific outcomes; 3) the different attributes of primary care have not been studied to the same extent; 4) there is little evidence related to the contribution of primary care to reducing health inequalities; 5) there is lack of consistency in measurement of primary care attributes; 6) there is a paucity of evidence that grounds the international experience in the New Zealand context. Therefore, policy makers in New Zealand (and elsewhere) have an inadequate knowledge base to draw on for directing changes to primary care service delivery. For example, should primary care contracts place emphasis on continuity of care with an individual practitioner (GP or nurse) – that is, should there be an on-going personal relationship between a patient and a practitioner? Or alternatively, should contracts focus on team-based care that might diminish the strength of individual one-to-one relationships? In order to address the limited knowledge base, we will explore the relationship between primary care and health outcomes in New Zealand to inform continuing policy development.

There are two primary care objectives that relate to four groups of questions in SoFIE-Health: a) extent of affiliation with a primary care provider, first contact access and first contact utilisation, b) continuity of care, c) co-ordination of care, and d) financial barriers to access. Specific research questions that will be addressed in the 2004-08 period, by objective, are:

*Objective 7: Are access to, continuity and coordination of primary care associated with better health?*

- What are the associations between affiliation with a primary care provider and health status (mental health, chronic diseases, recent hospitalisation, and mortality)?
- What are the associations between separate primary care attributes (access, continuity and co-ordination) and health outcomes?

*Objective 8: Do access, continuity and coordination of primary health care explain some of the associations of ethnicity, family structure, and socio-economic factors with health?*

Do access to, continuity and coordination of primary care mediate the relationships between:

- ethnicity and health?
- family and whanau structure and health?
- socio-economic factors and health?

These research questions will determine the differences in health status between those people affiliated with (or not) a primary care provider (including PHOs), and between people reporting varying levels of access, continuity and co-ordination of care. In the out-years of SoFIE-Health, we will use the longitudinal data to delineate the causal direction of these associations.

This Goal is not a major focus of the current report and will be reported in a SoFIE-Health primary Care report and a series of papers.

### **1.5.2 Relevance to Health**

The SoFIE-Health study will contribute knowledge to bridge existing gaps in our understanding of the inter-relationships between health and social and economic well-being. The objectives of SoFIE-Health aim at reducing health inequalities and enhancing primary health care.(Ministry of Health, 2000, 2001, 2002) There is a paucity of information on the movement of at-risk people between different occupational groups, and movement in and out of paid employment, and the consequent effects on health. Māori and Pacific people are also over-represented in jobs where the work environment is likely to have a negative impact on health and well-being. The need for longitudinal studies to explore the effects of income on health has been identified by the Treasury and the Ministry of Social Development. For example, a Ministry of Social Development report concluded that for child social outcomes, improvements (including health) “the residual effects [of income] are generally small to modest on most outcomes. For some outcomes, such as health, there is too little research to draw strong conclusions about the effect of income.”(Mayer, 2002) Judge and Patterson (2001) in a Treasury-commissioned report concluded that public health research had paid too little attention to health selection, and often failed to include a time dimension and longitudinal data.(Judge &

Paterson, 2001) Pointing to the lack of evidence on the health effect of income per se, they form the view that “this is a hugely important research priority that demands much more attention in the future”.(p. 27, ref (Judge & Paterson, 2001))

SoFIE-Health will also contribute to our understanding of social trajectories associated with physical disability, mental illness and chronic illness among adults. In comparison with longitudinal studies of (principally) labour market and income internationally (e.g. Canadian Survey of Longitudinal Income Dynamics, US PSID), the health module in SoFIE-Health is more extensive in the measurement of health status and risk factors. Of particular note, the inclusion of a sizable primary health care module gives SoFIE-Health a distinctive point of difference from other longitudinal studies.

## Chapter 2 Methods

This Chapter is divided into six sections. The first describes the SoFIE cohort, sampling design, data collection methods and common definitions used throughout this report. The second section describes the core variables, such as demographics, income, education, labour force status, which are asked at every wave. The third section describes the asset and liabilities module which is asked at waves 2, 4, 6 and 8. The fourth section describes the scales and variables that were included as part of the SoFIE-Health add-on, such as the Short Form (SF) 36, Kessler 10, chronic disease status, and primary care assessment, which are asked at waves 3, 5 and 7. The fifth section describes the longitudinal and survey variables that have been created to allow for the sampling methods, longitudinal attrition across the survey and imputation and derivation of core variables. Finally, a description of the analyses undertaken is provided in the final section.

### 2.1 The SoFIE Study

As mentioned earlier this study utilises data from the SoFIE study which is a single fixed panel longitudinal survey with an expected maximum duration of eight years, run by Statistics New Zealand.

#### 2.1.1 Cohort

The target population for SoFIE is:

*the usually resident population of New Zealand living in permanent, private dwellings on the main islands in the North and South Islands, including Waiheke Island as at the first wave of the panel.*

The survey excludes overseas visitors resident in New Zealand for less than 12 months and who intend to stay in New Zealand for less than 12 months; non-New Zealand diplomats and diplomatic staff and their dependants; members of non-New Zealand armed forces stationed in New Zealand and their dependants; and people living in institutions or in other non-private dwelling establishments such as boarding houses, hotels, motels and hostels, as well as people living on offshore islands (excluding Waiheke Island). The cross-sectional population for a particular wave, wave  $t$ , can



therefore be defined as: the usually resident New Zealand population living in permanent, private dwellings, as at wave  $t$  of the panel.

## **2.1.2 Sampling**

### *Sampling frame*

SoFIE used the standard Statistics New Zealand sampling frame used for other Statistics New Zealand household surveys. This frame partitions the North Island, South Island and Waiheke Island into approximately 19,000 small geographical areas known as Primary Sampling Units (PSUs). On average, a PSU contains around 70 dwellings, but each can range in size from 30 to 260 dwellings. The only areas not included in this sampling frame are offshore islands (except Waiheke Island) and very remote areas of New Zealand.

### *Sample selection*

The selection of the random sample for SoFIE was a three-stage process. Firstly, PSUs were assigned to groups called strata according to region, urban/rural, high/low Māori population density and other socio-economic variables derived from the most recent census. Then systematic sampling was used to select a sample of PSUs independently from each stratum.

The next stage of sampling involved taking a systematic random sample of permanent private dwellings within the PSUs selected. All of the eligible residents of each selected household who agreed to participate were then included in the sample. These people were designated as OSMs and will be followed and interviewed over time. The sample comprised 1,500 primary sampling units (PSUs), with an average 7.7 (full and partially) responding households obtained per PSU.

### *Sample Size*

For wave 1 of SoFIE a total of 15,000 randomly-selected households were approached, of which approximately 11,500 agreed to be interviewed (response rate of 77%), with data collected from over 22,000 individuals aged 15 and over. All individuals who were asked and responded to the Wave 1 interview were Original Sample Members (OSMs).

Children under the age of 15 at Wave 1 are interviewed as OSMs from Wave 2 onwards

once they have had their 15th birthday. All OSMs are reinterviewed in subsequent years, regardless of changes in their place of residence. Other members of an OSM's household who are not OSMs ('non-OSMs') are interviewed from Wave 2 onwards while they remain living with an OSM. Non-OSMs are asked a reduced set of questions and are not followed up if they leave the OSM's household.

### **2.1.3 SoFIE Questionnaires**

SoFIE is conducted using computer-assisted interviewing (CAI). In the field, interviewers use laptop computers to administer an electronic questionnaire (EQ), face-to-face, in respondents' homes. The EQ is organised into modules (a module is a series of questions on a particular topic).

There are two sets of questionnaires to SoFIE. For every household selected, a Household Questionnaire (HQ) is firstly administered to a single adult OSM, which includes questions on the characteristics of the entire household, and then a Personal Questionnaire which was administered to every person aged 15 and over. In general, each adult answers their own Personal Questionnaire. However, in some cases a proxy is allowed to fill in the Personal Questionnaire for someone else, for reasons such as disability or language difficulties. Children (aged 14 or younger at the household enumeration date) do not fill out a Personal Questionnaire. Instead, the parent/caregiver nominated to answer for the child(ren) in the Household Questionnaire is asked a child module for each child as part of their Personal Questionnaire. Once a child turns 15, they answer the full PQ.

A copy of the questionnaires can be found on the SoFIE website: [www.stats.govt.nz/sofie](http://www.stats.govt.nz/sofie)

The HQ is answered by one OSM in each household. It consists of two modules, the first of which is used to determine family type and household composition at the time of the interview. The modules are:

1. Household
2. Standard of living

The PQ is administered to all OSMs and new respondents aged 15 and over, and consists of eight core modules:

1. Demographics
2. Child (if any)
3. Labour force involvement history
4. Education
5. Family
6. Current labour force involvement
7. Income
8. Contact

Depending on the module, the SoFIE questionnaire collects both point-in-time data and spell data. Point-in-time data relates to a single date, usually the interview date (eg the respondent's educational qualifications as at the interview date). Spell data relates to a period of time with a defined start and end date reported by the respondent (eg the period of time a respondent lived with a family member, or the length of time a person worked for a particular employer). For example, the start of a new household spell occurs when a person enters or leaves a household. The analysis in each release includes incomplete spells, ie spells that were ongoing at the time of the interview.

The first wave (or interview cycle) of SoFIE was conducted from 1 October 2002 to 30 September 2003 and sought responses to these modules: Household questionnaire; Non-contact short form; Demographics; Child; Labour market history; Education; Family; Labour market; Income; Contact; Standard series modules.

The second wave (or interview cycle) of SoFIE was conducted from 1 October 2003 to 30 September 2004 and sought responses to these modules: Household questionnaire; Non-contact short form; Demographics; Child; Labour market history; Education; Family; Labour market; Income; Contact; Standard series, Asset and liability modules. These modules are repeated in Waves 4 (1 October 2005 to 30 September 2006) and 6 (1 October 2007 to 30 September 2008).

The third wave (or interview cycle) of SoFIE was conducted from 1 October 2004 to 30 September 2005 and sought responses to these modules: Household questionnaire; Non-

contact short form; Demographics; Child; Labour market history; Education; Family; Labour market; Income; Contact; Standard series; Health modules. These modules are repeated in Waves 5 (1 October 2006 to 30 September 2007) and 7 (1 October 2008 to 30 September 2009).

#### **2.1.4 Definitions**

*OSM - Original Sample Member.* At the first wave of the SoFIE, every eligible responding resident of the selected households will become an OSM. These are the people who will be interviewed over successive waves of the survey, regardless of whether or not they still reside in their original dwelling. An OSM may otherwise be called a longitudinal respondent.

*PQ - Personal Questionnaire.*

*HQ - Household Questionnaire.*

*HED - Household Enumeration Date.* HED is the date when all of the eligible members of the household are identified and recorded in the household questionnaire.

*SAPD - Start of Annual Period Date* is the reference date for the start of the annual period e.g. if a respondents Wave 1 HED interview is on 01 December 2002, the SAPD is 01 December 2001 (12 months before the HED).

*EAPD - End of Annual Period Date* is the reference date for the end of the annual period for each respondent e.g. if a respondents Wave 1 HED interview is on 01 December 2002, the EAPD is 30 November 2002.

*PSU - Primary Sampling Unit.* Statistics New Zealand sampling frame units.

*CAI - Computer-Assisted Interviewing* is used to administer interviews in the field.

*CSR - Cross-sectional Respondent (co-habitant)* is someone who is co-habiting in a household with an existing OSM after Wave 1 and is asked the PQ.

*Balanced Panel* consists of OSMs who responded in every wave.

*Unbalanced Panel* consists of all responding persons in each wave (OSMs as well as non-OSMs) i.e. the number of observations per time period varies.

## **2.2 Core Modules**

Core variables are taken from the Household and Personal questionnaires that are asked at every wave. A description of the variables that are used in this report follows. Note: this is not an exhaustive list of what is included in the SoFIE survey.

### **2.2.1 Demographic Variables**

There are a number of key demographic variables that are asked either at the initial interview only, such as sex, country of birth, and others are asked and updated at every wave, such as self-identified ethnicity, marital status and self-rated health.

#### *2.2.1.1 Sex*

The question on the person's sex is identified and answered by the interviewer as part of the initial interview within the PQ. The previous response is internally checked in subsequent waves. The sex of all current household members is also recorded as part of the HQ.

#### *2.2.1.2 Age*

The respondents' date of birth is asked at the initial interview. This is checked with the respondent at subsequent waves.

There are a number of age variables that have been derived by Statistics NZ:

AgeGiven (at wave) – this is used to derive age if date of birth hasn't been provided;

AgeatHED – age as at household enumeration date;

AgeatEAPD – age as at the end of the annual reference period;

AgeatWave1SAPD – age as at the start of the annual reference period.

Age variable to be used in the analyses is the derived age as at the enumeration date (AgeatHED), for consistency in longitudinal analyses.

Age is categorised into 5 year age groups and then aggregated into a number of levels.

For most analyses the Age2 grouping will be used.

Age1: 0-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+.

Age2: 0-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65+.

Age3: 0-14, 15-24, 25-44, 45-64, 65+.

### 2.2.1.3 Ethnicity

In the household questionnaire, which is answered by one OSM for every household member, the ethnicities of all household members are collected at Wave 1. In subsequent waves ethnicity is only asked of new household members.

In the PQ, demographics module, every adult (aged 15+ years) is asked their self-identified ethnicity at each wave. Respondents are asked to *choose as many responses as you need to say which ethnic groups you belong to*. There is no dependent data fed back for ethnicity, and the interviewer cannot see any previous responses.

The showcard consists of 15 possible groups:

11. New Zealand European / Pakeha
12. other European
13. Māori
14. Samoan
15. Cook Island Māori
16. Tongan
17. Niuean
18. Tokelauan
19. Fijian
20. other Pacific Peoples
21. Southeast Asian
22. Chinese
23. Indian
24. other Asian
25. other ethnic group
88. DK
99. RF

Note: if a respondent answered “kiwi” this is coded under 11. New Zealand European / Pakeha. If a respondent answered “New Zealander” this is coded as 25. Other ethnicity.

### *Total response ethnicity*

Respondents who reported more than one ethnic group are counted in each group they reported i.e. if a respondent answered Māori and Samoan this respondent would be counted in the Māori and Pacific groups. Therefore the ethnic groups are not mutually exclusive and total ethnicity will not equal the number of respondents in the sample. This is coded into NZ European, Māori, Pacific, Asian and Other.

### *Prioritised ethnicity*

A respondent is able to list all applicable ethnic groups in the questionnaire. Each respondent is then allocated to a single ethnic group using the priority recording system. This measure of ethnicity means that each respondent appears only once in the data and the groups will sum to give the total population. The classification of ethnic group was based on respondents indicating with which ethnic group or groups they identified. When only one ethnic group was given, that group was assigned. When two or more ethnic groups were given, a single ethnic group was assigned using the following priority rules:

If Māori was one of the groups reported, the respondent was assigned to 'Māori'.

If any Pacific ethnic group was reported among those not already assigned to a group, the respondent was assigned to 'Pacific'.

If any Asian ethnic group was reported among those not already assigned to a group, the respondent was assigned to 'Asian'.

All other respondents were assigned to 'non-Māori, non-Pacific, non-Asian'.

Country of Birth is recorded at the initial interview. From this we have an indicator of whether the respondent was born in NZ and if the respondent was not born in NZ the country of birth and the number of years since arrival in NZ are recorded.

Note: don't have country of birth for children

#### **2.2.1.4 Marital Status**

Legal marital status is asked at every wave and is coded into Legal spouse/Other partnership, Never Married, Separated/Divorced/Widowed.

Social marital status is derived from legal marital status and living arrangements. Social marital status is defined as an individual's status with respect to whether they live in a consensual union or not i.e. whether they have a spouse or partner with whom they are living as a couple. The concept to be measured is the individual's social marital status over the length of the longitudinal survey. Social marital status can be recorded as episode or spell data (start & end dates; whether partnered/non-partnered over spell duration). The start and end dates recorded for each different episode of being partnered or non-partnered thus define the spells of social marital status. Social marital status will be output at Level 1 of the New Zealand Standard Classification of Social Marital Status 1999 into partnered / not partnered.

### **2.2.2 Self-Rated Health**

The global self-rated health question is asked at every wave of all respondents aged 15+ years. It was taken from the first question from the SF36 scale “*in general would you say your health is...*” with a 5-point Likert Scale: Excellent (1), Very Good (2), Good (3), Fair (4), Poor (5), don't know (88), refused (99). Others have dichotomised self-rated health, combining “fair” and “poor” to yield a measure of less than good self-rated health.(Khang, Lynch et al., 2004) Data will be published on all 5 levels of self-rated health. Self-rated health will also be dichotomised at “fair + poor” to create a measure of less than good health.

### **2.2.3 Family Structure**

#### *Standard family type*

Statistics New Zealand's standard definition of a family is based on the family nucleus. A family nucleus consists of a couple, with or without child(ren), or one parent and their child(ren), where the children do not have partners or children of their own living in the same household.

#### *Economic family type*

A person who is financially independent or a group of persons who reside together and are financially interdependent. An economic family can comprise a couple, a couple with



dependent children, one parent with dependent children, or one person on their own. For example, in a household consisting of a couple with a dependent child that also lives with one of the couple's siblings there are two economic families - a one person economic family (the sibling) as well as the couple and their child who comprise the other economic family.

The definition of family is based on the concept of a family nucleus. A family nucleus can be any of the following:

- Couple only
- Couple with dependent and/or adult child(ren) where the children do not have partners or children of their own living in the same household
- Sole parents and their dependent and/or adult child(ren) where the child(ren) do not have partners or children of their own living in the same household
- Not in a family nucleus.

**Note:** Dependent children are defined as (a) all children aged less than 15 and (b) children aged between 15 and 17 who are not in full-time employment. Individuals who are not in a family nucleus have been included in family composition tables as a comparative measure and are referred to in these tables as 'not in family nucleus'.

## **2.2.4 Household Structure**

Household composition refers to members of a household at the household enumeration date (HED).

The Household categories include:

- One-family household
- Two-family households
- Three or more family households
- Other multi-person households, eg a flatting situation
- One-person households.

Note: the household is only used in the sampling frame and is NOT followed longitudinally across the eight waves, OSM's within the original household are followed.

## **2.2.5 Income**

In SoFIE, income is collected from every individual over 15 years at every wave. All income is reported as gross (before tax) amounts. Information is collected on household and individual income, with detailed information on the types/sources of individual income. This information has been derived into total annual household income and total personal income, with the main source within these incomes.

For the majority of analyses in this report, equivalised household income and personal income are used. Both of these incomes are adjusted to the consumer price index (CPI) for the quarter ending December 2001 (the first reference quarter of the study). Income is presented in quintiles as well as in tertiles.

### *2.2.5.1 Annual personal income*

Annual personal income is gross (before tax) annual (accrued) personal income from all sources received in a defined 12-month period (between the start and end of the annual reference period) by a person aged 15 and over. The total annual personal income value includes income from employment earnings and government transfers, as well as self-employment income, income from property, government income support received as one-off or annual payments, and transfer income other than government income support. The main source of personal income is identified.

Personal income does not necessarily reflect an individual's circumstances, due to income sharing within a household or family.

Annual personal income is derived by adding together:

- Gross income from employment earnings in the year
- Gross annual income from self-employment
- Gross and non-taxable income from government transfers in the year
- Gross annual income as interest from bank accounts, etc
- Gross annual income from other investments
- Gross annual income from private superannuation and pension schemes
- Gross annual income from other income received as regular payments
- Gross annual income from other irregular income.

### 2.2.5.2 Annual household income

Annual household income is the total income received from all sources by members of a household in the annual reference period. Only those people identified in a household and the income of household members aged 15 and over are included in annual household income statistics. This can include non-OSMs and non-family members.

All individuals i.e. longitudinal & cross-sectional respondents of all ages

- Total annual household income
- Main source of annual household income over reference period

#### *Equivalised Household Income*

Household income more fully reflects the resources available to the individual than personal income and so household income is a more appropriate measure for the analysis of health inequalities. However, households of different size and composition require different incomes to produce similar standards of living. There are economies of scales in households such that a household of four does not require four times the income as a household of one to purchase the same standard of living. Equivalisation is a procedure for adjusting the incomes of households to produce incomes that are comparable in terms of the resources available to family members. Household equivalised income was calculated for household economies of scale using the New Zealand-specific Jensen Index (Table 1). (Jensen, 1988) For example, a total household income of \$50,000 for a family of two adults and two children would be equivalised by dividing by 1.41 to give \$35,461.

**Table 1: The revised Jensen Index**

Number of Adults	Number of children						
	0	1	2	3	4	5	6
<b>1</b>	0.65	0.91	1.14	1.34	1.52	1.69	1.85
<b>2</b>	1	1.21	1.41	1.58	1.75	1.91	2.06
<b>3</b>	1.29	1.47	1.65	1.81	1.96	2.11	2.25
<b>4</b>	1.54	1.71	1.87	2.02	2.16	2.3	2.44

Jensen Equivalised Income = Household Income / { [a + (c \* x) + (y \* t)]z/2z}, where a = number of adults in household, c = number of children in household, t = sum of individual ages of children in household and x, y, z are constants.

### *2.2.5.3 Consumer Price Index Adjustment of Income*

The Consumers Price Index (CPI) measures the rate of price change of goods and services purchased by households. (Statistics New Zealand, 2006) The CPI can be used to adjust incomes for inflation. Movements in a time series of incomes, after adjusting for inflation, indicate whether, and by how much, the purchasing power of incomes has increased or decreased. If incomes have increased more quickly than inflation, then the purchasing power of incomes can be regarded as having risen. If inflation has risen more quickly than incomes, then the purchasing power of incomes can be regarded as having fallen.

For longitudinal analyses, the equivalised annual household income and annual personal income were further adjusted for spending parity to the baseline income quarter 1

October 2001 to 31 December 2001 dollars, using the Consumer Price Index (CPI).

Income information is reported about the 12 months prior to the interview date, therefore respondents will have different reference periods. Each respondent's reference period, for each wave, will be calculated and mapped to the CPI quarter corresponding to the mid-point of the reference period.

The published CPI quarterly indexes are referenced to the June quarter 2006. Therefore, the CPI quarterly indexes were re-referenced to the December 2001 quarter. The formula to adjust the current income to the dollar amount of December 2001 is:

#### **\$ Current x (Dec 01 CPI / Current Q CPI)**

For example: In if the initial interview was conducted on 01 July 2003, then the reference period was from 01 July 2002 to 30 June 2003 and the equivalised household disposable income was \$34,700. Its current value in December 2001 dollars would be:

$$\$34,700 \times (\text{Dec 01 CPI} / \text{Mar 03 CPI})$$

$$\$34,700 \times (1000/1030.98)$$

$$\$34,700 \times 0.96995$$

$$= \$33,657 \text{ (Dec 01 ($) dollars)}$$

#### *2.2.5.4 Income Quintiles and Tertiles*

For comparative purposes, income has been grouped into quintiles. Quintiles show income relative to the rest of the population rather than absolute income values. A quintile covers a fifth of the population when all values have been ordered from highest to lowest. Quintiles and tertiles boundaries were calculated on the mean CPI adjusted annual equivalised household and personal incomes across Waves 1-3. Annual personal and household incomes have different quintile boundaries which are shown below as the (“rounded”) dollar value at which each quintile falls.

Personal income tertiles: 1. low - \$11,670; 2. \$11,670 - \$30,165; 3. \$30,165 – high.

Personal income quintiles: 1. low - \$7,602; 2. \$7,602 - \$14,311; 3. \$14,311 – \$25,652; 4. \$25,652 - \$ 41,487; 5. \$41,487 - high.

Household income tertiles: 1. low - \$29,915; 2. \$29,195 - \$55,536; 3. \$55,536 – high.

Household income quintiles: 1. low - \$21,078; 2. \$21,078- \$34,010; 3. \$34,010– \$49,379; 4. \$ 49,379- \$ 72,280; 5. \$72,280 - high.

#### *2.2.5.5 Other income variables*

##### *Annual family income*

Annual family income is the total income received from all sources by members of a family in the annual reference period. Only those people identified in a family nucleus and the income of family members aged 15 and over are included in annual family income statistics.

Cross-sectional annual family income is calculated including information from all respondents, aged 15 years and older, within that family nucleus (as at household enumeration date). The main source of cross-sectional annual family income over the reference period is also calculated. Whereas, longitudinal annual family income is calculated for OSM’s only (as at EAPD), with the main source of longitudinal annual family income.

##### *Annual Employee Earnings*

Annual employee earnings are collected for those people aged 15 and over with at least one spell of employee earnings during the year. Annual employee earnings include gross

salary/wages, regular allowances, commissions and bonuses received as usual pay from a spell of employment. Redundancy, holiday pay, back pay and other irregular payments are excluded. Self-employment income is not included in the calculation of annual employee earnings.

#### *Weekly employee earnings*

Weekly employee earnings are collected for those people with at least one spell of employee earnings during the year. Weekly employee earnings include gross salary/wages, regular allowances, commissions and bonuses received as usual pay from a spell of employment, divided by the duration of the spell (in weeks). Redundancy, holiday pay, back pay and other irregular payments are excluded. Self-employment income is not included in the calculation of weekly employee earnings.

#### *Weekly personal income*

Weekly personal income is the total received from all sources by a person aged 15 and over during a spell. This is derived from the weekly amount of employee earnings and government transfers calculated for the spell, plus the sum of all regular income received annually, such as gross income from self-employment and gross income from interest, investments, private superannuation and pensions, divided by 52.14 weeks.

#### *Government transfer income*

Government transfer income refers to gross as well as non-taxable income received from government transfers within the reference period. Types of government transfer income include: Inland Revenue Department tax rebates/credits and paid parental leave payments, earnings-related accident compensation, NZ superannuation, veteran's pension and other NZ war pensions, Government Benefits (Domestic purposes, unemployment/sickness, invalid's, widow's, transitional retirement, orphan's and unsupported child benefit, disability and rehabilitation allowance, child disability allowance, accommodation supplement, independent youth benefit, student allowance (including accommodation benefit), special benefit, family support , other benefit/allowance (Work and Income payment).

## **2.2.6 Education**

The education module in SoFIE collects two types of information. The first covers the type of qualification held, and the second covers participation in education during the period covered by this wave of the survey. We will use the highest level of education across all three waves. Level of education may change between waves, especially for younger respondents, but will remain constant for most people.

The levels of education in SoFIE are aggregated into:

Other School Qualification, School Certificate/Fifth Form Qualification, Sixth Form Qualification, Higher School Qualification, Post-school qualification not identifiable, Basic Vocational Qualification, Skilled Vocational Qualification, Intermediate Vocational Qualification, Advanced Vocational Qualification, Bachelor degree, Higher degree, No qualification.

Education used in this report is the maximum education qualification over the 3 waves and were coded into:

No Qualification, School Qualification, Post-school Qualification and Degree or Higher.

For each year of data collection, whether any study or work towards a formal qualification was collected. Also information on whether study is full-time or part-time was collected. This is coded as part-time study only, full-time study only, part-time and full-time study, no study.

## **2.2.7 Labour Market Activity**

### *2.2.7.1 Labour force history*

Labour market history, is asked of all respondents aged 15+ only at initial interview.

Basic labour force history information is collected at the baseline interview, to establish:

- whether the respondent has ever been in paid employment (either full- or part-time)
- their age when they first started paid employment
- their total years in (and out of) paid employment
- Age first started working in paid employment

### *2.2.7.2 Labour force status*

A respondent's labour force involvement is defined as being either employed, not employed but seeking work, or not employed and not seeking work at the HED (interview date). The definitions for involvement in the labour force are aligned with, but not identical to, the concepts and definitions used in the Household Labour Force Survey. Retrospectively over a year, it is difficult to collect the information required to calculate the strict definition of unemployment (ie available and actively seeking work).

Note: students and the retired often form a large proportion of those 'not employed and not seeking work'.

#### *Employed*

This definition includes all individuals in the working age population who worked for one hour or more, either as an employee or in self-employment; or worked without pay for one hour or more in work which contributed directly to the operation of a farm, business or practice owned or operated by a relative; or had a job but were not at work due to own illness or injury, personal or family responsibilities, bad weather or mechanical breakdown, direct involvement in industrial dispute, or leave or holiday.

#### *Not employed but seeking work*

This definition includes all individuals in the working age population who were without a paid job and actively seeking work. Note that this is not the same as the official measure of unemployment derived from the Household Labour Force Survey, because of the difficulty respondents may have in remembering details of their job search activity and availability to start a new job for dates up to a year ago.

#### *Not employed and not seeking work*

This definition includes any person in the working age population who is neither employed nor seeking employment: for example, people who are retired, or have personal or family responsibilities; people attending educational institutions; people permanently unable to work due to disabilities; and people not actively seeking work.



## 2.2.8 Household Variables

The household modules apply to all individuals within that cross-sectional household i.e. longitudinal and cross-sectional respondents of all ages. This includes basic standard of living indicators are the presence of household amenities, access to and number of motor vehicles, household tenure, number of bedrooms, and expenditure on housing. Also included in this is information about the region and area level deprivation of the household.

- Tenure of dwelling
- Whether mortgage is paid for dwelling
- Mortgage payment amount
- Period covered by mortgage payment
- Whether rent is paid for dwelling
- Number of bedrooms
- Number of motor vehicles
- Presence in dwelling of accessible telephone
- Presence in dwelling of the following amenities
  - a dishwasher, automatic washing machine, clothes dryer, television and whether pay/subscribe/cable TV, video recorder/player, or a home computer
- Major geographical region of dwelling location , Auckland, Waikato, Wellington, Rest of North Island, Canterbury, Rest of South Island.
- Deprivation index decile of dwelling location is derived from the NZDep and assigned to the meshblock of the dwelling.

The NZDep2001 scale of deprivation from 1 to 10 divides New Zealand into tenths of the distribution of the first principal component scores, where 1 represents the areas with the least deprived scores and 10 the areas with the most deprived scores.(Salmond & Crampton, 2002) For example, a value of 10 indicates that the meshblock is in the most deprived 10 percent of areas in New Zealand, according the NZDep2001 scores.

NZDep2001 deprivation scores apply to areas rather than individual people.

## **2.3 Assets and Liabilities Module**

Information on assets and liabilities is collected every second wave (waves 2, 4, and 6) and provide estimates of the type and level of assets and liabilities held by individuals, families and households at a point in time.

### **2.3.1 Assets**

Detailed information on assets are asked of all adults. This includes the type and total value of the assets. The particular types of assets asked about are, Māori assets, trust beneficiaries, family trusts, residential property, mortgages, credit cards, bank accounts (net value of all bank deposits held by individual (credit minus overdraft)), vehicles and sporting equipment, household items, life insurance and superannuation, investments, other assets (art/antiques/collectibles, cash worth NZ\$100 or more), inheritance.

### **2.3.2 Liabilities**

Detailed information on liabilities are asked of all adults. This includes the type and total value of the liabilities. The particular types of liabilities asked about are, total amount owing on bank/finance company loan, total amount owed as bank liabilities by the individual (bank loan + overdraft), total amount owing on student loan, total amount owing on hire purchase, total amount owing on other debts worth NZ\$100 or more.

### **2.3.3 Net worth**

Net worth (overall wealth) is calculated by subtracting the total value of all liabilities from the total value of all assets for individuals and couples. Overall individual wealth was calculated by taking the couple wealth and dividing by two if the respondent was in a couple, otherwise the individual wealth was used. This method was used rather than just using the sum of the individual's assets and liabilities because if the respondent was in a couple, it was assumed that their assets and liabilities were shared.

Overall net worth is divided into tertiles quintiles.

Wealth tertiles: 1. low - \$21436; 2. \$21436 - \$119557; 3. \$119557 – high.

Wealth quintiles: 1. low - \$4899; 2. \$4899- \$34977; 3. \$34977– \$92841; 4. \$92841- \$195924; 5. \$195924- high.

## **2.4 Health Module Variables**

The health module was developed by researchers at the University of Otago, Wellington and consists of a 20-minute addition to the core SoFIE questionnaire which were asked of OSMs only at Waves 3, 5 and 7.

### **2.4.1 SF36**

The Short-Form health survey (SF-36) is a multi-purpose survey with only 36 questions. The most recent SF-36 Version 2 was used in the SoFIE survey. The SF-36 is comprised of 36 questions that fall into eight health domains (see Appendix): general health perceptions (GH - 5 items), physical functioning (PF - 10), role limitations due to physical functioning (RP - 4), bodily pain (BP - 2), general mental health (MH - 5), role limitations due to emotional problems (RE - 3), vitality (VT - 4), and social functioning (SF - 2). (Ware, Snow et al., 2000) The remaining item, relating to change in health, is not scored as a separate dimension. Each is scored from 0 (worst score) to 100 (best score). A score of 100 in the PF, RP, BP, SF, and RE domains and scores of 50 in the remaining three domains, GH, VT, and MH, indicate an absence of problems in those areas. The general health, Vitality and Mental Health scales cover both positive and negative health states with the maximum score on these scales indicates not just the absence of disability, but also the presence of a positive health state. For example, a score of 100 in physical functioning indicates an ability to perform all activities without limitations due to health; whereas a score of 50 in mental health indicates an ability to function without personal or emotional problems. A score of 100 in the mental health domain indicates that the respondent feels peaceful and happy and is calm all the time.

The SF36 has been tested and found both valid and reliable in the New Zealand population. (Scott, Tobias et al., 1999) However, there has been questions raised as to the reliability in ethnic minority population in NZ. (Scott, Sarfati et al., 2000) Normal scores are available for the general New Zealand population, facilitating comparisons with age and sex-matched controls. (Scott et al., 1999)

The SF-36 also yields two psychometrically-based physical and mental health summary measures the Physical Component Summary (PCS) and the Mental Component Summary (MCS). The PCS and MCS are computed following a three-step standardised procedure. First, all eight domains are standardised using a linear z-score transformation. Z-scores

are calculated by subtracting the domain means for the general population (by age and sex) from each individual's domain score and dividing by the standard deviation of the NZ pop. (Ministry of Health, 1999) Second, the z-scores are multiplied by the domain factor score coefficients for PCS and MCS and summed over all 8 domains. Finally t-scores are calculated by multiplying the PCS and MCS sums by 10 and adding 50 to the product to yield a mean of 50 and a standard deviation of 10 for the NZ population.

## **2.4.2 Kessler-10 scale**

The Kessler-10 (K-10) is a scale measuring non-specific psychological distress. (Kessler, Andrews et al., 2002; Kessler, Barker et al., 2003) The K-10 has been commonly used in population-wide health surveys in Australia (Furukawa, Kessler et al., 2003) and has been tested and validated in the Australian population against clinical diagnoses of depression and anxiety. (Andrews & Slade, 2001) It is also used in other mental health surveys around the world as well such as the WHO World Mental Health Surveys and has recently been used in the New Zealand Mental Health surveys. (Oakley Browne, Wells et al., 2006)

The K-10 scale consists of ten questions about non-specific psychological distress and seeks to measure the level of current anxiety and depressive symptoms based on questions about negative emotional states experienced a person may have experienced in the four weeks prior to interview (see Appendix). For each item there is a five-level response scale based on the amount of time the respondent reports experiencing the particular problem. Generally, each item is scored from 1 for 'none of the time' to 5 for 'all of the time'. Scores for the ten items are then summed, yielding a minimum possible score of 10 and a maximum possible score of 50, with low scores indicating low levels of psychological distress and high scores indicating high levels of psychological distress. The K10 includes 3 ordered pairs questions, so that if a respondent answered "never" to the first question in the pair the second question could be skipped. Therefore, if the second question in the pair was missed due to a prior "never" response the second question was imputed as "never". Where a respondent answered all 10 questions, the K10 score was simply the sum of the individual score for each question. Where the respondent answered 9 questions, the score for the missing question was imputed as the mean score of the 9 answered questions. (Phongsavan, Chey et al., 2006).

The scores were grouped into four levels according to the criteria developed by Andrews and Slade (2001): low (10-15), moderate (16-21), high (22-29), and very high (30+).(Andrews & Slade, 2001; Phongsavan et al., 2006) The last category represents the portion of the population previously found to meet diagnostic criteria for clinical depression and anxiety requiring professional help.

### **2.4.3 Perceived Stress Scale (PSS)**

The Perceived Stress Scale (PSS), created by Cohen et al. (1983), is one of the few instruments to measure a global level of perceived stress, dealing with the degree to which situations in one's life are appraised as stressful rather than stress related to specific events.(Cohen, Kamarck et al., 1983) It was originally a 14-item scale used to assess perceived stressful experience or stress responses over the previous month providing a subjective measure of stress. There is an abundance of literature reporting reliability and validity of the scale. The creators reported convergent validity indicated by relationships with depressive ( $r=0.76$ ,  $n=332$ ) and physical ( $r=0.70$ ,  $n=64$ ) symptomatology scales. Internal consistency reliability was high with Cronbach's alpha coefficient ranging from 0.84 ( $n=332$ ) to 0.86 ( $n=64$ ). (Cohen et al., 1983) The PSS has been translated into a number of different languages and used in different cultural groups.(Aveyard, Lawrence et al., 2005; Cole, 1999; Mimura & Griffiths, 2004) In the SoFIE-Health study the shorter version of the PSS was used, containing only 4 questions. This shorter version has been used in a few studies.(Aveyard et al., 2005) The questions in this scale ask you about your feelings and thoughts during the last month, "the degree to which situations in one's life are appraised as stressful". Each item is scored using a five-point Likert format, 4=never, 3=almost never, 2=sometimes, 1=fairly often and 0=very often for items stating positive experiences or response. PSS-4 scores are obtained by reverse coding the positive items, e.g., 0=4, 1=3, 2=2, etc. and then summing across all 4 items. Items 2 and 3 are the positively stated items and are reverse scored. Scores can range between 0 and 16, where higher scores mean more stress. The PSS-14 has previously been dichotomised into high stress/low stress at the median because it was not normally distributed.(Burns, Drayson et al., 2002) Aveyard (2005) used the mean score for the PSS-4 items, rather than the total score, giving a minimum score of zero and a maximum of four.(Aveyard et al., 2005)

*Box 1* shows the measure of stress was the four-item version of the Perceived Stress Scale (PSS). This scale measures the degree to which situations in life are appraised as stressful. It has good reliability and validity and has been shown to be sensitive to changes in stress within a population.(Cohen et al., 1983)

*Box 1. The perceived stress scale*

1. In the last month, how often have you felt that you were unable to control the important things in your life?
2. In the last month, how often have you felt confident about your ability to handle your personal problems?\*
3. In the last month, how often have you felt that things were going your way?\*
4. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Never = 0, Almost never = 1, Sometimes = 2, Fairly often = 3, Very often = 4

\*The PSS represents the sum of scores for items 1 and 4, and, for items 2 and 3, the scoring is reversed before adding to the total.

#### **2.4.4 Chronic Diseases**

As part of the health module each respondent was asked “have you ever been told by a doctor that you had”: Asthma, High Blood Pressure, High Cholesterol, Heart Disease, Diabetes, Stroke, Migraines, Chronic Depression, Manic Depression or Schizophrenia. If a respondent answered “Yes” to any of these, they are not asked in following waves. This was coded into a co-morbidities index: 0, 1-2, >2 co-morbid diseases.

#### **2.4.5 Smoking**

Detailed information on current and past cigarette use was asked as part of the health module. From this we derived a current smoking status variables:

Current smoker – Do you smoke cigarettes = Yes

Ex smoker – Do you smoke cigarettes = No, Have you ever been a regular smoker = Yes

Never smoked – Do you smoke cigarettes = No, Have you ever been a regular smoker = No

### **2.4.6 Alcohol**

The questions on alcohol consumption were developed in conjunction with ALAC. A number of questions have been combined to make comparisons with the ALAC AUDIT questions.

Alcohol consumption (*Alc\_drink*) measures the frequency of drinking and is derived from whether a respondent had a drink in the last month, and if so how many days in the last 4 weeks did they drink. This was coded into 0= Never drinks, 1= Drinks monthly or less, 2= Drinks 2-4 times a month, 3= Drinks 2-3 times a week, or 4= Drinks 4 or more times a week.

The number of drinks on a typical drinking day (*Alc\_num*) was coded into 0=1-2 drinks per typical day, 1=3-4 drinks per typical day, 2=5-6 drinks per typical day, 3=7-9 drinks per typical day, 4=10 drinks per typical day.

Binge drinking was calculated as if a respondent had > 0 occasions in the last 4 weeks where they drank 8 (male) or 6 (female) drinks containing alcohol. The frequency of binge drinking (*Alc\_binge*) was coded as 0= Never binge drinks, 1= binge drank monthly, 2= binge drank 2 times per month, 3= binge drank weekly, 4= daily or almost daily binge drinking.

The average daily consumption of alcohol drinking was calculated by multiplying the numbers of days drinking in the past 4 weeks by the frequency of drinking and dividing by 28 (days).

### **2.4.7 NZiDep**

The NZiDep index is a tool for measuring socioeconomic position for individuals and is based on eight simple questions which take about two minutes to administer.(Salmond, King et al., 2005) This was included in the health module as a personal measure of deprivation/need. The NZiDep index of socioeconomic deprivation has advantages over existing measures, including a specific focus on deficits, applicability to all adults (not just the economically active), and usefulness for all ethnic groups. Its strengths include simplicity, utility, acceptability across ethnic groups, construct validity, statistical validity, criterion validity (measured with reference to tobacco smoking), and relevance

to the current New Zealand context. The index is indicative of deprivation, in general, and is designed for use as a variable in research, and for elucidating the relationships between socioeconomic position and health/social outcomes.

The eight questions for the five-point individual-level index of socioeconomic deprivation are shown below. A suggested lead-in to these questions is: "The following few questions are designed to identify people who have had special financial needs in the last 12 months. Although these questions may not apply directly to you, for completeness we need to ask them of everyone."

1. In the last 12 months have you personally been forced to buy cheaper food so that you could pay for other things you needed? (yes/no)

2. In the last 12 months, have you been out of paid work at any time for more than one month? (yes/no) NOTE: *This unemployment question is defined as no for those 65 and over, and for full-time caregivers/home-makers.*

3. Looking at Showcard 1, did you yourself get income in the 12 months ending today from any of these sources? (yes/no) NOTE: *Means-tested benefits are listed on show card*

4. In the last 12 months have you personally put up with feeling cold to save heating costs? (yes/no)

5. In the last 12 months have you personally made use of special food grants or food banks because you did not have enough money for food? (yes/no)

6. In the last 12 months have you personally continued wearing shoes with holes because you could not afford replacement? (yes/no)

7. In the last 12 months have you personally gone without fresh fruit and vegetables, often, so that you could pay for other things you needed? (yes/no)

8. In the last 12 months have you personally received help in the form of clothes or money from a community organisation (like the Salvation Army)? (yes/no)

### **Creating the NZiDep index**

- (i) Add the 'yes' responses (count any missing data as 'no').
- (ii) If a respondent had more than half (>4) of the questions missing then the NZiDep score was coded as missing.
- (iii) The deprivation score was coded into the following five ordinal categories (relatively few people have the largest number of deprivation characteristics):

1 = no deprivation characteristics



- 2 = one deprivation characteristic
- 3 = two deprivation characteristics
- 4 = three or four deprivation characteristics
- 5 = five or more deprivation characteristics

## **2.5 Analyses**

Most of the analyses for this report are conducted on the balanced panel (OSMs responding in every wave). All analyses and data management were conducted using SAS 8.2 in the Statistics NZ data laboratory. The main tables in this report (Chapters 4 to 12) are calculated on a balanced panel, based on *adult OSMs (aged 15+ years) at Wave 3*, who responded in all three waves ( $N = 18,220$ ). All variables are mapped to baseline demographics taken at Wave 1 to ensure numbers for future analyses. All tables present crude analyses i.e. the results are not weighted to the total eligible New Zealand population, nor adjusted for age (or other confounders).

### **2.5.1 Data Management**

Access to the unit record data was via Statistics NZ's Wellington data laboratory under conditions designed to protect the confidentiality of individuals' information. The dataset contains a longitudinal record for each surveyed OSM, with variables from both the core SoFIE and SoFIE-Health questionnaire components. Coding was done to standard classifications, for example ethnicity, occupation, industry and qualifications.

### **2.5.2 Rounding**

Due to confidentiality of the data and to produce results in concordance with the *Statistics Act (1975)*, rounding procedures were used on all outputs. All counts and values in the tables have been randomly rounded (up or down) to the nearest multiple of 5 and cells with counts less than 10 were imputed with the value 10. Therefore, table totals may differ from the sum of individual cells. Some row percentages in the tables may also sum to greater than 100, as the percentages were calculated according to the random rounded totals.

## Chapter 3 SoFIE Data

### 3.1 Attrition

Attrition is the loss of respondents from the survey sample. The quality of longitudinal data through time is heavily affected by attrition as it occurs at each wave of the survey, resulting in fewer and fewer people who have complete records over the life of the survey. Minimising attrition is very important for a longitudinal survey.

Attrition from a longitudinal sample can be caused by:

- Death
- Emigration
- Movement into an institution
- Failure to trace respondents who have changed addresses between waves
- Failure to contact respondents
- Refusal to be interviewed.

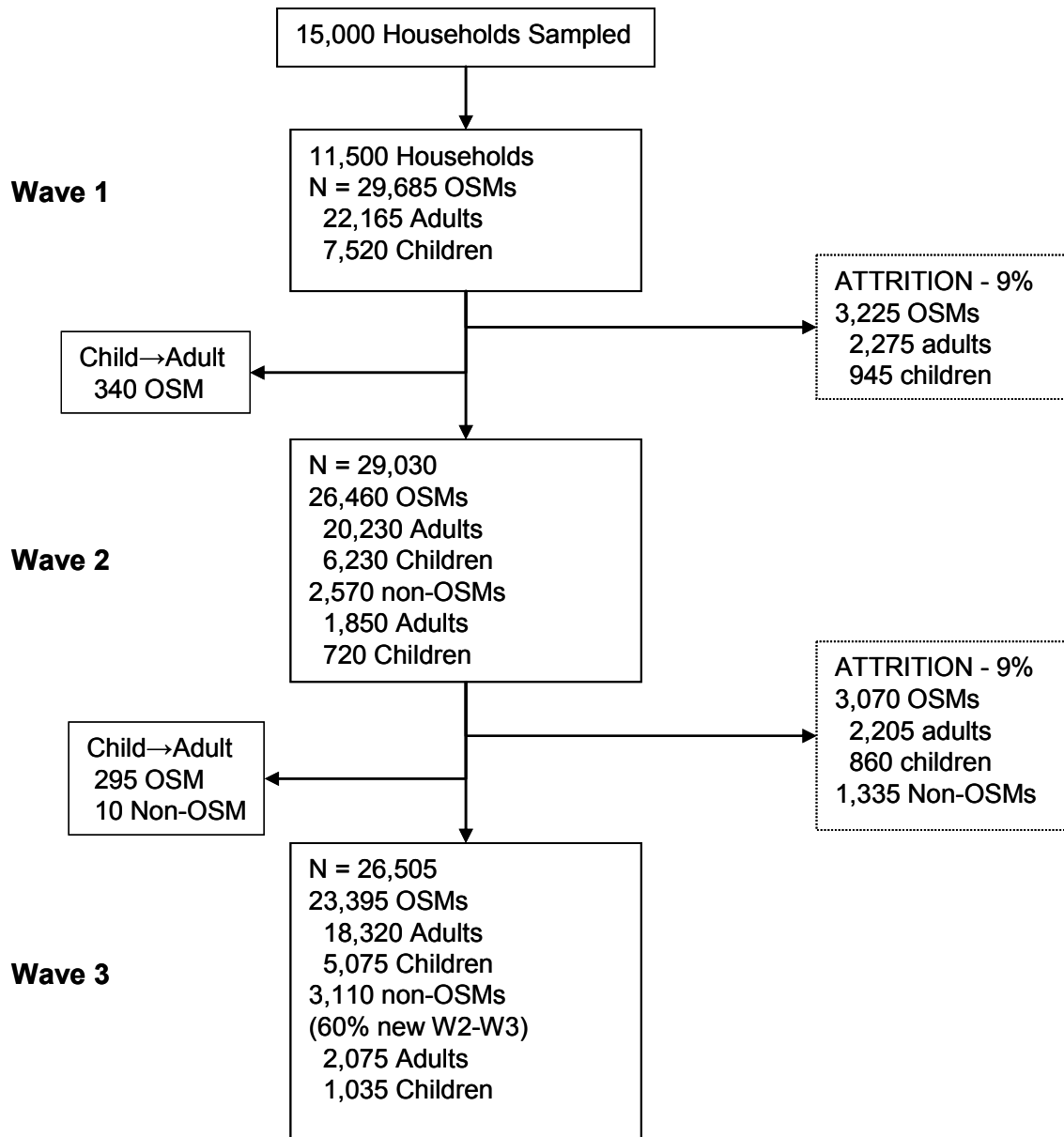
The initial SoFIE sample comprised approximately 11,500 responding private households and 22,000 adults sampled within them, on a statistically representative basis from rural and urban areas throughout New Zealand. Information is collected from each member (including children) of a sampled household that falls within the scope of the survey and meets survey coverage rules. For wave one, approximately 77% of eligible households responded. In the second year of the survey, 89% of all OSM respondents from wave one responded again in Wave 2. In wave two there were just over 20,000 (91%) responding OSM adults. In wave three there were just over 18,200 responding OSM adults (90% of Wave 2 responders, 83% of Wave 1 responders).

Figure 2 shows the flow of respondents across the first three waves of the SoFIE study. Of the 15,000 households sampled by Statistics NZ 11,500 (77%) agreed to participate in the study. In these households there were 29,685 OSMs (22,165 adults and 7,520 children).

The attrition rate between Wave 1 and 2 was 9% where 2275 OSM adults and 945 OSM children did not respond to Wave 2. It appears that attrition was worse for children compared with adults. However, when an OSM child turns 15 years of age between Wave interviews they will be interviewed next as an adult and asked the full set of questions. There were 340 OSM children who became adults between Waves 1 and 2 after allowing for attrition. The attrition rate between Wave 2 and 3 was also 9%, with 2,255 adults and 815 children of the Wave 2 OSM population not responding at the Wave 3 interview. There were 295 OSM children who became adults between Waves 2 and 3. Note 1: These numbers do not exclude deaths, approximately 150 OSMs died between Waves 1 and 2 and Waves 2 and 3, respectively.

New respondents can join the SoFIE cohort while they are cohabiting with an OSM (N=2,570), therefore the actual number of respondents between Waves 1 and 2 didn't decline that much. However, over half of the new respondents were not re-interviewed at Wave 3, with 60% of the non-OSMs interviewed at Wave 3 being new respondents.

Note 2: A child born to an OSM (either mother or father), after Wave 1, is not counted as an OSM in future waves; they are included in the non-OSM counts. At Wave 1 there were 455 OSM children at age 0 (had not had their 1<sup>st</sup> birthday). At Wave 2 there were a small number of OSM children still at age 0, with 370 of the new respondents aged 0. At Wave 3, 315 of the new respondents were aged 0.



**Figure 2: Flow chart of respondents over Waves 1 to 3.**

\* Note: The numbers in this figure may not sum to 100%, due to random rounding.

Table 2 shows the distribution of OSMs across a number of key demographic variables across the waves. It can be seen from Table 2 that the proportion of respondents from the Auckland region declined by 3.5 percentage points over the study period, which may reflect greater attrition in this region but may also be due to OSMs moving to other regions (there were slight increases in the proportion of other regions). The relative proportion of males to females is stable across the waves. The declines in the proportion of OSMs aged 0-14 reflect the changes from child to adult OSM previously mentioned. There are increases in the proportional share in the older age groups (ages 45+ years), reflecting changes in the age structure of the population and the worse attrition in the younger age groups (ages <35 years). Marital status remained relatively stable over time. There were large increases in the proportion of OSMs reporting NZ/European and declines in Māori and Pacific across the waves. This is due to greater attrition in the latter ethnic groups. We will be conducting more in-depth analyses of changes in self-reported ethnic status across the waves in 2008. The proportional share of self-rated health is varied across the waves. This could be due to attrition in some self-rated health groups or true changes in self-rated health.

Table 3 shows the distribution of OSMs across a number of socio-economic variables across the waves. Note: data for highest education qualification (no qualification) and personal and household income (Wave 3) are suppressed due to problems with the derivation of these variables (these are in the process of being corrected and will be updated in Version 1.1). Highest education qualification is calculated as the highest qualification across the three waves, so changes in the distribution reflect attrition changes in the population. However, this is relatively stable across the waves. Declines in the proportion of OSMs in the lower personal and household income quintiles from Wave 1 to 2, show that respondents with lower income were more likely to attrit out of the study. The proportion of OSMs reporting that they were working at the time of the wave interview increased across the waves, with declines in the not employed populations. This could reflect worse attrition in the not employed groups as well as improvements in employment status within NZ. There were changes in the neighbourhood deprivation levels across the waves, with increases in the proportion of OSMs living in lesser deprived areas and decreases in the proportion living in more deprived areas. This may

reflect worse attrition rates in the more deprived groups but may also reflect changing residence and neighbourhoods.

**Table 2: Distribution of OSMs across demographic variables.**

	<b>Wave 1 N=29685</b>		<b>Wave 2 N=26460</b>		<b>Wave 3 N=23395</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Major Region</b>						
Auckland	8510	28.7	7200	27.2	5870	25.1
Waikato	2740	9.2	2395	9.1	2150	9.2
Wellington	3650	12.3	3365	12.7	3100	13.3
Rest of North Island	6760	22.9	6065	22.9	5415	23.2
Canterbury	4235	14.3	3915	14.8	3680	15.7
Rest of South Island	3785	12.8	3520	13.3	3185	13.6
<b>Sex</b>						
Male	14155	47.7	12545	47.4	11035	47.2
Female	15530	52.3	13925	52.6	12365	52.9
<b>Age at Interview</b>						
0-14	7520	25.3	6230	23.5	5075	21.69
15-24	3800	12.8	3195	12.1	2780	11.9
25-34	3730	12.6	3115	11.8	2580	11.0
35-44	4530	15.3	4160	15.7	3650	15.6
45-54	3760	12.7	3610	13.6	3420	14.6
55-64	2895	9.8	2845	10.8	2715	11.6
65+	3450	11.6	3310	12.5	3170	13.6
<b>Marital Status*</b>						
Never Married	7320	33.0	6300	23.8	5520	23.6
Married	11090	50.0	10435	39.4	9570	40.9
Divorced	1465	6.6	1370	5.2	1295	5.5
Widowed	1410	6.4	1350	5.1	1245	5.3
Separated	875	3.9	775	2.9	680	2.9
DK	10	0.1	10	0.1	10	0.1
REF	10	0.1	10	0.1	10	0.1
<b>Ethnicity</b>						
NZ/European	20385	68.7	18975	71.7	17395	74.4
Māori	4865	16.4	3935	14.9	3195	13.7
Pacific	2130	7.2	1595	6.0	1205	5.2
Asian	1750	5.9	1485	5.6	1195	5.1
Other	550	1.9	470	1.8	400	1.7
<b>Self-Rated Health*</b>						
Excellent	8820	38.3	7940	30.0	6100	26.1
Very Good	7405	32.2	6545	24.7	6235	26.7
Good	4695	20.4	4245	16.0	4125	17.6
Fair	1605	7.0	1460	5.5	1430	6.1
Poor	495	2.2	440	1.7	420	1.8

\* - adults only

**Table 3: Distribution of OSMs across socioeconomic variables.**

	Wave 1 N=29685		Wave 2 N=26460		Wave 3 N=23395	
	N	%	N	%	N	%
<b>Highest education qualification*</b>						
No Qualification	5980	20.1	-	-	-	-
School Qual	6185	20.8	5495	20.8	4920	21.0
Post school vocational qual	7125	24.0	6765	25.6	6275	26.8
Degree or Higher	2880	9.7	2735	10.3	2590	11.1
<b>Personal Income*</b>						
q1: low < 7602	4100	18.5	3515	17.4	-	-
q2: 7602 < 14311	4085	18.5	3305	16.4	-	-
q3: 14311 < 25652	4955	22.4	4560	22.6	-	-
q4: 25652 < 41487	4495	20.3	4270	21.1	-	-
q5: 41487 - high	4510	20.4	4570	22.6	-	-
<b>Household Income</b>						
q1: low < 21078	5350	18.0	3905	14.8	-	-
q2: 21078 < 34010	7280	24.5	6340	24.0	-	-
q3: 34010 < 49379	6065	20.4	5200	19.7	-	-
q4: 49379 < 72280	5510	18.6	5470	20.7	-	-
q5: 72280 < high	5470	18.4	5545	21.0	-	-
<b>Labour Market Activity*</b>						
Working	13590	45.8	12810	48.4	11930	51.0
Not employed, looking for work	605	2.0	450	1.7	335	1.4
Not employed, not looking for work	7965	26.8	6960	26.3	6050	25.9
Overseas	10	0.0	20	0.1	10	0.1
Under 15	415	1.4	400	1.5	.	.
<b>NZ Deprivation</b>						
NZDepQ1(least)	5260	17.7	5020	19.0	4440	19.0
NZDepQ2	5540	18.7	5110	19.3	4465	19.1
NZDepQ3	4910	16.5	4710	17.8	4150	17.7
NZDepQ4	6695	22.6	5640	21.3	4845	20.7
NZDepQ5(most)	7270	24.5	5970	22.6	4730	20.2

\* - adults only

- Data suppressed due to problems with derivation

As an additional check the of attrition and the representability of the current SoFIE population with the original sample, the proportion of Wave 1 OSMs that have been re-interviewed in all waves (balanced panel) are presented by Wave 1 characteristics in Table 4. It can be seen that the proportion re-interviewed across all waves was worst for OSMs from the Auckland region (with only 70% re-interviewed). As seen in Table 2 attrition was worse for the younger age groups. It has also been shown that OSMs who were never married at Wave 1 were more likely to attrit. The proportion of Māori, Pacific and Asian OSMs re-interviewed were low compared with NZ/European respondents. The proportion of Pacific OSMs re-interviewed at every wave was 57%, which may be related to the worse attrition of OSMs from the Auckland region. Respondents living in sole parent families or households with multiple people of families were more likely to attrit. It appears from Table 4 that OSMs in lower socio-economic groups (lower levels of education, lower income, unemployed and living in highly deprived areas) were more likely to attrit. OSMs with a post school qualification or employed at Wave 1 were more likely to be re-interviewed at later waves. There was an inverse relationship between proportion re-interviewed and level of area deprivation, with the proportion re-interviewed decreasing as the level of area deprivation increases. Table 4 also shows that people with fair or poor self-rated health status in Wave 1 were more likely to attrit. Note: these tables do not take into account deaths. There were about 300 deaths over the three waves.



**Table 4: Proportion of OSMs (relative to Wave 1) re-interviewed at all Waves**

<b>Wave 1 characteristics</b>	<b>Wave 1</b>	<b>Balanced Panel</b>	
	<b>N=29685</b>	<b>N</b>	<b>%</b>
<b>Major Region</b>			
Auckland	8510	5910	69.5
Waikato	2740	2130	77.7
Wellington	3650	3080	84.4
Rest of North Island	6760	5325	78.8
Canterbury	4235	3630	85.7
Rest of South Island	3785	3225	85.2
<b>Sex</b>			
Male	14155	10980	77.6
Female	15530	12310	79.3
<b>Age at Interview</b>			
0-14	7520	5665	75.3
15-24	3800	2510	66.1
25-34	3730	2820	75.6
35-44	4530	3775	83.3
45-54	3760	3235	86.0
55-64	2895	2505	86.5
65+	3450	2780	80.6
<b>Marital Status*</b>			
Never Married	7320	5185	70.8
Married	11090	9440	85.1
Divorced	1465	1215	82.9
Widowed	1410	1085	77.0
Separated	875	695	79.4
DK	10	10	100.0
REF	10	10	100.0
<b>Ethnicity - Prioritised</b>			
NZ/European	20385	17200	84.4
Māori	4865	3290	67.6
Pacific	2130	1225	57.5
Asian	1750	1170	66.9
Other	550	410	74.6
<b>Highest education qualification*</b>			
No Qualification	5980	4580	76.6
School Qualification	6185	4840	78.3
Post school vocational	7125	5880	82.5
Degree or Higher	2880	2340	81.3
<b>Family Structure</b>			
Couple only	6405	5415	84.5
Couple with children	14530	11700	80.5
Sole parent	4320	2955	68.4
Not in a family	4425	3210	72.5
<b>Household Composition</b>			
One Family	24440	19510	79.8
Two or more families	1330	850	63.9
Other multi-person	1320	825	62.5
One person household	2600	2105	81.0

Wave 1 characteristics	Wave 1	Balanced Panel	
	N=29685 N	N=23290 N	%
<b>Personal Income*</b>			
q1: low < 7602	4100	3025	73.8
q2: 7602 < 14311	4085	3105	76.0
q3: 14311 < 25652	4955	3880	78.3
q4: 25652 < 41487	4495	3675	81.8
q5: 41487 - high	4510	3925	87.0
<b>HHLI Income Quintile</b>			
q1: low < 21078	5355	3540	66.1
q2: 21078 < 34010	7285	5685	78.0
q3: 34010 < 49379	6065	4880	80.5
q4: 49379 < 72280	5515	4565	82.8
q5: 72280 < high	5470	4625	84.6
<b>Labour Market Activity*</b>			
Working	13590	11220	82.6
Not employed, looking for work	605	400	66.1
Not employed, not looking for work	7965	6010	75.5
Overseas	10	10	100.0
Under 15	415	285	68.7
<b>NZ Deprivation Index</b>			
NZDepQ1(least)	5260	4495	85.5
NZDepQ2	5540	4650	83.9
NZDepQ3	4910	3985	81.2
NZDepQ4	6695	5135	76.7
NZDepQ5(most)	7270	5015	69.0
<b>Self-Rated Health**</b>			
Excellent	8820	6945	78.7
Very Good	7405	6035	81.5
Good	4695	3715	79.1
Fair	1605	1210	75.34
Poor	495	310	62.6

\* - adults only

\*\* - There are 23020 with self-rated health at Wave 1 (due to backward imputation).

## ***Part 1 Results: Demographics and Health***

Part 1 Results describes in detail the baseline demographics (age, sex, prioritised ethnicity, family and household structure) of the balanced panel at Wave 1. The second section (Chapter 5) describes the association of the various health measures with the baseline demographics. Detailed descriptions of each table are provided to aid understanding the results of Part 2 Results: Chapters 6 to 12.

The following tables in this report (Chapters 4 to 12) are calculated on a balanced panel, based on *adult OSMs (aged 15+ years) at Wave 3*, who responded in all three waves ( $N = 18,220$ ). All variables are mapped to baseline demographics taken at Wave 1 to ensure the numbers of respondents in subgroups for future analyses.

Note: All tables are crude analyses i.e. the results are not weighted to the total eligible New Zealand population, nor adjusted for age (or other confounders).

## Chapter 4 Demographics of the SoFIE Population

### 4.1 Baseline Demographics

#### 4.1.1 Age and Sex

Age and sex were one of the main units for sampling the SoFIE population. Table 5 shows that the age and sex structure of the SoFIE population are relatively well distributed, with slightly more females (54%) than males (46%) in the balanced SoFIE population. The small proportion of respondents aged 0-14 reflect the number of child OSMs at Wave 1 who are responding adults (aged 15+ years) at Wave 3. The mean age for females was 44.1 (standard deviation = 18.2) and for males was 43.9 (standard deviation = 18.2).

A large proportion of the population is aged 65+ years (compared to other surveys) reflecting useful data on retired aged people, again with slightly more females in the older age groups.

**Table 5: Age and sex structure of the balanced panel at Wave 1**

Age (W1)	Sex (W1)				Total	
	Male		Female			
	N	%	N	%	N	%
0-14	295	3.5	295	3.0	590	3.2
15-24	1185	14.1	1325	13.5	2510	13.8
25-34	1225	14.6	1600	16.3	2825	15.5
35-44	1705	20.3	2070	21.0	3775	20.7
45-54	1535	18.3	1700	17.3	3235	17.8
55-64	1200	14.3	1305	13.3	2505	13.7
65+	1240	14.8	1540	15.7	2780	15.3
<b>Total-col%</b>	<b>8385</b>	<b>100.0</b>	<b>9835</b>	<b>100.0</b>	<b>18220</b>	<b>100.0</b>
<b>Total-row%</b>	<b>8385</b>	<b>46.0</b>	<b>9835</b>	<b>54.0</b>	<b>18220</b>	<b>100.0</b>

#### 4.1.2 Ethnicity

In this report prioritised ethnicity was used to complement the numbers that will be used in future regression analyses on balanced data. It can be seen in Table 6 that the distribution of prioritised ethnicity is similar between the sexes. There are higher proportions of younger respondents (aged <35 years) in the Māori and Pacific ethnic

groups, with high proportions of non-Māori, non-Pacific, non-Asian in the older age groups.

Table 7 shows total ethnicity counts and the age and sex structure remains the same.

Note: the sum of the total ethnicity cells is greater than number of respondents as about 5% responded to more than one ethnic group. The proportion of the European ethnic group is slightly higher than that shown for the 2001 census total European population (80%). Whereas, the proportions of Māori and Pacific populations are lower than the total response rates in the 2001 census (15%, 7%, 7%, respectively). Note, the SoFIE sampling strategy did not oversample ethnic groups.

**Table 6: Prioritised ethnicity by age, sex and overall**

Age (W1)	Ethnicity (W1)									
	nM,nP,nA*		Māori		Pacific		Asian		Total	
	N	%	N	%	N	%	N	%	N	%
0-14	390	2.7	125	6.1	40	5.0	35	3.9	590	3.2
15-24	1735	12.0	415	20.3	175	21.7	190	20.9	2515	13.8
25-34	2055	14.2	435	21.3	165	20.5	170	18.7	2825	15.5
35-44	2870	19.9	475	23.2	180	22.4	250	27.5	3770	20.7
45-54	2650	18.3	280	13.7	135	16.8	165	18.1	3235	17.8
55-64	2170	15.0	195	9.5	80	9.9	65	7.1	2505	13.8
65+	2575	17.8	125	6.1	40	5.0	40	4.4	2780	15.3
<b>Male</b>	<b>6740</b>	<b>46.6</b>	<b>870</b>	<b>42.5</b>	<b>360</b>	<b>44.7</b>	<b>410</b>	<b>45.1</b>	<b>8380</b>	<b>46.0</b>
<b>Female</b>	<b>7720</b>	<b>53.4</b>	<b>1180</b>	<b>57.7</b>	<b>445</b>	<b>55.3</b>	<b>495</b>	<b>54.4</b>	<b>9840</b>	<b>54.0</b>
<b>Total-col%</b>	<b>14450</b>	<b>100.0</b>	<b>2045</b>	<b>100.0</b>	<b>805</b>	<b>100.0</b>	<b>910</b>	<b>100.0</b>	<b>18215</b>	<b>100.0</b>
<b>Total-col%</b>	<b>14450</b>	<b>79.0</b>	<b>2045</b>	<b>11.0</b>	<b>805</b>	<b>4.0</b>	<b>910</b>	<b>5.0</b>	<b>18215</b>	<b>100.0</b>

\*non-Māori, non-Pacific, non-Asian

**Table 7: Total ethnicity by age, sex and overall**

Age (W1)	Total Ethnicity (W1)											
	European		Māori		Pacific		Asian		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
0-14	460	3.0	125	6.1	50	5.6	50	5.1	10	3.0	590	3.2
15-24	1920	12.7	420	20.5	200	22.6	205	20.7	60	18.2	2515	13.8
25-34	2220	14.7	435	21.3	175	19.8	190	19.2	60	18.2	2820	15.5
35-44	3000	19.8	475	23.2	195	22.0	265	26.8	85	25.8	3770	20.7
45-54	2715	18.0	280	13.7	140	15.8	175	17.7	55	16.7	3235	17.8
55-64	2200	14.6	195	9.5	80	9.0	70	7.1	35	10.6	2505	13.8
65+	2605	17.2	125	6.1	45	5.1	40	4.0	25	7.6	2780	15.3
<b>Male</b>	<b>7000</b>	<b>46.3</b>	<b>865</b>	<b>42.3</b>	<b>390</b>	<b>44.1</b>	<b>445</b>	<b>44.9</b>	<b>155</b>	<b>47.0</b>	<b>8380</b>	<b>46.0</b>
<b>Female</b>	<b>8120</b>	<b>53.7</b>	<b>1180</b>	<b>57.7</b>	<b>495</b>	<b>55.9</b>	<b>540</b>	<b>54.5</b>	<b>175</b>	<b>53.0</b>	<b>9840</b>	<b>54.0</b>
<b>Total-col%</b>	<b>15120</b>	<b>100.0</b>	<b>2045</b>	<b>100.0</b>	<b>885</b>	<b>100.0</b>	<b>990</b>	<b>100.0</b>	<b>330</b>	<b>100.0</b>	<b>18215</b>	<b>100.0</b>
<b>Total-row%</b>	<b>15120</b>	<b>83.0</b>	<b>2045</b>	<b>11.2</b>	<b>885</b>	<b>4.9</b>	<b>990</b>	<b>5.4</b>	<b>330</b>	<b>1.8</b>	<b>18215</b>	<b>100.0</b>

### 4.1.3 Marital Status

Table 8 shows that there are higher proportions (twice as many) of females divorced, separated or widowed at Wave 1, this may reflect the older age of the female population. As expected there are high proportions of younger aged respondents (<35 years) in the never married group, with high proportions of middle aged respondents (35-55 years) in the married group and older respondents (65+ years) in the divorce/ widowed/ separated group. There are higher proportions of male respondent who were legally married at Wave 1 (55%) than females (49%). Whereas. Approximately 40% of the Divorced/ Separated/ Widowed group were divorced, 40% widowed and 20% separated. The 590 respondents with missing marital status at Wave1 were aged 0-14 at Wave 1 and did not take part in the full Wave 1 interview.

Over 45% of Māori respondents had never been legally married at Wave 1. Whereas approximately 50% of the non-Māori, non-Pacific, non-Asian and Pacific respondents and over 60% of Asian respondents were legally married at Wave 1.

**Table 8: Marital Status by age, sex and overall**

	Marital Status (W1)									
	NA:DK:REF		Never Married		Divorced Widowed Separated		Married		Total	
Age (W1)	N	%	N	%	N	%	N	%	N	%
0-14	590	100.0	.	.	.	.	.	.	590	3.2
15-24	10	1.7	2400	46.2	10	0.3	100	1.1	2515	13.8
25-34	10	1.7	1400	27.0	205	6.8	1220	12.9	2820	15.5
35-44	10	1.7	800	15.4	570	19.0	2400	25.4	3770	20.7
45-54	.	.	325	6.3	650	21.7	2255	23.9	3235	17.8
55-64	.	.	150	2.9	570	19.0	1780	18.9	2505	13.8
65+	.	.	110	2.1	995	33.2	1675	17.7	2785	15.3
<b>Male</b>	<b>295</b>	<b>50.0</b>	<b>2510</b>	<b>48.4</b>	<b>955</b>	<b>31.9</b>	<b>4620</b>	<b>48.9</b>	<b>8380</b>	<b>46.0</b>
<b>Female</b>	<b>295</b>	<b>50.0</b>	<b>2680</b>	<b>51.6</b>	<b>2040</b>	<b>68.1</b>	<b>4820</b>	<b>51.1</b>	<b>9835</b>	<b>54.0</b>
<b>Total-col%</b>	<b>590</b>	<b>100.0</b>	<b>5190</b>	<b>100.0</b>	<b>2995</b>	<b>100.0</b>	<b>9440</b>	<b>100.0</b>	<b>18215</b>	<b>100.0</b>
<b>Total-row%</b>	<b>590</b>	<b>3.0</b>	<b>5190</b>	<b>28.5</b>	<b>2995</b>	<b>16.4</b>	<b>9440</b>	<b>51.8</b>	<b>18215</b>	<b>100.0</b>

#### 4.1.4 Family Structure

Table 9 shows that there are considerably more females than males who are sole parents at Wave 1, as well as more females not living in a family nucleus. There are higher proportions of respondents aged 55+ years living in a couple only. The high proportion of respondents aged 65+ years not living in a family nucleus reflects the high proportion of this older group who were divorced/ widowed/ separated (as above).

Over 60% of Pacific and Asian respondents were living in a family with a couple and children. Whereas there were more non-Māori, non-Pacific, non-Asian respondents (33%) who lived in a couple only family and 23% of Māori respondents lived in a sole parent family.

**Table 9: Family structure by age, sex and overall**

Age (W1)	Family Structure (W1)									
	Couple with children		Sole parent		Couple only		Not in a family nucleus		Total	
	N	%	N	%	N	%	N	%	N	%
0-14	460	5.9	130	7.1	.	.	.	.	590	3.2
15-24	1320	17.0	435	23.7	270	5.0	485	15.1	2510	13.8
25-34	1380	17.8	330	18.0	660	12.2	445	13.8	2825	15.5
35-44	2515	32.4	465	25.3	415	7.7	375	11.7	3770	20.7
45-54	1575	20.3	270	14.7	975	18.0	420	13.1	3235	17.8
55-64	395	5.1	115	6.3	1515	28.0	480	14.9	2505	13.7
65+	115	1.5	85	4.6	1580	29.2	1005	31.3	2780	15.3
<b>Male</b>	<b>3825</b>	<b>49.3</b>	<b>525</b>	<b>28.6</b>	<b>2665</b>	<b>49.3</b>	<b>1365</b>	<b>42.5</b>	<b>8380</b>	<b>46.0</b>
<b>Female</b>	<b>3935</b>	<b>50.7</b>	<b>1310</b>	<b>71.4</b>	<b>2745</b>	<b>50.7</b>	<b>1850</b>	<b>57.5</b>	<b>9840</b>	<b>54.0</b>
<b>Total-col%</b>	<b>7760</b>	<b>100.0</b>	<b>1835</b>	<b>100.0</b>	<b>5410</b>	<b>100.0</b>	<b>3215</b>	<b>100.0</b>	<b>18220</b>	<b>100.0</b>
<b>Total-row%</b>	<b>7760</b>	<b>42.6</b>	<b>1835</b>	<b>10.1</b>	<b>5410</b>	<b>29.7</b>	<b>3215</b>	<b>17.6</b>	<b>18220</b>	<b>100.0</b>

#### 4.1.5 Household Structure

Table 10 shows that the majority of SoFIE respondents lived in households that contained only one family at Wave 1. There are higher proportions of females who lived on their own or in households with two or more families compared to males. There are higher proportions of younger respondents (aged <35 years) living in multi-person households, possibly reflecting renting/flatting households. The high proportion of respondents aged 65+ years living in one person households is reflected in the age structure of marital status and family structure.

There was a high proportion (20%) of Pacific families that lived in a household with two or more families. There were also higher proportions of non-Māori, non-Pacific, non-Asian (13%) living in single person households than other ethnic groups.



**Table 10: Household structure by sex and overall**

	Household Structure (W1)									
	One Family		Two or more families		Other multi-person household		One person household		Total	
Age (W1)	N	%	N	%	N	%	N	%	N	%
0-14	570	3.9	20	3.3	.	.	.	.	590	3.2
15-24	1985	13.5	145	23.8	330	40.2	40	1.9	2510	13.8
25-34	2295	15.6	115	18.9	240	29.3	175	8.3	2820	15.5
35-44	3325	22.7	100	16.4	80	9.8	265	12.6	3770	20.7
45-54	2740	18.7	110	18.0	75	9.1	310	14.7	3235	17.8
55-64	1970	13.4	75	12.3	65	7.9	395	18.8	2510	13.8
65+	1790	12.2	50	8.2	30	3.7	915	43.5	2785	15.3
<b>Male</b>	<b>6890</b>	<b>47.0</b>	<b>245</b>	<b>40.2</b>	<b>410</b>	<b>50.0</b>	<b>825</b>	<b>39.2</b>	<b>8370</b>	<b>46.0</b>
<b>Female</b>	<b>7785</b>	<b>53.0</b>	<b>365</b>	<b>59.8</b>	<b>410</b>	<b>50.0</b>	<b>1280</b>	<b>60.8</b>	<b>9840</b>	<b>54.0</b>
<b>Total-col%</b>	<b>14675</b>	<b>100.0</b>	<b>610</b>	<b>100.0</b>	<b>820</b>	<b>100.0</b>	<b>2105</b>	<b>100.0</b>	<b>18210</b>	<b>100.0</b>
<b>Total-row%</b>	<b>14675</b>	<b>80.6</b>	<b>610</b>	<b>3.3</b>	<b>820</b>	<b>4.5</b>	<b>2105</b>	<b>11.6</b>	<b>18210</b>	<b>100.0</b>

## 4.2 Changes in Demographics between Waves 1 and 3

### 4.2.1 Changes in Marital Status

Table 11 shows changes in marital status between Wave 1 and 3. There appears to be stability across the waves in legal marital status, with 93% of respondents not changing their legal marital status between Waves 1 and 3. Approximately 4% of the married population become divorced, widowed or separated. Over 8% of the never married population and 5% of the divorced, separated or widowed population in Wave 1 are married at Wave 3.

There are a number of potentially “impossible” changes, with 145 respondents changing from Married, Separated, Divorced or Widowed in Wave 1 to Never Married in Wave 3. Some of these changes may be “true changes” as the respondent reported them in the interview. There are also 65 people who change from Never Married in Wave 1 to Divorced, Separated, or Widowed in Wave 3.

**Table 11: Changes in marital status between Wave 1 and 3**

Marital Status (W1)	Marital Status (W3)							
	Never Married		Married		Divorced Widowed Separated		Total	
	N	%	N	%	N	%	N	%
NA:DK:REF	585	98.3	10	1.7	.	.	595	100.0
Never Married	4690	90.4	425	8.2	65	1.3	5190	100.0
Married	80	0.8	8990	95.2	365	3.9	9440	100.0
Divorced Widowed Separated	65	2.2	150	5.0	2780	92.8	2995	100.0
<b>Total</b>	<b>5420</b>	<b>29.7</b>	<b>9570</b>	<b>52.5</b>	<b>3215</b>	<b>17.6</b>	<b>18220</b>	<b>100.0</b>

#### 4.2.2 Changes in Family Structure

Table 12 shows that there is much more fluctuation in family structure across three waves of data. Sole parents seem to change the most with only 74% remaining as sole parents at Wave 3. 15% of sole parent families move to not in a family nucleus at Wave 3, this could be due to children leaving home.

**Table 12: Changes in family structure between Waves 1 and 3**

Family Structure (W1)	Family Structure (W3)									
	Couple only		Couple with children		Sole parent		Not in a family nucleus		Total	
	N	%	N	%	N	%	N	%	N	%
Couple only	4470	82.5	445	8.2	15	0.3	480	8.9	5415	100.0
Couple with children	510	6.6	6615	85.2	285	3.7	350	4.5	7760	100.0
Sole parent	40	2.2	175	9.6	1345	73.5	275	15.0	1830	100.0
Not in a family nucleus	255	7.9	125	3.9	90	2.8	2745	85.5	3210	100.0
<b>Total</b>	<b>5270</b>	<b>28.9</b>	<b>7365</b>	<b>40.4</b>	<b>1730</b>	<b>9.5</b>	<b>3855</b>	<b>21.2</b>	<b>18220</b>	<b>100.0</b>

#### 4.2.3 Changes in Household Structure

Table 13 shows changes in household structure between Waves 1 and 3. Households with multiple people or families living in them changed household structure 65% between the waves. Not many people moved into other multi-person households across the waves. 50% of respondents who lived in families with two or more families at Wave 1 moved into a household with only one family by Wave 3.

**Table 13: Changes in household structure between Waves 1 and 3**

	Household Structure (W3)									
	One Family		Two or more families		Other multi-person household		One person household		Total	
Household Structure (W1)	N	%	N	%	N	%	N	%	N	%
One Family	13330	90.8	295	2.0	530	3.6	520	3.5	14675	100.0
Two or more families	300	49.2	275	45.1	20	3.3	10	1.6	610	100.0
Other multi-person ousehold	245	29.7	10	1.2	370	44.8	200	24.2	825	100.0
One person household	185	8.8	10	0.5	80	3.8	1840	87.4	2105	100.0
<b>Total</b>	<b>14060</b>	<b>77.2</b>	<b>580</b>	<b>3.2</b>	<b>1005</b>	<b>5.5</b>	<b>2580</b>	<b>14.2</b>	<b>18220</b>	<b>100.0</b>

## **Chapter 5 The Association of Health Measures with Demographics**

This chapter describes in detail the association of the various health measures with baseline demographics (age, sex, prioritised ethnicity, family and household structure) at Wave 1. Detailed descriptions of each table are provided in this chapter to aid understanding the results of Chapters 6 to 12.

### ***5.1 The Association of Self-Rated Health with Demographics***

The following section describes the distribution of self-rated health status at Wave 1 across a number of demographic variables taken from the baseline (Wave 1) interview. There were  $\leq 10$  respondents who either answered “don’t know” or refused to answer the self-rated health question in Wave 1. This data is not represented in any of the self-rated health tables that follow. In a number of tables there are 590 respondents with missing data at Wave 1, which reflects the number of children aged <15 years at Wave 1, who were not interviewed in Wave 1, but were included in the balanced panel as they answered the health module at Wave 3.

#### **5.1.1 Self-rated health overall, and by age and sex**

Table 14 shows that over two thirds of the population rated their health as excellent or very good, with only 8% rating their health as fair or poor. As mentioned in Chapter 3, people with fair or poor health in Wave 1 were more likely to attrit and not be included in the balanced panel. However the overall structure of self-rated health of the balanced panel population is the same as the original population. The unweighted results presented here are similar to those found in recent NZ health surveys (weighted to the NZ population), where over 90% of the population reported excellent, very good or good health status.(Ministry of Health, 2004a)

**Table 14: Self-rated health by age, sex and overall**

Age (W1)	Self-rated health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
0-14	325	55.1	180	30.5	70	11.9	10	1.7	10	1.7	590	100.0
15-24	1250	49.8	800	31.9	390	15.5	65	2.6	10	0.4	2510	100.0
25-34	1360	48.2	950	33.7	385	13.7	115	4.1	10	0.4	2820	100.0
35-44	1615	42.8	1275	33.8	650	17.2	185	4.9	50	1.3	3770	100.0
45-54	1240	38.3	1120	34.6	640	19.8	170	5.3	70	2.2	3235	100.0
55-64	685	27.3	885	35.3	630	25.1	245	9.8	65	2.6	2505	100.0
65+	475	17.1	835	30.0	940	33.8	430	15.5	105	3.8	2780	100.0
<b>Male</b>	<b>3230</b>	<b>38.5</b>	<b>2790</b>	<b>33.3</b>	<b>1670</b>	<b>19.9</b>	<b>545</b>	<b>6.5</b>	<b>135</b>	<b>1.6</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>3710</b>	<b>37.7</b>	<b>3245</b>	<b>33.0</b>	<b>2040</b>	<b>20.7</b>	<b>665</b>	<b>6.8</b>	<b>175</b>	<b>1.8</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3710</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

### 5.1.2 Self-rated health by prioritised ethnicity

Table 15 shows that the proportions of respondents reporting excellent or very good health were similar across the ethnic groups. However, higher proportions of Māori and Pacific respondents reported fair or poor health.

**Table 15: Self-rated health by prioritised ethnicity.**

Ethnicity (W1)	Self-Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA*	5560	38.5	4845	33.5	2870	19.9	935	6.5	240	1.7	14455	100.0
Māori	665	32.5	700	34.2	485	23.7	165	8.1	30	1.5	2045	100.0
Pacific	345	42.6	225	27.8	150	18.5	55	6.8	35	4.3	810	100.0
Asian	375	41.2	275	30.2	215	23.6	45	4.9	10	1.1	910	100.0
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

\*nM, nP, nA = non-Māori, non-Pacific, non-Asian

### 5.1.3 Self-rated health by legal marital status

Table 16 shows that the highest proportions of respondents who rated their health as excellent or very good had never been legally married, with and legally married respondents rating their health good as well. There were lower proportions of divorced, separated or widowed respondents reporting excellent or very good health, with quite a high proportion of this group rating their health as fair or poor compared to the other respondents. This may be due to the older age structure of this population.

**Table 16: Self-rated health by legal marital status**

Marital Status (W1)	Self-Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	330	55.9	185	31.4	65	11.0	10	1.7	10	1.7	590	100.0
Never Married	2270	43.7	1700	32.8	920	17.7	235	4.5	65	1.3	5190	100.0
Divorced	820	27.4	935	31.2	800	26.7	335	11.2	105	3.5	2995	100.0
Widowed	3525	37.4	3215	34.1	1930	20.5	630	6.7	145	1.5	9435	100.0
Separated	6945	38.1	6035	33.1	3715	20.4	1205	6.6	315	1.7	18220	100.0

### 5.1.4 Self-rated health by family structure

Table 17 shows that nearly 80% of respondents living in a family nucleus of a couple with children reported their health as excellent or very good. Two thirds of respondents in a couple only or sole parent family reported excellent or very good health. The high proportion of respondents not in a family nucleus rating their health as fair or poor may be reflected in the high proportion of older respondents or divorced, widowed or separated in this group.

**Table 17: Self-rated health by family structure**

Family Structure (W1)	Self-Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1745	32.2	1860	34.3	1290	23.8	425	7.8	95	1.8	5415	100.0
Couple with children	3580	46.1	2550	32.9	1220	15.7	330	4.3	85	1.1	7760	100.0
Sole parent	660	36.0	580	31.6	405	22.1	140	7.6	50	2.7	1835	100.0
Not in a family nucleus	955	29.7	1050	32.7	800	24.9	315	9.8	85	2.6	3215	100.0
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

### 5.1.5 Self-rated health by household structure

Table 18 shows that a high proportion of respondents living in single family households reported excellent or very good health. The high proportion of respondents living in other multi-person households reporting excellent or very good health probably reflects the younger age structure of this population and the popular flatting environment. The high proportions of respondents living by themselves and reporting fair or poor health status may reflect the older age structure in this group

**Table 18: Self-rated health by household structure**

Household Composition (W1)	Self-Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
One Family	5880	40.1	4885	33.3	2830	19.3	865	5.9	210	1.4	14680	100.0
Two or more families	205	33.6	185	30.3	140	23.0	60	9.8	15	2.5	610	100.0
Other multi-person household	335	40.6	290	35.2	160	19.4	30	3.6	10	1.2	825	100.0
One person household	520	24.7	675	32.1	580	27.6	255	12.1	75	3.6	2105	100.0
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

### 5.1.6 Changes in self-rated health

Table 19 shows that there is much fluidity in changes in self-rated health, with only 52% of respondents not changing their health status between waves 1 and 3. There was more stability in respondents reporting excellent and very good health status in Wave 1, which may be due to the ceiling effect. If a respondent changed health status in Wave 3, it was typically one level up or down from their Wave 1 health status.

**Table 19: Changes in self-rated health between waves 1 and 3**

Self Rated Health (W1)	Self Rated Health (W3)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Excellent	4245	61.1	1980	28.5	580	8.4	110	1.6	15	0.2	6945	100.0
Very Good	1405	23.3	3005	49.8	1380	22.9	210	3.5	40	0.7	6035	100.0
Good	355	9.6	1075	28.9	1685	45.4	495	13.3	95	2.6	3715	100.0
Fair	40	3.3	120	10.0	405	33.6	495	41.1	150	12.4	1205	100.0
Poor	10	3.2	15	4.8	65	21.0	115	37.1	115	37.1	310	100.0
<b>Total</b>	<b>6050</b>	<b>33.2</b>	<b>6195</b>	<b>34.0</b>	<b>4115</b>	<b>22.6</b>	<b>1430</b>	<b>7.8</b>	<b>420</b>	<b>2.3</b>	<b>18220</b>	<b>100.0</b>

## **5.2 The Association of Health Related Quality of Life (SF-36) with Demographics**

This section describes the mean and standard deviation for the eight SF-36 (Version 2) domain scores and the physical and mental component scores, asked as part of the health module in Wave 3, by major demographic variables at Wave 1. The eight domains are: physical functioning (PF), role limitations due to physical problems (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role limitations due to emotional problems (RE), and mental health (MH). A difference of 5-points in the mean domain scores between groups is defined as a clinically or socially relevant difference between groups. (Ware et al., 2000)

### **5.2.1 SF-36, Overall and by Age and Sex**

Table 20 shows that the overall means and standard deviations of the eight SF-36 domain scores, as well as the two principle component scores (PCS and MCS). These unweighted results are relatively consistent with the NZ Health Survey. (Ministry of Health, 2004b) Males scored higher than females on all domains. Any score above 50 in the vitality domain (as well as for GH and MH) indicates an absence of problems. Most of the physical functioning type domains (GH, BP, RP, PF and PCS) decline in a linear fashion with advancing age, with at least a 10-point difference in scores between the younger and older age groups. The mental health domains (MH, RE and MCS) remain relatively stable across the age groups.

### **5.2.2 SF-36 by Ethnicity**

Table 21 shows small variation in the SF-36 scores of the domains between the ethnic groups. The most pronounced difference between ethnic groups occurred for the BP, RP, VT, RE and PF domains, which is similar to findings in the NZ Health Survey 2002/03. (Ministry of Health, 2004b) Overall, Pacific populations rated their health worse than the other ethnic groups. The Asian population tended to rate their health better, particularly on the physical health domains. There were 5 to 6 point difference in mean scores between the Pacific and Asian populations on the RP, RE and PF domains.



### **5.2.3 SF-36 by Marital Status**

Table 22 shows that respondents who were legally married at Wave 1 rated their health better on the mental health domains (MH, RE and MCS). Respondents who were divorced, widowed or separated at Wave 1 were more likely to rate their health worse, which may be related to the age structure of this population. There was on average a 5 point difference in mean scores of the domains between the married and the widowed, divorced or separated populations.

### **5.2.4 SF-36 by Family Structure**

Table 23 shows that respondents who were in a couple (with or without children) tended to rate their health better than other respondents. Sole parents rated low on the mental health domains. Respondents who reported that they were not in a family nucleus rated their health low on the physical domains, which may be related to the older age structure of this population.

### **5.2.5 SF-36 by Household Structure**

Table 24 shows that respondents who lived in a single person household rated their health low on all of the domains, which may (again) be related to the older age structure of this population. Respondents who lived in other multi-person households (such as flats) rated high on the physical functioning domains, which may be due to the younger age structure of this population. There was a 15 point difference the mean PF domain scores between the single person and multi-person households.

**Table 20: SF-36 scores, mean and standard deviation (SD), overall and by age and sex**

Age (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0-14	83.2	15.7	88.0	17.9	90.5	16.8	92.3	16.8	70.6	17.7	82.6	13.1	93.7	15.0	97.2	8.8	52.1	8.2	54.6	5.4
15-24	80.6	17.4	85.3	20.8	88.1	19.7	89.8	19.5	65.4	18.8	81.5	14.2	92.2	15.7	94.8	13.0	50.8	9.1	53.6	6.5
25-34	82.1	17.2	84.7	21.1	87.4	20.4	90.5	19.5	64.1	19.4	82.1	14.7	91.8	16.8	93.3	14.0	51.1	9.4	53.2	6.9
35-44	80.7	18.7	83.0	22.1	86.3	21.5	89.7	21.0	64.5	19.5	82.2	14.7	91.6	17.5	90.8	16.4	51.4	9.4	52.1	7.7
45-54	78.8	20.5	81.1	23.5	85.1	23.2	91.0	20.0	65.8	19.4	83.6	14.5	92.4	16.9	87.0	20.2	52.6	8.9	50.5	8.9
55-64	75.5	21.8	79.4	23.8	82.7	24.8	91.2	20.4	66.1	19.8	85.2	13.8	92.9	16.4	82.0	22.4	53.8	8.3	48.5	9.6
65+	69.5	23.1	75.7	25.5	73.0	29.6	87.3	24.0	59.2	23.1	85.3	13.9	91.6	18.2	65.3	29.5	53.9	8.6	43.1	11.5
<b>Male</b>	<b>78.7</b>	<b>19.9</b>	<b>83.1</b>	<b>22.3</b>	<b>85.7</b>	<b>23.1</b>	<b>91.5</b>	<b>19.3</b>	<b>67.0</b>	<b>19.5</b>	<b>84.6</b>	<b>13.5</b>	<b>93.5</b>	<b>15.6</b>	<b>88.4</b>	<b>20.3</b>	<b>53.1</b>	<b>8.5</b>	<b>50.9</b>	<b>8.8</b>
<b>Female</b>	<b>77.9</b>	<b>20.4</b>	<b>80.7</b>	<b>23.4</b>	<b>82.7</b>	<b>24.1</b>	<b>88.7</b>	<b>21.8</b>	<b>62.2</b>	<b>20.4</b>	<b>82.1</b>	<b>14.9</b>	<b>90.9</b>	<b>18.0</b>	<b>84.3</b>	<b>23.1</b>	<b>51.5</b>	<b>9.5</b>	<b>50.0</b>	<b>9.6</b>
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 21: SF-36 scores, mean and standard deviation (SD) by prioritised ethnicity**

Ethnicity (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
nM,nP,nA	78.5	20.1	81.3	23.1	83.9	24.0	90.3	20.5	63.8	20.3	83.5	14.2	92.7	16.3	85.6	22.4	52.4	8.9	50.2	9.4
Māori	77.6	20.3	83.0	22.7	84.3	23.3	88.5	22.7	65.7	19.8	82.6	15.4	90.0	19.4	88.0	20.7	51.5	10.0	51.1	8.6
Pacific	74.8	22.1	82.8	23.3	81.8	24.4	87.2	22.3	67.5	20.0	81.4	14.6	86.9	21.5	86.8	21.9	51.1	9.4	50.5	9.0
Asian	78.1	18.3	86.8	20.2	88.5	18.4	91.8	17.6	68.1	17.8	82.3	14.2	92.5	14.8	91.0	16.4	51.9	8.4	52.7	7.2
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 22: SF-36 scores, mean and standard deviation (SD) by legal marital status**

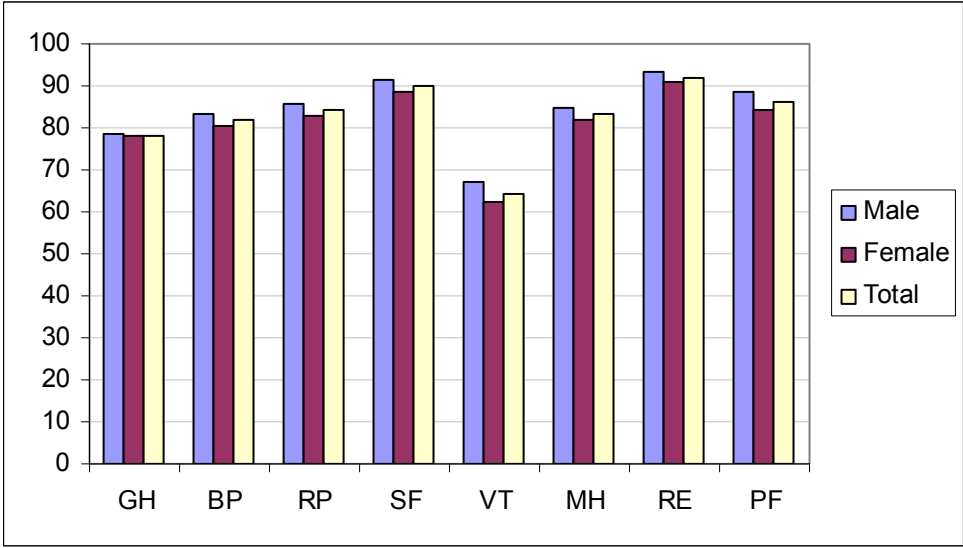
Marital Status (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	83.2	15.6	88.0	17.9	90.5	16.9	92.3	16.8	70.5	17.7	82.5	13.2	93.7	15.0	97.2	8.9	52.1	8.2	54.6	5.4
Never Married	79.6	18.7	83.9	21.5	86.4	21.4	89.3	20.6	64.8	19.4	81.5	14.8	91.2	17.3	91.9	16.8	50.9	9.5	52.5	7.6
Divorced Widowed Separated	73.1	22.9	76.8	25.5	77.5	27.7	86.2	25.0	60.1	22.6	81.9	16.3	89.7	20.1	76.0	27.8	51.6	10.4	46.9	11.1
Married	78.8	20.0	81.8	22.8	84.5	23.5	91.4	19.4	65.2	19.6	84.6	13.4	93.2	15.6	85.6	21.6	53.1	8.3	50.1	9.2
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 23: SF-36 scores, mean and standard deviation (SD) by family structure**

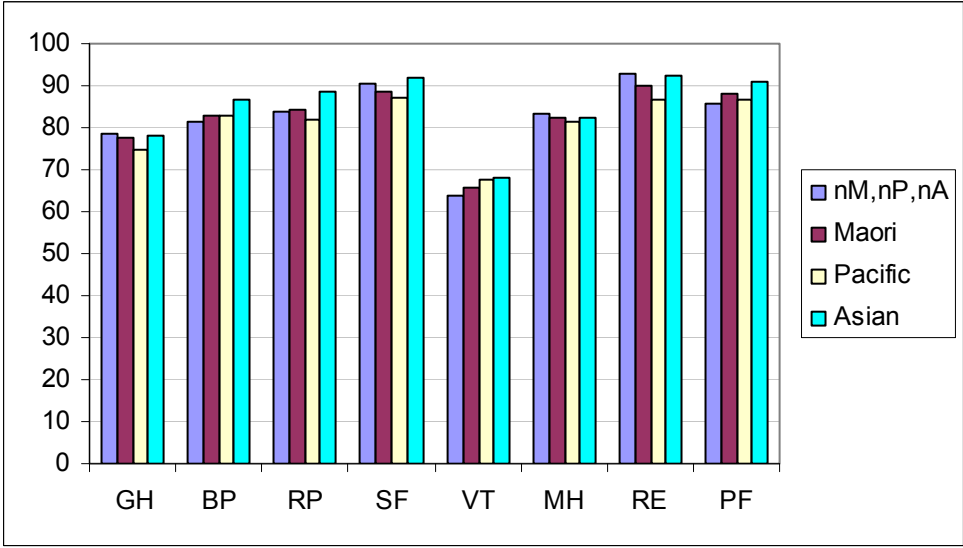
Family Structure (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Couple only	77.2	20.9	80.1	23.6	82.4	25.2	90.8	20.1	65.0	20.3	85.1	13.4	93.0	16.1	82.3	23.9	53.5	8.3	48.8	9.9
Couple with children	81.1	18.2	84.6	21.1	87.6	20.4	91.5	18.7	65.9	18.9	83.2	13.8	93.0	15.4	91.8	15.9	52.1	8.7	52.5	7.4
Sole parent	75.7	21.3	81.0	24.1	82.3	24.6	85.5	24.6	61.9	21.0	79.6	16.4	87.9	21.0	86.7	22.1	49.6	10.8	50.8	9.4
Not in a family nucleus	74.6	21.8	78.4	24.5	79.5	26.7	87.7	23.4	61.3	21.6	82.1	15.5	90.8	18.7	78.9	27.1	51.8	9.8	47.9	10.6
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 24: SF-36 scores, mean and standard deviation (SD) by household structure)**

Household Structure (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
One Family	79.0	19.8	82.4	22.5	85.0	23.0	90.5	20.1	65.0	19.8	83.5	14.1	92.4	16.5	87.7	20.5	52.3	8.9	50.9	8.9
Two or more families	76.5	21.4	82.8	23.6	84.1	23.4	88.8	21.9	66.1	20.0	82.7	14.8	89.2	19.6	86.3	22.0	51.6	9.5	50.7	9.1
Other multi-person household	80.4	17.5	82.1	22.7	86.0	21.9	90.0	19.6	64.2	19.1	82.0	13.7	91.8	16.7	90.5	18.2	51.4	8.9	51.9	8.3
One person household	72.6	22.5	77.0	24.9	77.0	27.9	86.7	24.7	60.0	22.4	82.1	16.3	90.7	19.2	74.1	28.4	51.9	10.1	46.3	11.0
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>



**Figure 3: Mean SF-36 scores, overall and by sex**



**Figure 4: Mean SF-36 scores by prioritised ethnicity**

### 5.3 The Association of Mental Distress (K-10) with Demographics

This section describes the mean and standard deviation for Kessler-10 measure of mental distress, asked as part of the health module in Wave 3, by major demographic variables at Wave 1. The scores were grouped into four levels according to the criteria developed by Andrews and Slade (2001): low (10-15), moderate (16-21), high (22-29), and very high (30+).(Phongsavan et al., 2006)

#### 5.3.1 K-10 Overall and by Age and Sex

Table 25 shows that 77% of the population reported having low levels of mental distress. There were 235 respondents who had two or more missing questions in the K-10 and a re represented in the NA:DK:REF column. There was no difference in the proportion with missing data across the age groups or by sex. Males reported lower levels of mental distress compared with females. Younger respondents (aged <25 years at Wave 1) reported higher levels of mental distress (~28% moderate to very high mental distress). These results were similar to those found in the NZ mental health survey.(Oakley Browne et al., 2006) The mean mental distress ranged from 13 to 14, which falls well below the low mental distress category.

**Table 25: K-10 score, overall and by age and sex**

Age (W1)	Kessler Groups (W3)												Mean	SD
	Low		Moderate		High		Very High		NA:DK:REF		Total			
	N	%	N	%	N	%	N	%	N	%	N	%		
0-14	430	72.9	105	17.8	40	6.8	10	1.7	10	1.7	590	100.0	14.0	4.6
15-24	1785	71.0	495	19.7	170	6.8	45	1.8	15	0.6	2515	100.0	14.2	4.9
25-34	2130	75.5	465	16.5	150	5.3	50	1.8	25	0.9	2820	100.0	13.8	4.8
35-44	2925	77.6	545	14.5	190	5.0	70	1.9	45	1.2	3770	100.0	13.6	4.9
45-54	2595	80.2	390	12.1	155	4.8	65	2.0	35	1.1	3235	100.0	13.3	4.9
55-64	2020	80.6	305	12.2	100	4.0	40	1.6	40	1.6	2505	100.0	13.0	4.5
65+	2150	77.2	410	14.7	140	5.0	20	0.7	65	2.3	2785	100.0	13.2	4.4
<b>Male</b>	<b>6645</b>	<b>79.3</b>	<b>1150</b>	<b>13.7</b>	<b>385</b>	<b>4.6</b>	<b>90</b>	<b>1.1</b>	<b>115</b>	<b>1.4</b>	<b>8380</b>	<b>100.0</b>	<b>13.2</b>	<b>4.3</b>
<b>Female</b>	<b>7390</b>	<b>75.1</b>	<b>1560</b>	<b>15.9</b>	<b>555</b>	<b>5.6</b>	<b>210</b>	<b>2.1</b>	<b>115</b>	<b>1.2</b>	<b>9835</b>	<b>100.0</b>	<b>13.8</b>	<b>5.1</b>
<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>	<b>13.5</b>	<b>4.8</b>

### 5.3.2 K-10 by Ethnicity

Table 26 shows that the non-Māori, non-Pacific and non-Asian ethnic group reported the lowest levels of mental distress. The highest levels were reported by the Pacific population with 34% scoring moderate, high or very high mental distress scores. The Māori population also reported high levels of mental distress compared with the overall population. Note that this is different from the NZ mental health survey where, Māori reported the highest levels of mental distress.(Oakley Browne et al., 2006) However, the Kessler-10 has not been validated in different ethnic groups and these results are not adjusted for age.

**Table 26: K-10 score by prioritised ethnicity**

Ethnicity (W1)	Kessler Groups (W3)													
	Low		Moderate		High		Very High		NA:DK:REF		Total		Mean	SD
	N	%	N	%	N	%	N	%	N	%	N	%		
nM,nP,nA	11375	78.7	2050	14.2	665	4.6	215	1.5	150	1.0	14455	100.0	13.4	4.6
Māori	1455	71.1	350	17.1	150	7.3	55	2.7	35	1.7	2045	100.0	14.3	5.5
Pacific	530	65.8	160	19.9	75	9.3	20	2.5	25	3.1	805	100.0	14.6	5.6
Asian	675	74.2	155	17.0	45	4.9	10	1.1	20	2.2	910	100.0	13.6	4.4
<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>	<b>13.5</b>	<b>4.8</b>

### 5.3.3 K-10 by Marital Status

Table 27 shows the legally married population reported the lowest levels of mental distress. The never legally married population reported higher levels of mental distress than the divorced, widowed or separated respondents, which were both higher than the overall population.

**Table 27: K-10 score by legal marital status**

Marital Status (W1)	Kessler Groups (W3)													
	Low		Moderate		High		Very High		NA:DK:REF		Total		Mean	SD
	N	%	N	%	N	%	N	%	N	%	N	%		
NA:DK:REF	435	73.1	110	18.5	35	5.9	10	1.7	10	1.7	595	100.0	14.0	4.6
Never Married	3775	72.8	915	17.6	335	6.5	110	2.1	55	1.1	5185	100.0	14.1	5.1
Divorced Widowed Separated	2215	74.0	475	15.9	195	6.5	80	2.7	40	1.3	2995	100.0	14.0	5.4
Married	7615	80.7	1220	12.9	370	3.9	105	1.1	130	1.4	9435	100.0	13.0	4.3
<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>	<b>13.5</b>	<b>4.8</b>

### 5.3.4 K-10 by Family Structure

Table 28 shows that respondents who were in a couple (with or without children) reported the lowest levels of mental distress. Sole parents reported high levels of mental distress, with 33% of the population scoring moderate, high or very high levels of mental distress.

**Table 28: K-10 score by family structure**

Family Structure (W1)	Kessler Groups (W3)													Mean	SD
	Low		Moderate		High		Very High		NA:DK:REF		Total				
	N	%	N	%	N	%	N	%	N	%	N	%			
Couple only	4330	80.0	725	13.4	230	4.2	55	1.0	75	1.4	5415	100.0	13.1	4.3	
Couple with children	6065	78.2	1120	14.4	370	4.8	110	1.4	100	1.3	7760	100.0	13.4	4.5	
Sole parent	1230	67.0	355	19.3	160	8.7	70	3.8	15	0.8	1835	100.0	14.9	5.9	
Not in a family nucleus	2405	74.9	510	15.9	185	5.8	65	2.0	40	1.2	3210	100.0	13.9	5.1	
<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>	<b>13.5</b>	<b>4.8</b>	

### 5.3.5 K-10 by Household Structure

Table 29 shows the respondents living in a household with one family only reported lower levels of mental distress. Whereas respondents who lived in a household with one or more families tended to report higher levels of mental distress. There was no difference between respondents who lived on their own or in multi-person households.

**Table 29: K-10 score by household structure**

Household Structure (W1)	Kessler Groups (W3)													Mean	SD
	Low		Moderate		High		Very High		NA:DK:REF		Total				
	N	%	N	%	N	%	N	%	N	%	N	%			
One Family	11410	77.8	2145	14.6	730	5.0	220	1.5	170	1.2	14675	100.0	13.4	4.6	
Two or more families	420	68.9	105	17.2	45	7.4	10	1.6	20	3.3	610	100.0	14.1	5.2	
Other multi-person household	625	75.3	145	17.5	45	5.4	10	1.2	10	1.2	830	100.0	13.8	4.3	
One person household	1580	75.1	310	14.7	125	5.9	55	2.6	30	1.4	2105	100.0	13.9	5.4	
<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>	<b>13.5</b>	<b>4.8</b>	



## **5.4 The Association of Perceived Stress with Demographics**

This section describes the response to four questions about perceived stress over the past four weeks, asked as part of the health module in Wave 3, by major demographic variables at Wave 1.

### **5.4.1 Perceived stress, Overall and by Age and Sex**

Table 30 shows that there was no difference between the sexes in the responses to the questions about how often they felt they were unable to control important things in life. Over 80% reported that they felt in control most or all of the time.

The majority (~90%) of respondents felt that they were able to overcome difficulties most of the time. Males and the older age groups had the highest proportion who felt they were never unable to overcome their difficulties. Whereas, over 3% of the younger age groups (aged <34 years) felt that their difficulties were piling so high that they could not overcome them most or all of the time.

The majority (over 80%) of respondents felt confident in their ability to handle personal problems most or all of the time. Males and the older age groups had the highest proportions of respondents feeling confident that they could handle problems all of the time.

Over 60% of the population felt things were going their way most or all of the time. There was no difference between the sexes. Younger age groups had the lowest proportion who felt things were going their way most or all of the time. Whereas, the oldest age group (65+ years) had the highest proportion who felt things were not going their way.

### **5.4.2 Perceived stress by Ethnicity**

Table 31 shows that the majority of the non-Māori, non-Pacific, non-Asian ethnic group felt that they were able to control the important things in life all or most of the time. Whereas, there were lower proportions in the other ethnic groups who felt that they were able to control the important things in life. Māori reported higher proportions of feeling that they were unable to control the important things in life all or most of the time.

Non-Māori, non-Pacific, non-Asian respondents they felt were able to overcome difficulties all of the time. Whereas the proportions in the other ethnic groups were much lower than the overall proportion.

Over 85% of the non-Māori, non-Pacific, non-Asian respondents reported that they felt confident in handling their problems all or most of the time, which was much more than compared to the other ethnic groups. However, the proportion of respondents reporting that they felt confident in handling problems all or most of the time was well over 70% for all ethnic groups.

There was not much difference in the distribution of whether respondents felt things were going their way across the ethnic groups. Pacific and Asian respondents were more likely to feel that things weren't going their way more of the time, however, these numbers were small.

**Table 30: Perceived Stress, overall and by age and sex**

Age (W1)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	10	1.7	25	4.2	55	9.3	125	21.2	365	61.9	15	2.5	590	100.0
15-24	30	1.2	105	4.2	310	12.3	640	25.4	1405	55.9	20	0.8	2515	100.0
25-34	40	1.4	125	4.4	325	11.5	740	26.2	1570	55.6	25	0.9	2825	100.0
35-44	70	1.9	120	3.2	435	11.5	935	24.8	2180	57.8	30	0.8	3770	100.0
45-54	45	1.4	120	3.7	345	10.7	630	19.5	2070	64.0	30	0.9	3235	100.0
55-64	50	2.0	75	3.0	215	8.6	410	16.4	1735	69.3	25	1.0	2505	100.0
65+	60	2.2	120	4.3	235	8.5	345	12.4	1985	71.4	40	1.4	2780	100.0
<b>Male</b>	<b>140</b>	<b>1.7</b>	<b>260</b>	<b>3.1</b>	<b>840</b>	<b>10.0</b>	<b>1700</b>	<b>20.3</b>	<b>5350</b>	<b>63.8</b>	<b>85</b>	<b>1.0</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>170</b>	<b>1.7</b>	<b>425</b>	<b>4.3</b>	<b>1075</b>	<b>10.9</b>	<b>2115</b>	<b>21.5</b>	<b>5950</b>	<b>60.5</b>	<b>95</b>	<b>1.0</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1920</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.0</b>	<b>185</b>	<b>1.0</b>	<b>18220</b>	<b>100.0</b>
	<b>Unable to overcome difficulties (W3)</b>													
0-14	10	1.7	10	1.7	60	10.2	135	22.9	375	63.6	15	2.5	590	100.0
15-24	15	0.6	65	2.6	250	9.9	595	23.7	1580	62.8	15	0.6	2515	100.0
25-34	20	0.7	70	2.5	285	10.1	580	20.5	1845	65.3	20	0.7	2825	100.0
35-44	25	0.7	70	1.9	325	8.6	785	20.8	2530	67.1	30	0.8	3770	100.0
45-54	20	0.6	60	1.9	265	8.2	510	15.8	2350	72.6	25	0.8	3235	100.0
55-64	15	0.6	35	1.4	150	6.0	285	11.4	1995	79.6	25	1.0	2505	100.0
65+	15	0.5	20	0.7	135	4.9	285	10.3	2280	82.0	40	1.4	2780	100.0
<b>Male</b>	<b>45</b>	<b>0.5</b>	<b>115</b>	<b>1.4</b>	<b>615</b>	<b>7.3</b>	<b>1355</b>	<b>16.2</b>	<b>6160</b>	<b>73.5</b>	<b>85</b>	<b>1.0</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>75</b>	<b>0.8</b>	<b>220</b>	<b>2.2</b>	<b>850</b>	<b>8.6</b>	<b>1820</b>	<b>18.5</b>	<b>6790</b>	<b>69.0</b>	<b>90</b>	<b>0.9</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>120</b>	<b>0.7</b>	<b>330</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3180</b>	<b>17.5</b>	<b>12950</b>	<b>71.1</b>	<b>175</b>	<b>1.0</b>	<b>18220</b>	<b>100.0</b>
	<b>Confident in handling problems (W3)</b>													
0-14	145	24.6	305	51.7	80	13.6	40	6.8	15	2.5	10	1.7	590	100.0
15-24	735	29.2	1250	49.7	305	12.1	150	6.0	45	1.8	20	0.8	2515	100.0
25-34	970	34.3	1385	49.0	275	9.7	125	4.4	40	1.4	25	0.9	2825	100.0
35-44	1280	34.0	1875	49.7	350	9.3	160	4.2	75	2.0	30	0.8	3770	100.0
45-54	1235	38.2	1530	47.3	240	7.4	130	4.0	65	2.0	25	0.8	3235	100.0
55-64	1105	44.1	1065	42.5	145	5.8	100	4.0	70	2.8	25	1.0	2505	100.0
65+	1245	44.8	1100	39.6	215	7.7	100	3.6	90	3.2	40	1.4	2780	100.0
<b>Male</b>	<b>3420</b>	<b>40.8</b>	<b>3670</b>	<b>43.8</b>	<b>680</b>	<b>8.1</b>	<b>335</b>	<b>4.0</b>	<b>190</b>	<b>2.3</b>	<b>80</b>	<b>1.0</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>3295</b>	<b>33.5</b>	<b>4845</b>	<b>49.2</b>	<b>930</b>	<b>9.5</b>	<b>470</b>	<b>4.8</b>	<b>205</b>	<b>2.1</b>	<b>85</b>	<b>0.9</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>6715</b>	<b>36.9</b>	<b>8520</b>	<b>46.8</b>	<b>1615</b>	<b>8.9</b>	<b>805</b>	<b>4.4</b>	<b>400</b>	<b>2.2</b>	<b>165</b>	<b>0.9</b>	<b>18220</b>	<b>100.0</b>
	<b>Felt things were going your way (W3)</b>													
0-14	50	8.5	265	44.9	200	33.9	45	7.6	15	2.5	10	1.7	590	100.0
15-24	225	8.9	1285	51.1	735	29.2	205	8.2	55	2.2	15	0.6	2515	100.0
25-34	285	10.1	1590	56.3	670	23.7	205	7.3	50	1.8	25	0.9	2825	100.0
35-44	365	9.7	2095	55.6	935	24.8	245	6.5	95	2.5	40	1.1	3770	100.0
45-54	340	10.5	1855	57.3	720	22.3	205	6.3	80	2.5	30	0.9	3235	100.0
55-64	315	12.6	1400	55.9	540	21.6	150	6.0	70	2.8	35	1.4	2505	100.0
65+	370	13.3	1400	50.4	630	22.7	225	8.1	100	3.6	55	2.0	2780	100.0
<b>Male</b>	<b>925</b>	<b>11.0</b>	<b>4545</b>	<b>54.2</b>	<b>2020</b>	<b>24.1</b>	<b>575</b>	<b>6.9</b>	<b>210</b>	<b>2.5</b>	<b>105</b>	<b>1.3</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>1015</b>	<b>10.3</b>	<b>5340</b>	<b>54.3</b>	<b>2405</b>	<b>24.4</b>	<b>720</b>	<b>7.3</b>	<b>255</b>	<b>2.6</b>	<b>105</b>	<b>1.1</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>1940</b>	<b>10.6</b>	<b>9890</b>	<b>54.3</b>	<b>4425</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18220</b>	<b>100.0</b>

**Table 31: Perceived stress by prioritised ethnicity**

Ethnicity (W1)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	230	1.6	475	3.3	1395	9.7	2980	20.6	9255	64.0	115	0.8	14455	100.0
Māori	55	2.7	125	6.1	250	12.2	450	22.0	1145	56.0	25	1.2	2045	100.0
Pacific	10	1.2	50	6.2	155	19.3	175	21.7	390	48.4	30	3.7	805	100.0
Asian	10	1.1	30	3.3	120	13.2	215	23.6	515	56.6	20	2.2	910	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1920</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.0</b>	<b>185</b>	<b>1.0</b>	<b>18220</b>	<b>100.0</b>
Unable to overcome difficulties (W3)														
nM,nP,nA	90	0.6	210	1.5	975	6.7	2315	16.0	10765	74.5	100	0.7	14455	100.0
Māori	20	1.0	65	3.2	240	11.7	440	21.5	1255	61.4	25	1.2	2045	100.0
Pacific	10	1.2	30	3.7	120	14.9	190	23.6	430	53.4	25	3.1	805	100.0
Asian	10	1.1	25	2.7	130	14.3	235	25.8	500	54.9	15	1.6	910	100.0
<b>Total</b>	<b>120</b>	<b>0.7</b>	<b>330</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3175</b>	<b>17.4</b>	<b>12950</b>	<b>71.1</b>	<b>170</b>	<b>0.9</b>	<b>18220</b>	<b>100.0</b>
Confident in handling problems (W3)														
nM,nP,nA	5575	38.6	6725	46.5	1140	7.9	595	4.1	315	2.2	110	0.8	14455	100.0
Māori	730	35.7	890	43.5	245	12.0	105	5.1	55	2.7	20	1.0	2045	100.0
Pacific	175	21.7	420	52.2	115	14.3	50	6.2	15	1.9	20	2.5	805	100.0
Asian	240	26.4	480	52.7	110	12.1	55	6.0	15	1.6	20	2.2	910	100.0
<b>Total</b>	<b>6715</b>	<b>36.9</b>	<b>8515</b>	<b>46.7</b>	<b>1615</b>	<b>8.9</b>	<b>805</b>	<b>4.4</b>	<b>395</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18220</b>	<b>100.0</b>
Felt things were going your way (W3)														
nM,nP,nA	1530	10.6	8035	55.6	3390	23.5	995	6.9	365	2.5	135	0.9	14455	100.0
Māori	235	11.5	1005	49.1	555	27.1	160	7.8	55	2.7	35	1.7	2045	100.0
Pacific	75	9.3	385	47.8	235	29.2	70	8.7	25	3.1	25	3.1	805	100.0
Asian	95	10.4	455	50.0	255	28.0	65	7.1	20	2.2	20	2.2	910	100.0
<b>Total</b>	<b>1935</b>	<b>10.6</b>	<b>9885</b>	<b>54.3</b>	<b>4430</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18220</b>	<b>100.0</b>

### 5.4.3 Perceived stress by Marital Status

Table 32 shows that respondents who had never been legally married were less likely to feel that they were able to control the important things in life all or most of the time. Whereas, respondents who were divorced, widowed or separated were more likely to report that they felt unable to control the important things in life all or most of the time. Legally married respondents were more likely to report that they were able to overcome difficulties. Also over 85% of married respondents reported that they felt confident in their ability to handle problems all or most of the time. Higher proportions of married respondents reported that they felt things were going their way all or most of the time, as compared to other groups. Divorced, widowed or separated respondents were more likely to report that they felt things were not going their way (however, numbers are small).

**Table 32: Perceived stress by legal marital status**

Marital Status (W1)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	10	1.7	25	4.2	50	8.5	125	21.2	370	62.7	15	2.5	590	100.0
Never Married	90	1.7	225	4.3	635	12.2	1285	24.8	2900	55.9	55	1.1	5190	100.0
Divorced														
Widowed	65	2.2	160	5.3	330	11.0	550	18.3	1860	62.0	35	1.2	3000	100.0
Separated														
Married	145	1.5	270	2.9	900	9.5	1865	19.8	6180	65.5	80	0.8	9440	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1920</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.0</b>	<b>180</b>	<b>1.0</b>	<b>18220</b>	<b>100.0</b>
Unable to overcome difficulties (W3)														
NA:DK:REF	10	1.7	10	1.7	60	10.2	130	22.0	375	63.6	10	1.7	590	100.0
Never Married	40	0.8	135	2.6	535	10.3	1115	21.5	3315	63.9	40	0.8	5190	100.0
Divorced														
Widowed	15	0.5	70	2.3	250	8.3	465	15.5	2165	72.2	30	1.0	3000	100.0
Separated														
Married	65	0.7	115	1.2	625	6.6	1460	15.5	7090	75.1	85	0.9	9440	100.0
<b>Total</b>	<b>125</b>	<b>0.7</b>	<b>330</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3175</b>	<b>17.4</b>	<b>12950</b>	<b>71.1</b>	<b>175</b>	<b>1.0</b>	<b>18220</b>	<b>100.0</b>
Confident in handling problems (W3)														
NA:DK:REF	145	24.6	305	51.7	80	13.6	40	6.8	10	1.7	10	1.7	590	100.0
Never Married	1660	32.0	2505	48.3	590	11.4	285	5.5	100	1.9	45	0.9	5190	100.0
Divorced														
Widowed	1155	38.5	1320	44.0	265	8.8	145	4.8	80	2.7	30	1.0	3000	100.0
Separated														
Married	3760	39.8	4390	46.5	670	7.1	335	3.5	200	2.1	85	0.9	9440	100.0
<b>Total</b>	<b>6715</b>	<b>36.9</b>	<b>8515</b>	<b>46.7</b>	<b>1610</b>	<b>8.8</b>	<b>805</b>	<b>4.4</b>	<b>400</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18220</b>	<b>100.0</b>
Felt things were going your way (W3)														
NA:DK:REF	50	8.5	265	44.9	200	33.9	50	8.5	15	2.5	10	1.7	590	100.0
Never Married	480	9.2	2700	52.0	1415	27.3	410	7.9	125	2.4	55	1.1	5190	100.0
Divorced														
Widowed	325	10.8	1510	50.3	730	24.3	280	9.3	110	3.7	50	1.7	3000	100.0
Separated														
Married	1085	11.5	5410	57.3	2080	22.0	550	5.8	220	2.3	100	1.1	9440	100.0
<b>Total</b>	<b>1935</b>	<b>10.6</b>	<b>9890</b>	<b>54.3</b>	<b>4425</b>	<b>24.3</b>	<b>1285</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18220</b>	<b>100.0</b>

#### 5.4.4 Perceived stress by Family Structure

Table 33 shows that respondents living in sole parent families were more likely to report that they felt they were unable to control the important things in life. Whereas, respondents living in a couple only were more likely to feel that they were able to control the important things in life. Couple only respondents were also more likely (over 90%) to feel that they were able to overcome difficulties. Whereas, people living in a sole parent family were less likely to feel that they were able to overcome difficulties. The proportion of respondents reporting that they felt confident in handling their problems, all or most of the time, was relatively high (>80%) for across the family structure groups.

However, respondents in sole parent families were slightly less likely to feel confident. Respondents in sole parent families or not in a family nucleus were less likely to feel that things were going their way.

**Table 33: Perceived stress by family structure**

Family Structure (W1)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	90	1.7	165	3.0	475	8.8	980	18.1	3660	67.6	45	0.8	5415	100.0
Couple with children	110	1.4	235	3.0	830	10.7	1800	23.2	4700	60.6	80	1.0	7760	100.0
Sole parent	40	2.2	135	7.4	270	14.7	445	24.3	930	50.7	20	1.1	1835	100.0
Not in a family nucleus	65	2.0	150	4.7	345	10.7	595	18.5	2015	62.7	40	1.2	3215	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1915</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.1</b>	<b>180</b>	<b>1.0</b>	<b>18215</b>	<b>100.0</b>
Unable to overcome difficulties (W3)														
Couple only	25	0.5	45	0.8	310	5.7	725	13.4	4265	78.8	45	0.8	5415	100.0
Couple with children	55	0.7	135	1.7	660	8.5	1530	19.7	5300	68.3	80	1.0	7760	100.0
Sole parent	10	0.5	70	3.8	235	12.8	400	21.8	1095	59.7	15	0.8	1835	100.0
Not in a family nucleus	30	0.9	75	2.3	270	8.4	520	16.2	2295	71.4	30	0.9	3215	100.0
<b>Total</b>	<b>120</b>	<b>0.7</b>	<b>335</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3175</b>	<b>17.4</b>	<b>12955</b>	<b>71.1</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Confident in handling problems (W3)														
Couple only	2365	43.7	2335	43.1	360	6.6	175	3.2	125	2.3	50	0.9	5415	100.0
Couple with children	2645	34.1	3820	49.2	725	9.3	350	4.5	145	1.9	75	1.0	7760	100.0
Sole parent	510	27.8	900	49.0	240	13.1	125	6.8	50	2.7	15	0.8	1835	100.0
Not in a family nucleus	1200	37.3	1460	45.4	295	9.2	155	4.8	80	2.5	35	1.1	3215	100.0
<b>Total</b>	<b>6715</b>	<b>36.9</b>	<b>8520</b>	<b>46.8</b>	<b>1610</b>	<b>8.8</b>	<b>805</b>	<b>4.4</b>	<b>395</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Felt things were going your way (W3)														
Couple only	700	12.9	3030	56.0	1160	21.4	340	6.3	125	2.3	60	1.1	5415	100.0
Couple with children	755	9.7	4350	56.1	1920	24.7	480	6.2	165	2.1	85	1.1	7760	100.0
Sole parent	155	8.4	845	46.0	550	30.0	180	9.8	75	4.1	25	1.4	1835	100.0
Not in a family nucleus	330	10.3	1660	51.6	795	24.7	285	8.9	100	3.1	50	1.6	3215	100.0
<b>Total</b>	<b>1935</b>	<b>10.6</b>	<b>9885</b>	<b>54.3</b>	<b>4425</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18215</b>	<b>100.0</b>

#### **5.4.5 Perceived stress by Household Structure**

Table 34 shows that over 80% of respondents in most household structures felt that they were able to control the important things in life all or most of the time. There were slightly lower proportions in households with two or more families. There were high proportions of respondents who lived in single person households who reported that they felt unable to control the important things in life all or most of the time. Over 80% of respondents in all groups reported that they felt that they were able to overcome difficulties.

There were higher proportions of respondents living in two or more family households or by themselves, who felt less confident in their ability to handle person problems.

There were higher proportions of respondents living in two or more family households or by themselves, who felt things were not going their way most of the time.

**Table 34: Perceived stress by household structure**

Household Structure (W1)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	240	1.6	515	3.5	1515	10.3	3165	21.6	9105	62.0	135	0.9	14675	100.0
Two or more families	10	1.6	30	4.9	85	13.9	130	21.3	340	55.7	15	2.5	610	100.0
Other multi-person household	10	1.2	30	3.6	95	11.5	205	24.8	480	58.2	10	1.2	825	100.0
One person household	50	2.4	110	5.2	225	10.7	325	15.4	1380	65.6	25	1.2	2105	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1920</b>	<b>10.5</b>	<b>3815</b>	<b>20.9</b>	<b>11305</b>	<b>62.1</b>	<b>180</b>	<b>1.0</b>	<b>18215</b>	<b>100.0</b>
Unable to overcome difficulties (W3)														
One Family	90	0.6	250	1.7	1150	7.8	2585	17.6	10470	71.3	130	0.9	14675	100.0
Two or more families	10	1.6	15	2.5	75	12.3	130	21.3	365	59.8	15	2.5	610	100.0
Other multi-person household	10	1.2	15	1.8	75	9.1	175	21.2	555	67.3	10	1.2	825	100.0
One person household	20	1.0	55	2.6	165	7.8	285	13.5	1555	73.9	20	1.0	2105	100.0
<b>Total</b>	<b>120</b>	<b>0.7</b>	<b>335</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3175</b>	<b>17.4</b>	<b>12950</b>	<b>71.1</b>	<b>175</b>	<b>1.0</b>	<b>18215</b>	<b>100.0</b>
Confident in handling problems (W3)														
One Family	5415	36.9	6920	47.2	1270	8.7	635	4.3	315	2.1	125	0.9	14675	100.0
Two or more families	195	32.0	270	44.3	80	13.1	30	4.9	15	2.5	15	2.5	610	100.0
Other multi-person household	270	32.7	430	52.1	75	9.1	35	4.2	15	1.8	10	1.2	825	100.0
One person household	840	39.9	890	42.3	190	9.0	105	5.0	55	2.6	25	1.2	2105	100.0
<b>Total</b>	<b>6715</b>	<b>36.9</b>	<b>8515</b>	<b>46.7</b>	<b>1610</b>	<b>8.8</b>	<b>805</b>	<b>4.4</b>	<b>400</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Felt things were going your way (W3)														
One Family	1575	10.7	8075	55.0	3540	24.1	975	6.6	360	2.5	155	1.1	14675	100.0
Two or more families	65	10.7	285	46.7	175	28.7	50	8.2	20	3.3	20	3.3	610	100.0
Other multi-person household	75	9.1	475	57.6	205	24.8	60	7.3	10	1.2	10	1.2	825	100.0
One person household	225	10.7	1050	49.9	505	24.0	205	9.7	80	3.8	40	1.9	2105	100.0
<b>Total</b>	<b>1935</b>	<b>10.6</b>	<b>9890</b>	<b>54.3</b>	<b>4425</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18215</b>	<b>100.0</b>



## **5.5 The Association of Chronic Diseases with Demographics**

This section describes the proportion of respondents who reported that they had ever been told by a doctor if they had various chronic diseases (asked as part of the health module in Wave 3), by major demographic variables at Wave 1. A chronic disease is a physical or mental illness that has lasted, or is expected to last, for more than six months. The proportions presented in these tables are the number who reported "yes" they did have the chronic disease. The chronic diseases were summed into a comorbidity index, which is presented by major demographic variables.

### **5.5.1 Chronic Diseases, Overall and by Age and Sex**

Table 35 presents the proportion of respondents who reported that they had ever been told by a doctor if they had various chronic diseases. Although the results presented here are not adjusted for age nor weighted to the NZ population, the overall proportions of respondents who had each chronic disease were similar to those found in the NZ Health Survey 2002/03. (Ministry of Health, 2004a) More females than males reported they had asthma (same in NZHS) and it was distributed towards the younger age groups. High blood pressure, high cholesterol, heart disease, stroke and diabetes were all distributed towards the older age groups, with the highest proportions in the 65+ year age group. Males had higher rates of high cholesterol and heart disease than females. The prevalence of migraine and manic depression, depression or schizophrenia in females was twice the rate in males. The age structure of migraine and manic depression, depression or schizophrenia was more towards the 25-54 age groups.

Table 36 presents the number of diseases in the SoFIE population. Overall 45% of the population reported no chronic diseases, with high rate in males than females and a linear decline in the proportion with no disease with increasing age. Whereas, there is an increasing linear trend with increasing age for the proportion of respondents with 1-2 or >2 comorbid diseases. Females also had higher proportions than males with any comorbid disease.

### **5.5.2 Chronic Diseases by Ethnicity**

Table 37 shows that Māori had higher rates of asthma compared to all other ethnic groups. The non-Māori, non-Pacific, non-Asian ethnic group had the highest proportion of high blood pressure, high cholesterol, and heart disease. The rates in the Pacific and Asian ethnic groups were typically much lower than the overall rate. The prevalence of diabetes was much higher in the Pacific population than any other ethnic group, which has been found in other population-based studies around NZ. (Joshy & Simmons, 2006) However, note that the rates here have not been adjusted for age structure nor weighted to the NZ population. The prevalence rates of migraine and manic depression, depression or schizophrenia were higher in the non-Māori, non-Pacific, non-Asian and Māori ethnic groups.

Table 38 shows that there were similar proportions of comorbid disease in the non-Māori, non-Pacific, non-Asian and Māori ethnic groups. There were high rates of Pacific and Asian ethnic groups who did not report any chronic diseases, which could be due to undiagnosed disease in these populations.

### **5.5.3 Chronic Diseases by Marital Status**

Table 39 shows that there were high proportions of the NA:DK:REF and never legally married groups with asthma, reflecting the younger age distribution of these groups. The divorced, widowed, separated group reported high proportions high blood pressure, high cholesterol, heart disease, stroke, diabetes and migraine, reflecting the older age structure of this population.

Table 40 shows high proportions of the NA:DK:REF and never legally married groups reporting no chronic diseases, again reflecting the younger age structure. The divorced, widowed, separated group had the highest proportions of 1-2 or >2 comorbid diseases.

### **5.5.4 Chronic Diseases by Family Structure**

Table 41 shows that there were similar (high) proportions of respondents who were living in a couple only family or not in a family nucleus reporting they had high blood pressure, high cholesterol, heart disease, stroke and diabetes. This may be reflected in the older age structure of these groups. There were high proportions of respondents living in sole

parent families that reported they had asthma and migraines. There were high proportions of respondents in sole parent families and not in a family nucleus who reported they had manic depression, depression or schizophrenia.

Table 42 shows that respondents living in a family of couple with children were more likely to report no chronic diseases. Whereas, respondents who were living in a couple only family or not in a family nucleus had similar, high, proportions of comorbid diseases.

### **5.5.5 Chronic Diseases by Household Structure**

Table 43 shows that higher proportions of respondents living in other multi-person household (flatting) reported that they had asthma, reflecting the younger age structure of this group. Respondents living in one person households reported high prevalence of high blood pressure, high cholesterol, heart disease, stroke and diabetes, possibly reflecting the older age structure of this population. There were high proportions of respondents living in households with two or more families who reported they had diabetes, possibly reflecting the larger proportion of Pacific respondents in this group.

Table 44 shows that there were high proportions of people living in two or more family household or other multi-person households who reported no chronic diseases. There were high proportion of respondents living in single person households with one or more comorbid disease, again reflecting the older age structure.

**Table 35: Chronic diseases, overall and by age and sex**

Age (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	135	22.9	10	1.7	10	1.7	10	1.7	.	.	10	1.7	45	7.6	15	2.5	590	100.0
15-24	675	26.8	100	4.0	40	1.6	10	0.4	10	0.4	10	0.4	270	10.7	185	7.4	2515	100.0
25-34	635	22.5	275	9.8	180	6.4	25	0.9	15	0.5	30	1.1	425	15.1	300	10.6	2820	100.0
35-44	680	18.0	510	13.5	480	12.7	65	1.7	30	0.8	90	2.4	585	15.5	415	11.0	3770	100.0
45-54	520	16.1	765	23.6	750	23.2	125	3.9	45	1.4	160	4.9	485	15.0	345	10.7	3235	100.0
55-64	405	16.2	930	37.1	780	31.1	280	11.2	80	3.2	220	8.8	310	12.4	245	9.8	2505	100.0
65+	375	13.5	1415	50.8	915	32.9	650	23.3	280	10.1	290	10.4	310	11.1	175	6.3	2785	100.0
<b>Male</b>	<b>1385</b>	<b>16.5</b>	<b>1760</b>	<b>21.0</b>	<b>1625</b>	<b>19.4</b>	<b>635</b>	<b>7.6</b>	<b>220</b>	<b>2.6</b>	<b>410</b>	<b>4.9</b>	<b>640</b>	<b>7.6</b>	<b>505</b>	<b>6.0</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>2035</b>	<b>20.7</b>	<b>2230</b>	<b>22.7</b>	<b>1525</b>	<b>15.5</b>	<b>520</b>	<b>5.3</b>	<b>235</b>	<b>2.4</b>	<b>400</b>	<b>4.1</b>	<b>1785</b>	<b>18.1</b>	<b>1170</b>	<b>11.9</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 36: Comorbidity index, overall and by age and sex**

Age (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
0-14	415	70.3	175	29.7	10	1.7	10	1.7	590	100.0
15-24	1515	60.2	945	37.6	50	2.0	10	0.4	2515	100.0
25-34	1550	55.0	1125	39.9	140	5.0	10	0.4	2820	100.0
35-44	1965	52.1	1560	41.4	230	6.1	15	0.4	3770	100.0
45-54	1335	41.3	1575	48.7	320	9.9	10	0.3	3235	100.0
55-64	820	32.7	1265	50.5	415	16.6	10	0.4	2505	100.0
65+	650	23.3	1475	53.0	645	23.2	10	0.4	2785	100.0
<b>Male</b>	<b>4080</b>	<b>48.7</b>	<b>3550</b>	<b>42.4</b>	<b>720</b>	<b>8.6</b>	<b>30</b>	<b>0.4</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>4165</b>	<b>42.3</b>	<b>4555</b>	<b>46.3</b>	<b>1090</b>	<b>11.1</b>	<b>25</b>	<b>0.3</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 37: Chronic diseases by prioritised ethnicity**

Ethnicity (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	2685	18.6	3335	23.1	2685	18.6	1005	7.0	385	2.7	580	4.0	2040	14.1	1460	10.1	14455	100.0
Māori	525	25.7	425	20.8	275	13.4	90	4.4	45	2.2	115	5.6	280	13.7	150	7.3	2045	100.0
Pacific	110	13.7	145	18.0	85	10.6	45	5.6	15	1.9	80	9.9	60	7.5	30	3.7	805	100.0
Asian	100	11.0	90	9.9	100	11.0	25	2.7	10	1.1	35	3.8	50	5.5	30	3.3	910	100.0
<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3140</b>	<b>17.2</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 38: Comorbidity index by prioritised ethnicity**

Ethnicity (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	6205	42.9	6700	46.4	1510	10.4	35	0.2	14455	100.0
Māori	940	46.0	905	44.3	200	9.8	10	0.5	2045	100.0
Pacific	480	59.6	260	32.3	60	7.5	10	1.2	805	100.0
Asian	625	68.7	245	26.9	35	3.8	10	1.1	910	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 39: Chronic diseases by legal marital status**

Marital Status (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	140	23.5	10	1.7	10	1.7	10	1.7	.	.	10	1.7	45	7.6	15	2.5	595	100.0
Never Married	1245	24.0	525	10.1	355	6.8	70	1.3	45	0.9	100	1.9	640	12.3	525	10.1	5190	100.0
Divorced Widowed Separated	560	18.7	1045	34.8	715	23.8	355	11.8	155	5.2	195	6.5	490	16.3	395	13.2	3000	100.0
Married	1480	15.7	2415	25.6	2070	21.9	735	7.8	255	2.7	505	5.3	1260	13.3	740	7.8	9440	100.0
<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 40: Comorbidity index by legal marital status**

Marital Status (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	415	69.7	175	29.4	10	1.7	10	1.7	595	100.0
Never Married	2830	54.5	2090	40.3	260	5.0	15	0.3	5190	100.0
Divorced Widowed Separated	965	32.2	1515	50.5	505	16.8	10	0.3	3000	100.0
Married	4040	42.8	4330	45.9	1040	11.0	30	0.3	9440	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 41: Chronic diseases by family structure**

Family Structure (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migrane		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	910	16.8	1710	31.6	1370	25.3	600	11.1	215	4.0	340	6.3	690	12.7	430	7.9	5415	100.0
Couple with children	1445	18.6	1025	13.2	940	12.1	190	2.4	60	0.8	225	2.9	1005	13.0	605	7.8	7760	100.0
Sole parent	435	23.7	290	15.8	190	10.4	75	4.1	35	1.9	60	3.3	320	17.4	250	13.6	1835	100.0
Not in a family nucleus	630	19.6	970	30.2	645	20.1	295	9.2	140	4.4	185	5.8	425	13.2	390	12.1	3210	100.0
<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 42: Comorbidity index by family structure**

Family Structure (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
Couple only	2000	36.9	2635	48.7	765	14.1	15	0.3	5415	100.0
Couple with children	4165	53.7	3140	40.5	425	5.5	30	0.4	7760	100.0
Sole parent	855	46.6	805	43.9	170	9.3	10	0.5	1835	100.0
Not in a family nucleus	1225	38.2	1530	47.7	450	14.0	10	0.3	3210	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 43: Chronic diseases by household structure**

Household Structure (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	2740	18.7	2970	20.2	2455	16.7	860	5.9	310	2.1	595	4.1	1970	13.4	1270	8.7	14675	100.0
Two or more families	115	18.9	115	18.9	85	13.9	25	4.1	10	1.6	45	7.4	75	12.3	40	6.6	610	100.0
Other multi-person household	195	23.5	100	12.0	70	8.4	15	1.8	10	1.2	20	2.4	110	13.3	90	10.8	830	100.0
One person household	380	18.1	810	38.5	525	24.9	260	12.4	125	5.9	155	7.4	275	13.1	275	13.1	2105	100.0
<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3140</b>	<b>17.2</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 44: Comorbidity index by household structure**

Household Structure (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
One Family	6825	46.5	6465	44.1	1335	9.1	45	0.3	14675	100.0
Two or more families	320	52.5	235	38.5	55	9.0	10	1.6	610	100.0
Other multi-person household	425	51.2	360	43.4	40	4.8	.	.	830	100.0
One person household	675	32.1	1055	50.1	380	18.1	10	0.5	2105	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>



## 5.6 The Association of Smoking Status with Demographics

This section describes the proportion of respondents who reported whether they regularly smoke tobacco cigarettes or not, asked as part of the health module in Wave 3, by major demographic variables at Wave 1.

### 5.6.1 Smoking, Overall by Age and Sex

Table 45 shows that over 50% of the population had never smoked, which was higher in females than males. The proportions of never smokers were highest in the younger age groups. There were increasing proportions of ex-smokers with increasing age. However, 20% of the population are still current smokers. This proportion is higher in the 15-44 age groups.

**Table 45: Smoking status, overall and by age and sex**

Age (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
0-14	500	84.7	15	2.5	70	11.9	10	1.7	590	100.0
15-24	1635	65.0	230	9.1	645	25.6	10	0.4	2515	100.0
25-34	1480	52.4	550	19.5	785	27.8	10	0.4	2825	100.0
35-44	1990	52.8	875	23.2	895	23.7	15	0.4	3770	100.0
45-54	1645	50.9	920	28.4	655	20.2	15	0.5	3235	100.0
55-64	1165	46.5	890	35.5	440	17.6	10	0.4	2505	100.0
65+	1380	49.6	1185	42.6	205	7.4	10	0.4	2780	100.0
<b>Male</b>	<b>4260</b>	<b>50.8</b>	<b>2345</b>	<b>28.0</b>	<b>1735</b>	<b>20.7</b>	<b>40</b>	<b>0.5</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>5540</b>	<b>56.3</b>	<b>2305</b>	<b>23.4</b>	<b>1955</b>	<b>19.9</b>	<b>30</b>	<b>0.3</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

### 5.6.2 Smoking by Ethnicity

Table 46 shows that the highest proportion of respondents who reported that they had never smoked were in the Asian ethnic group. Whereas, the lowest proportion of never smokers were in the Māori ethnic group. The highest proportions of current smokers were in the Māori ethnic group, which is similar to that found in the NZHS.(Ministry of Health, 2004a)

**Table 46: Smoking status by prioritised ethnicity**

Ethnicity (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	7845	54.3	3975	27.5	2590	17.9	45	0.3	14455	100.0
Māori	755	36.9	475	23.2	810	39.6	10	0.5	2045	100.0
Pacific	475	59.0	120	14.9	200	24.8	10	1.2	805	100.0
Asian	730	79.8	80	8.7	95	10.4	10	1.1	915	100.0
<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

### 5.6.3 Smoking by Marital Status

Table 47 shows that the majority of the NA:DK:REF marital group (ages 0-14 at Wave 1) reported that they had never smoked. There are high proportions of divorced, widowed, or separated and legally married respondents who reported that they had given up smoking. There were high proportions of respondents who were never legally married who reported that they still smoked currently, possible reflecting the younger (to middle) age structure of this group.

**Table 47: Smoking status by legal marital status**

Marital Status (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	500	84.0	15	2.5	70	11.8	10	1.7	595	100.0
Never Married	2850	54.9	805	15.5	1515	29.2	15	0.3	5190	100.0
Divorced Widowed Separated	1335	44.6	930	31.1	720	24.0	10	0.3	2995	100.0
Married	5115	54.2	2905	30.8	1385	14.7	35	0.4	9440	100.0
<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3695</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

### 5.6.4 Smoking by Family Structure

Table 48 shows that higher proportions of respondents who lived in a couple with children reported never smoking, with low proportions of respondents living in sole parent families reporting never smoking. There were high proportions of respondents living in sole parent families who reported that they were current smokers.

**Table 48: Smoking status by family structure**

Family Structure (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
Couple only	2710	50.0	1855	34.3	830	15.3	20	0.4	5415	100.0
Couple with children	4610	59.4	1610	20.8	1500	19.3	35	0.5	7755	100.0
Sole parent	820	44.7	365	19.9	640	34.9	10	0.5	1835	100.0
Not in a family nucleus	1660	51.6	820	25.5	720	22.4	10	0.3	3215	100.0
<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

### 5.6.5 Smoking by Household Structure

Table 49 shows higher proportions of respondents who lived other multi-person household reported never smoking, reflecting the younger age structure of this group. There were low proportions of respondents living in two or more family households reporting never smoking. There were high proportions of respondents living in two or more family households reporting that they were current smokers.

**Table 49: Smoking status by household structure**

Household Structure (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
One Family	8000	54.5	3760	25.6	2865	19.5	55	0.4	14680	100.0
Two or more families	285	46.7	135	22.1	185	30.3	10	1.6	610	100.0
Other multi-person household	475	57.2	145	17.5	205	24.7	.	.	830	100.0
One person household	1050	49.9	615	29.2	430	20.4	10	0.5	2105	100.0
<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

## 5.7 The Association of Alcohol Consumption with Demographics

This section describes the frequency of drinking alcoholic beverages and binge drinking (asked at Wave 3), by major demographic variables at Wave 1. Average alcoholic beverage consumption was calculated as the numbers of days drinking by the number of drinks consumed.

### 5.7.1 Alcohol consumption, Overall by Age and Sex

Table 50 shows that more females than males abstained from drinking over the past 12 months, with high proportions in the 0-14 and 65+ age groups. There were higher proportions of younger respondents who drank less than once a month. There were higher proportions of respondents aged 15-44 who drank 2-4 times a month, as well as 2-3 times per week. However, the highest proportions of respondents who drink four or more times per week were aged 45+ years. Males tended to drink more frequently than females. Respondents aged 15-34 and males were more likely to binge drink than others. The average alcohol consumption overall was 1.1, where in males (mean=1.4) it was twice that of females (mean=0.7). The average consumption was highest in the 15-24 age group (mean=1.3).

**Table 50: Alcohol drinking frequency, overall and by age and sex**

Age (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	210	35.6	195	33.1	140	23.7	25	4.2	10	1.7	10	1.7	90	15.3	590	100.0
15-24	375	14.9	560	22.3	930	37.1	410	16.3	220	8.8	10	0.4	1070	42.6	2510	100.0
25-34	385	13.7	585	20.7	925	32.8	435	15.4	475	16.8	10	0.4	885	31.4	2820	100.0
35-44	545	14.5	645	17.1	1080	28.6	630	16.7	850	22.5	20	0.5	905	24.0	3770	100.0
45-54	540	16.7	490	15.1	750	23.2	480	14.8	965	29.8	20	0.6	560	17.3	3235	100.0
55-64	465	18.6	400	16.0	535	21.4	310	12.4	775	30.9	15	0.6	270	10.8	2505	100.0
65+	740	26.6	470	16.9	500	18.0	210	7.6	850	30.6	15	0.5	115	4.1	2780	100.0
<b>Male</b>	<b>1165</b>	<b>13.9</b>	<b>1165</b>	<b>13.9</b>	<b>2230</b>	<b>26.6</b>	<b>1345</b>	<b>16.1</b>	<b>2420</b>	<b>28.9</b>	<b>50</b>	<b>0.6</b>	<b>2330</b>	<b>27.8</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>2095</b>	<b>21.3</b>	<b>2190</b>	<b>22.3</b>	<b>2630</b>	<b>26.7</b>	<b>1160</b>	<b>11.8</b>	<b>1725</b>	<b>17.5</b>	<b>45</b>	<b>0.5</b>	<b>1565</b>	<b>15.9</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

### 5.7.2 Alcohol consumption by Ethnicity

Table 51 shows that Pacific and Asian ethnic groups were more likely to fully abstain from drinking. Māori OSM respondents in SoFIE were more likely to drink 1-4 times per month. However, Māori respondents were much more likely to report binge drinking than other ethnic groups. Whereas, the non-Māori, non-Pacific, non-Asian respondents were more likely to drink at least 2-3 or four or more times per week. Note, as stated earlier these results have not been adjusted for age. The average alcohol consumption was lowest in the Asian population (mean=0.5).

**Table 51: Alcohol drinking frequency by prioritised ethnicity**

Ethnicity (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	1910	13.2	2505	17.3	3895	26.9	2195	15.2	3875	26.8	70	0.5	3065	21.2	14455	100.0
Māori	460	22.5	525	25.7	630	30.8	220	10.8	200	9.8	10	0.5	660	32.3	2045	100.0
Pacific	425	52.8	150	18.6	150	18.6	40	5.0	30	3.7	15	1.9	125	15.5	805	100.0
Asian	460	50.3	170	18.6	180	19.7	55	6.0	40	4.4	10	1.1	40	4.4	915	100.0
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

### 5.7.3 Alcohol consumption by Marital Status

Table 52 shows that the NA:DK:RF and divorced, widowed, separated never drinking populations correspond to the 0-14 years and 65+ years age groups, respectively. There were higher proportions of never married respondents who drank 2-4 times per month or 2-3 times per week. Legally married respondents represented the highest proportion of respondents who drank four or more times per week. The never married population were more likely to binge drink than other groups.

**Table 52: Alcohol drinking frequency by legal marital status**

Marital Status (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	210	35.3	200	33.6	140	23.5	30	5.0	10	1.7	10	1.7	90	15.1	595	100.0
Never	745	14.4	1085	20.9	1755	33.8	850	16.4	725	14.0	20	0.4	1885	36.4	5185	100.0
Married	645	21.5	570	19.0	735	24.5	355	11.9	660	22.0	25	0.8	495	16.5	2995	100.0
Divorced	1655	17.5	1495	15.8	2225	23.6	1265	13.4	2745	29.1	50	0.5	1430	15.1	9440	100.0
Widowed	3255	17.9	3350	18.4	4855	26.7	2505	13.8	4145	22.8	100	0.5	3895	21.4	18215	100.0
Separated																
Married																
<b>Total</b>	<b>3255</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2505</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

### 5.7.4 Alcohol consumption by Family Structure

Table 53 shows that the highest proportions of respondents who reported never drinking tended to live in a sole parent family or not in a family nucleus. Respondents living in a sole parent family were also more likely to drink less than once a month. The highest frequency drinkers were respondents who lived in couple only families, where over 30% drank more than four times per week. Binge drinking was more common in respondents who lived in a couple with children or in a sole parent family.

**Table 53: Alcohol drinking frequency by family structure**

Family Structure (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	810	15.0	830	15.3	1235	22.8	720	13.3	1795	33.1	30	0.6	860	15.9	5415	100.0
Couple with children	1370	17.7	1465	18.9	2210	28.5	1145	14.8	1525	19.7	45	0.6	1855	23.9	7755	100.0
Sole parent	405	22.1	495	27.0	525	28.7	205	11.2	195	10.7	10	0.5	480	26.2	1830	100.0
Not in a family nucleus	670	20.8	560	17.4	890	27.7	440	13.7	630	19.6	20	0.6	695	21.6	3215	100.0
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

### 5.7.5 Alcohol consumption by Household Structure

Table 54 shows that respondents who lived in a household with two or more families were more likely to abstain from drinking or drink less than once a month. Respondents who lived in other multi-person households were more likely to drink monthly or 2-3 times per week, as well as being more likely to binge drink, reflecting the younger age

structure of this population. The highest proportion of respondents who drank four or more times per week lived in single family households.

**Table 54: Alcohol drinking frequency by household structure**

Household Structure (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	2455	16.7	2705	18.4	3910	26.6	2040	13.9	3485	23.7	80	0.5	3120	21.3	14680	100.0
Two or more families	205	33.6	145	23.8	140	23.0	55	9.0	65	10.7	10	1.6	140	23.0	610	100.0
Other multi-person household	105	12.7	120	14.5	290	35.2	170	20.6	145	17.6	10	1.2	340	41.2	825	100.0
One person household	495	23.5	380	18.1	515	24.5	250	11.9	450	21.4	15	0.7	295	14.0	2105	100.0
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

## ***Part 2 Results: Socioeconomic Variables and Health***

Part 2 Results presents tables of each socioeconomic variable, by the baseline demographics (age, sex, prioritised ethnicity, family and household structure), by the various health measures with the baseline demographics. A brief description of the findings across each socioeconomic variable is provided under each (level 1) subheading.

The following tables in this report (Chapters 4 to 12) are calculated on a balanced panel, based on *adult OSMs (aged 15+ years) at Wave 3*, who responded in all three waves ( $N = 18,220$ ). All variables are mapped to baseline demographics taken at Wave 1 to ensure numbers for future analyses. All tables are crude analyses i.e. the results are not weighted to the total eligible New Zealand population, nor adjusted for age (or other confounders).



## **Chapter 6 The Association of Household Income with Demographics and Health Measures**

Household income is the total income received from all sources by members of a household in at Wave 1, equivalised for family structure and CPI adjusted to the December quarter 2001. These were cut into percentiles (below).

Household income tertiles: 1. low - \$29,915; 2. \$29,195 - \$55,536; 3. \$55,536 – high.

Household income quintiles: 1. low - \$21,078; 2. \$21,078- \$34,010; 3. \$34,010– \$49,379; 4. \$ 49,379- \$ 72,280; 5. \$72,280 - high.

### ***6.1 The Association of Household Income with Demographics***

Overall, males had higher levels of household income than females. Income quintile tended to increase with increasing age. Non-Māori, non-Pacific, non-Asian respondents had higher proportions in the upper quintiles compared to Māori, Pacific and Asian respondents who had higher proportions in low quintiles. Married respondents had the highest proportions in the upper income quintiles. Whereas, separated, divorced or widowed respondents were over-represented in the lower income quintiles. As were respondents living in sole parent families.

There was a lot of change in income between Waves 1 and 2, with only 56% of the population remaining in the same income quintile. The biggest changes in income were increases in quintiles between Waves 1 and 2.

## 6.1.1 Household income by baseline demographics

**Table 55: Household income overall and by age and sex**

	Income Quintiles (W1)											
	1		2		3		4		5		Total	
Age, mean SD	43.0	19.0	50.0	21.4	41.6	17.4	41.7	16.2	42.8	14.9	44.0	18.2
Age (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	100	16.9	160	27.1	135	22.9	125	21.2	80	13.6	590	100.0
15-24	425	16.9	485	19.3	550	21.9	555	22.1	500	19.9	2515	100.0
25-34	360	12.7	575	20.4	640	22.7	590	20.9	665	23.5	2825	100.0
35-44	470	12.5	730	19.3	890	23.6	855	22.6	830	22.0	3775	100.0
45-54	320	9.9	420	13.0	635	19.6	780	24.1	1090	33.7	3235	100.0
55-64	410	16.4	460	18.4	380	15.2	580	23.2	670	26.7	2505	100.0
65+	340	12.2	1470	52.8	430	15.4	290	10.4	250	9.0	2785	100.0
<b>Male</b>	<b>985</b>	<b>11.8</b>	<b>1780</b>	<b>21.2</b>	<b>1740</b>	<b>20.8</b>	<b>1830</b>	<b>21.8</b>	<b>2040</b>	<b>24.3</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>1435</b>	<b>14.6</b>	<b>2510</b>	<b>25.5</b>	<b>1915</b>	<b>19.5</b>	<b>1935</b>	<b>19.7</b>	<b>2045</b>	<b>20.8</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>2415</b>	<b>13.3</b>	<b>4290</b>	<b>23.5</b>	<b>3655</b>	<b>20.1</b>	<b>3770</b>	<b>20.7</b>	<b>4090</b>	<b>22.4</b>	<b>18220</b>	<b>100.0</b>

**Table 56: Household income by prioritised ethnicity**

	Income Quintiles (W1)											
	1		2		3		4		5		Total	
Ethnicity (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	1480	10.2	3330	23.0	2880	19.9	3140	21.7	3630	25.1	14450	100.0
Māori	450	22.0	545	26.7	415	20.3	365	17.8	270	13.2	2045	100.0
Pacific	200	24.8	200	24.8	210	26.1	125	15.5	80	9.9	805	100.0
Asian	290	31.7	215	23.5	155	16.9	140	15.3	120	13.1	915	100.0
<b>Total</b>	<b>2420</b>	<b>13.3</b>	<b>4290</b>	<b>23.5</b>	<b>3655</b>	<b>20.1</b>	<b>3765</b>	<b>20.7</b>	<b>4090</b>	<b>22.4</b>	<b>18220</b>	<b>100.0</b>

**Table 57: Household income by legal marital status**

	Income Quintiles (W1)											
	1		2		3		4		5		Total	
Marital Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	100	16.8	155	26.1	135	22.7	125	21.0	85	14.3	595	100.0
Never Married	815	15.7	1025	19.7	1045	20.1	1130	21.8	1180	22.7	5190	100.0
Divorced Widowed Separated	515	17.2	1015	33.8	495	16.5	510	17.0	460	15.3	3000	100.0
Married	990	10.5	2090	22.1	1985	21.0	2010	21.3	2365	25.1	9440	100.0
<b>Total</b>	<b>2420</b>	<b>13.3</b>	<b>4290</b>	<b>23.5</b>	<b>3650</b>	<b>20.0</b>	<b>3770</b>	<b>20.7</b>	<b>4085</b>	<b>22.4</b>	<b>18220</b>	<b>100.0</b>

**Table 58: Household income by family structure**

Family Structure (W1)	Income Quintiles (W1)											
	1		2		3		4		5		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	505	9.3	1260	23.3	810	15.0	1155	21.3	1685	31.1	5415	100.0
Couple with children	810	10.4	1485	19.1	1965	25.3	1835	23.6	1665	21.5	7760	100.0
Sole parent	535	29.2	575	31.3	330	18.0	230	12.5	160	8.7	1835	100.0
Not in a family nucleus	565	17.6	965	30.0	550	17.1	550	17.1	580	18.0	3215	100.0
<b>Total</b>	<b>2415</b>	<b>13.3</b>	<b>4290</b>	<b>23.6</b>	<b>3655</b>	<b>20.1</b>	<b>3770</b>	<b>20.7</b>	<b>4090</b>	<b>22.5</b>	<b>18215</b>	<b>100.0</b>

**Table 59: Household income by household structure**

Household Structure (W1)	Income Quintiles (W1)											
	1		2		3		4		5		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
One Family	1805	12.3	3235	22.0	3065	20.9	3150	21.5	3410	23.2	14680	100.0
Two or more families	75	12.3	155	25.4	110	18.0	120	19.7	145	23.8	610	100.0
Other multi-person household	135	16.3	110	13.3	160	19.3	195	23.5	225	27.1	830	100.0
One person household	400	19.0	780	37.1	310	14.7	305	14.5	310	14.7	2105	100.0
<b>Total</b>	<b>2420</b>	<b>13.3</b>	<b>4290</b>	<b>23.6</b>	<b>3655</b>	<b>20.1</b>	<b>3765</b>	<b>20.7</b>	<b>4085</b>	<b>22.4</b>	<b>18215</b>	<b>100.0</b>

### 6.1.2 Changes in household income

Changes in income between waves 1 and 2 were investigated, rather than waves 1 and 3 because there were some issues with the derivation of income at wave 3 which are being sorted by Statistics NZ.

**Table 60: Changes in household income between waves 1 and 2.**

Income Quintiles (W1)	Income Quintiles (W2)											
	1		2		3		4		5		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
1	1175	48.6	805	33.3	240	9.9	120	5.0	70	2.9	2420	100.0
2	590	13.8	2470	57.6	860	20.0	250	5.8	115	2.7	4290	100.0
3	155	4.2	565	15.5	1645	45.0	1030	28.2	270	7.4	3655	100.0
4	100	2.7	220	5.8	565	15.0	1955	51.9	935	24.8	3765	100.0
5	95	2.3	120	2.9	220	5.4	655	16.0	3005	73.6	4085	100.0
<b>Total</b>	<b>2115</b>	<b>11.6</b>	<b>4175</b>	<b>22.9</b>	<b>3525</b>	<b>19.4</b>	<b>4010</b>	<b>22.0</b>	<b>4395</b>	<b>24.1</b>	<b>18215</b>	<b>100.0</b>

## 6.2 The Association of Household Income with Self-Rated Health

Overall, the proportion of respondents reporting excellent or very good health status increased with increasing income tertile. Also the proportion reporting excellent health status increased across income tertiles in every age group, as well as by sex and ethnicity. This pattern was consistent within marital status, family and household structure. There were high proportions of divorced, widowed or separated respondents in the lowest income tertile, reporting fair or poor health.

**Table 61: Self-rated health, by household income tertiles, overall**

Income Tertiles (W1)	Self Rated Health (W1)												Total	
	Excellent		Very Good		Good		Fair		Poor		NA:DK:REF			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	1515	27.7	1625	29.7	1490	27.3	660	12.1	180	3.3	10	0.2	5465	100.0
2	2325	37.8	2165	35.2	1235	20.1	335	5.5	90	1.5	.	.	6145	100.0
3	3105	47.0	2250	34.0	995	15.1	215	3.3	45	0.7	.	.	6610	100.0
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>10</b>	<b>0.1</b>	<b>18220</b>	<b>100.0</b>

**Table 62: Self-rated health, by household income tertiles by age and sex**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	1	105	52.5	55	27.5	30	15.0	10	5.0	10	5.0	200	100.0
	2	120	52.2	80	34.8	25	10.9	10	4.3	.	.	230	100.0
	3	100	60.6	50	30.3	15	9.1	10	6.1	10	6.1	165	100.0
15-24	1	330	45.5	230	31.7	135	18.6	30	4.1	10	1.4	725	100.0
	2	435	46.8	330	35.5	140	15.1	25	2.7	10	1.1	930	100.0
	3	485	56.4	240	27.9	115	13.4	10	1.2	10	1.2	860	100.0
25-34	1	270	37.5	260	36.1	140	19.4	50	6.9	10	1.4	720	100.0
	2	505	49.0	330	32.0	150	14.6	45	4.4	10	1.0	1030	100.0
	3	595	55.6	360	33.6	100	9.3	15	1.4	10	0.9	1070	100.0
35-44	1	305	33.0	295	31.9	210	22.7	80	8.6	30	3.2	925	100.0
	2	615	42.3	495	34.0	260	17.9	65	4.5	10	0.7	1455	100.0
	3	690	49.5	475	34.1	180	12.9	35	2.5	10	0.7	1395	100.0
45-54	1	160	26.2	165	27.0	170	27.9	70	11.5	40	6.6	610	100.0
	2	335	33.3	375	37.3	215	21.4	55	5.5	15	1.5	1005	100.0
	3	735	45.4	575	35.5	250	15.4	50	3.1	10	0.6	1620	100.0
55-64	1	130	17.8	200	27.4	230	31.5	140	19.2	30	4.1	730	100.0
	2	170	23.6	285	39.6	190	26.4	50	6.9	30	4.2	720	100.0
	3	380	35.8	405	38.2	215	20.3	50	4.7	10	0.9	1060	100.0
65+	1	215	13.8	420	26.9	575	36.9	285	18.3	70	4.5	1560	100.0
	2	150	19.1	275	35.0	245	31.2	90	11.5	25	3.2	785	100.0
	3	115	26.1	145	33.0	120	27.3	50	11.4	10	2.3	440	100.0
<b>Male</b>	1	645	29.1	635	28.7	585	26.4	270	12.2	80	3.6	2215	100.0
	2	1100	37.9	1025	35.3	565	19.5	170	5.9	35	1.2	2900	100.0
	3	1485	45.5	1130	34.6	520	15.9	110	3.4	20	0.6	3265	100.0
<b>Female</b>	1	865	26.6	995	30.6	905	27.8	390	12.0	100	3.1	3255	100.0
	2	1220	37.6	1135	35.0	665	20.5	165	5.1	50	1.5	3245	100.0
	3	1620	48.5	1115	33.4	470	14.1	105	3.1	25	0.7	3340	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 63: Self-rated health, by household income tertiles by prioritised ethnicity**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	1	1010	26.2	1125	29.1	1090	28.2	500	13.0	130	3.4	3860	100.0
	2	1820	37.6	1755	36.3	945	19.5	260	5.4	65	1.3	4840	100.0
	3	2735	47.6	1965	34.2	835	14.5	175	3.0	45	0.8	5750	100.0
Māori	1	200	24.5	275	33.7	220	27.0	100	12.3	15	1.8	815	100.0
	2	255	35.2	245	33.8	170	23.4	50	6.9	10	1.4	725	100.0
	3	205	41.0	180	36.0	90	18.0	25	5.0	10	2.0	500	100.0
Pacific	1	130	38.2	85	25.0	70	20.6	40	11.8	25	7.4	340	100.0
	2	145	44.6	90	27.7	60	18.5	15	4.6	10	3.1	325	100.0
	3	65	44.8	45	31.0	25	17.2	10	6.9	10	6.9	145	100.0
Asian	1	170	37.8	135	30.0	115	25.6	25	5.6	10	2.2	450	100.0
	2	110	43.1	75	29.4	55	21.6	15	5.9	10	3.9	255	100.0
	3	100	46.5	60	27.9	40	18.6	10	4.7	.	.	215	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 64: Self-rated health, by household income tertiles by legal marital status**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	1	110	53.7	55	26.8	30	14.6	10	4.9	10	4.9	205	100.0
	2	120	52.2	80	34.8	25	10.9	10	4.3	.	.	230	100.0
	3	100	60.6	45	27.3	10	6.1	10	6.1	10	6.1	165	100.0
Never Married	1	525	35.4	475	32.0	330	22.2	115	7.7	35	2.4	1485	100.0
	2	740	41.9	600	34.0	330	18.7	75	4.2	20	1.1	1765	100.0
	3	1005	51.9	620	32.0	260	13.4	40	2.1	10	0.5	1935	100.0
Divorced Widowed Separated	1	260	19.7	355	26.9	430	32.6	220	16.7	60	4.5	1320	100.0
	2	260	29.5	295	33.5	220	25.0	70	8.0	35	4.0	880	100.0
	3	300	37.7	285	35.8	150	18.9	50	6.3	10	1.3	795	100.0
Married	1	615	25.0	735	29.9	700	28.5	320	13.0	80	3.3	2460	100.0
	2	1205	36.9	1180	36.1	655	20.0	190	5.8	40	1.2	3270	100.0
	3	1700	45.8	1300	35.0	570	15.3	125	3.4	30	0.8	3715	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3710</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

**Table 65: Self-rated health, by household income tertiles by family structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1	255	17.7	400	27.8	485	33.7	230	16.0	60	4.2	1440	100.0
	2	415	28.0	555	37.5	385	26.0	105	7.1	20	1.4	1480	100.0
	3	1070	42.8	905	36.2	415	16.6	90	3.6	15	0.6	2500	100.0
Couple with children	1	660	38.3	545	31.6	365	21.2	130	7.5	30	1.7	1725	100.0
	2	1415	44.6	1090	34.3	500	15.7	135	4.3	35	1.1	3175	100.0
	3	1505	52.6	920	32.2	360	12.6	60	2.1	20	0.7	2860	100.0
Sole parent	1	340	35.4	295	30.7	215	22.4	80	8.3	30	3.1	960	100.0
	2	205	35.7	180	31.3	130	22.6	40	7.0	20	3.5	575	100.0
	3	120	39.3	105	34.4	60	19.7	15	4.9	10	3.3	305	100.0
Not in a family nucleus	1	260	19.3	385	28.6	425	31.6	215	16.0	60	4.5	1345	100.0
	2	285	31.0	340	37.0	215	23.4	55	6.0	20	2.2	920	100.0
	3	410	43.4	320	33.9	160	16.9	45	4.8	10	1.1	945	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

**Table 66: Self-rated health, by household income tertiles by household structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	1	1220	30.4	1215	30.3	1040	25.9	430	10.7	110	2.7	4015	100.0
	2	2020	39.3	1790	34.9	1000	19.5	270	5.3	65	1.3	5135	100.0
	3	2645	47.9	1885	34.1	795	14.4	160	2.9	35	0.6	5525	100.0
Two or more families	1	55	30.6	50	27.8	40	22.2	20	11.1	10	5.6	180	100.0
	2	70	33.3	70	33.3	45	21.4	20	9.5	10	4.8	210	100.0
	3	85	38.6	65	29.5	55	25.0	15	6.8	.	.	220	100.0
Other multi-person household	1	70	32.6	80	37.2	55	25.6	10	4.7	10	4.7	215	100.0
	2	90	33.3	100	37.0	65	24.1	10	3.7	10	3.7	270	100.0
	3	175	50.7	115	33.3	45	13.0	10	2.9	10	2.9	345	100.0
One person household	1	160	15.2	290	27.5	355	33.6	190	18.0	55	5.2	1055	100.0
	2	150	28.6	200	38.1	125	23.8	35	6.7	15	2.9	525	100.0
	3	200	38.8	185	35.9	100	19.4	25	4.9	10	1.9	515	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

### 6.3 The Association of Household Income with Health-Related Quality of Life (SF-36)

Overall, mean SF-36 scores increased with increasing income tertile. This was consistent across age groups and by sex and for non-Māori, non-Pacific, non-Asian and Māori ethnic groups. The relationship in respondents aged 0-14 years (at Wave 1) was not linear. However, this group typically had mean SF-36 scores greater than the overall mean at all income tertiles. For Pacific and Asian ethnic groups the mean SF-36 scores seem to be relatively stable across income tertiles. This may be due to smaller numbers in these populations in the study. There is not a linear relationship for respondents in sole parent families, with the mean scores in income tertile 2 being lower than tertile 1 and 3 for the physical health scales (BP, VT, PF, PCS). There were linear relationships with increasing mean SF-36 score and increasing income for the different household structures. However, it appears that SF-36 means were lowest in one person households in the lowest income tertile, which may reflect the older age structure of this group.

**Table 67: Overall Mean (SD) SF-36 score by Household income tertiles**

Income Tertiles (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	72.7	22.7	78.3	25.3	78.3	27.2	86.4	24.2	61.0	22.1	81.1	16.3	88.7	20.3	78.9	26.9	51.0	10.3	47.9	10.8
2	78.6	19.7	82.3	22.5	85.2	22.7	90.2	20.4	64.6	19.7	83.4	14.1	92.5	16.3	87.6	20.5	52.2	8.9	50.9	8.9
3	82.5	17.1	84.3	20.8	87.9	20.4	92.8	17.1	67.0	18.4	84.9	12.6	94.5	13.6	90.9	16.5	53.3	7.9	52.1	7.6
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>



**Table 68: Mean (SD) SF-36 score by Household income tertiles by age and sex**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0-14	1	82.1	17.4	87.7	19.6	88.1	19.5	90.5	19.5	70.9	19.3	81.8	14.4	91.2	17.4	96.6	11.2	51.6	9.1	54.2	6.1
	2	83.8	14.8	89.3	16.4	92.4	14.7	92.8	15.9	71.2	15.9	83.0	12.7	94.7	13.9	97.4	8.0	52.4	7.8	55.0	5.0
	3	83.6	14.7	86.4	17.7	90.8	15.9	94.0	14.0	69.3	17.9	83.0	12.0	95.2	13.1	97.5	6.4	52.5	7.6	54.5	4.8
15-24	1	80.4	17.8	86.6	20.4	88.1	19.3	89.3	19.6	66.1	19.1	80.6	14.5	91.0	17.0	93.7	14.3	50.5	9.3	53.6	6.6
	2	79.8	17.6	84.4	21.2	87.4	20.1	88.7	20.6	64.6	19.1	80.8	14.9	91.6	16.5	94.9	12.4	50.3	9.7	53.4	6.6
	3	81.8	16.6	85.1	20.7	88.8	19.5	91.6	18.0	65.5	18.3	82.9	13.1	93.8	13.5	95.7	12.3	51.6	8.2	53.6	6.2
25-34	1	79.1	19.0	83.3	22.1	84.3	22.3	87.9	22.7	62.8	20.4	79.4	17.0	88.0	20.7	92.5	14.6	49.4	10.9	52.8	7.1
	2	81.0	18.0	84.3	21.3	87.2	20.5	90.5	19.4	64.0	19.7	82.6	14.3	92.5	15.7	92.6	14.9	51.4	9.3	52.7	7.1
	3	85.2	14.7	86.0	20.1	89.6	18.6	92.2	16.9	65.1	18.4	83.3	13.0	93.7	14.2	94.5	12.6	52.0	8.2	53.8	6.5
35-44	1	75.3	21.9	79.9	24.6	81.6	25.1	84.5	25.6	61.3	21.5	79.0	17.5	86.8	22.2	86.3	21.2	49.2	11.1	50.5	9.0
	2	81.4	17.6	83.1	21.8	87.1	20.4	90.7	19.8	64.6	19.1	82.8	13.9	92.1	16.3	91.4	15.3	51.7	9.0	52.3	7.5
	3	83.7	16.5	85.0	20.3	88.5	19.5	92.1	18.1	66.5	18.3	83.7	13.1	94.2	14.2	93.1	13.0	52.5	8.2	53.0	6.9
45-54	1	69.0	25.2	74.5	27.3	76.5	28.0	83.4	27.3	60.2	22.2	78.0	19.1	84.8	23.8	79.1	25.8	49.1	11.9	47.5	10.7
	2	77.9	20.6	80.6	23.9	85.1	23.4	90.9	19.8	65.4	19.4	83.9	14.1	92.7	16.3	86.8	20.5	52.7	8.4	50.3	9.1
	3	83.0	16.8	83.9	21.1	88.2	20.1	93.9	15.9	68.1	17.9	85.6	12.1	95.1	12.9	90.1	16.5	53.9	7.5	51.8	7.6
55-64	1	68.0	24.2	73.6	26.5	75.6	27.8	86.9	24.0	61.3	21.8	82.5	16.0	88.6	20.3	74.1	26.1	52.1	9.7	45.4	10.8
	2	75.4	22.0	79.9	23.6	83.2	24.6	90.6	21.8	65.7	20.2	84.7	14.1	92.7	17.1	82.3	22.2	53.4	8.5	48.7	9.5
	3	80.8	18.0	83.1	21.1	87.1	21.4	94.4	15.5	69.7	17.3	87.4	11.4	95.9	11.5	87.3	17.9	55.2	6.8	50.4	8.2
65+	1	67.2	23.3	73.6	26.6	69.9	30.7	85.7	25.2	56.6	23.8	83.9	14.8	90.5	19.0	61.3	30.0	53.1	9.1	41.9	11.7
	2	71.0	22.8	77.9	24.1	75.9	28.1	88.8	23.3	61.3	21.6	86.6	12.8	93.1	16.9	68.3	29.1	54.6	7.8	44.1	11.3
	3	75.0	21.7	79.3	23.2	79.0	26.7	90.5	20.4	64.6	22.2	88.1	11.5	93.0	17.5	74.4	25.5	55.2	7.8	45.9	10.1
Male	1	72.5	23.1	80.0	24.7	79.5	27.4	87.8	23.4	63.8	22.0	82.8	15.4	90.0	19.6	80.9	26.3	52.0	9.8	48.3	10.7
	2	79.2	19.3	83.4	22.0	86.6	22.3	91.5	19.3	67.1	19.1	84.6	13.3	93.8	14.9	89.7	18.7	53.0	8.3	51.4	8.4
	3	82.3	16.8	84.8	20.6	89.1	19.5	94.1	15.4	69.0	17.8	85.7	12.2	95.5	12.4	92.2	14.9	53.9	7.5	52.3	7.2
Female	1	72.9	22.4	77.1	25.7	77.6	27.0	85.4	24.7	59.2	21.9	80.0	16.8	87.9	20.8	77.6	27.3	50.3	10.6	47.6	10.9
	2	78.0	20.0	81.3	22.8	83.9	22.9	89.0	21.4	62.3	19.9	82.2	14.7	91.3	17.5	85.7	21.9	51.4	9.4	50.4	9.3
	3	82.6	17.3	83.7	21.1	86.6	21.3	91.5	18.5	65.1	18.8	84.0	12.9	93.5	14.7	89.5	17.7	52.6	8.2	51.8	8.0
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 69: Mean (SD) SF-36 score by Household income tertiles by ethnicity**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Ethnicity (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
nM,nP,nA	1	71.9	23.1	76.5	25.9	76.6	28.2	86.1	24.7	59.0	22.5	81.1	16.5	89.2	20.1	76.0	28.1	51.0	10.4	46.8	11.3
	2	78.8	19.7	81.7	22.6	84.9	23.0	90.4	20.2	64.0	19.8	83.6	13.9	93.0	15.7	87.0	20.9	52.4	8.8	50.6	9.0
	3	82.7	16.9	84.2	20.8	88.0	20.3	92.9	16.9	66.9	18.4	84.9	12.4	94.7	13.3	90.8	16.4	53.3	7.8	52.1	7.6
Māori	1	75.0	21.7	81.5	23.5	81.7	24.8	85.8	24.5	65.1	21.2	81.1	16.6	87.2	21.7	85.0	23.2	50.6	10.8	50.2	9.2
	2	77.7	19.6	83.5	22.4	85.4	22.3	88.5	23.0	65.1	19.2	82.4	15.2	90.5	18.7	89.7	19.0	51.3	9.9	51.6	8.4
	3	81.7	18.3	85.0	21.7	86.8	21.7	92.7	18.4	67.7	18.3	85.4	13.2	93.5	15.5	90.3	18.2	53.4	8.6	51.8	8.0
Pacific	1	71.5	24.5	80.0	25.4	77.3	26.4	83.5	24.5	66.3	20.4	79.9	15.7	83.2	24.0	81.7	25.3	50.2	9.9	48.5	10.1
	2	77.2	20.4	86.4	21.5	86.1	22.6	89.2	21.0	68.7	20.6	82.3	14.1	89.2	19.9	90.2	19.1	51.5	9.3	52.3	8.0
	3	77.3	18.4	81.4	20.7	82.9	21.6	91.2	18.3	67.5	17.5	82.8	12.7	90.5	17.6	91.0	15.8	52.1	8.3	51.2	7.2
Asian	1	76.8	18.9	87.2	20.8	88.3	18.7	92.0	17.8	67.8	18.2	82.5	14.4	92.0	15.2	91.0	16.0	51.8	8.5	52.6	7.3
	2	78.1	18.1	85.9	20.8	88.7	17.6	92.4	16.7	68.4	16.6	82.0	13.4	92.6	14.7	89.1	19.0	52.2	7.8	52.2	7.5
	3	81.0	17.1	87.3	18.3	88.8	19.0	90.9	18.3	68.6	18.5	82.4	14.6	93.1	13.9	93.1	13.4	51.9	8.7	53.3	6.4
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 70: Mean (SD) SF-36 score by Household income tertiles by legal marital status**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Marital Status (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	1	82.1	17.3	87.9	19.5	88.3	19.4	90.4	19.6	70.8	19.2	81.7	14.5	91.2	17.3	96.7	11.1	51.5	9.2	54.3	6.1
	2	83.8	14.8	89.3	16.4	92.2	15.1	92.8	15.9	71.0	16.2	83.0	12.7	94.8	13.8	97.3	8.2	52.4	7.8	54.9	5.1
	3	83.6	14.7	86.4	17.7	90.8	15.9	94.0	14.0	69.3	17.9	83.0	12.0	95.2	13.1	97.5	6.4	52.5	7.6	54.5	4.8
Never Married	1	76.5	20.6	82.7	22.8	83.4	23.7	86.3	23.5	63.6	20.6	79.3	16.5	87.7	20.8	88.8	20.4	49.6	10.6	51.6	8.5
	2	78.8	18.7	83.5	21.9	86.2	21.3	89.0	20.7	64.1	19.6	81.6	14.9	91.5	16.6	92.0	16.0	50.8	9.6	52.4	7.7
	3	82.8	16.5	85.3	20.0	89.0	19.2	92.0	17.4	66.2	18.2	83.2	13.0	93.6	14.2	94.2	13.7	52.0	8.2	53.4	6.5
Divorced Widowed Separated	1	68.2	24.1	73.2	26.7	71.5	29.2	82.7	27.4	56.4	23.3	80.0	18.1	87.1	22.2	67.9	29.5	50.6	11.4	44.1	11.5
	2	74.8	21.8	77.7	25.1	79.8	26.6	87.3	24.4	61.2	22.3	82.6	15.0	90.2	19.6	78.7	26.8	51.9	9.8	47.8	10.9
	3	79.5	19.8	81.9	23.0	84.9	23.8	91.1	20.0	65.0	20.4	84.3	14.0	93.6	16.1	86.4	20.9	53.0	8.8	50.4	9.2
Married	1	72.1	22.9	77.6	25.8	78.2	27.6	88.1	22.9	61.2	22.0	82.8	15.2	90.0	19.1	77.4	27.0	52.0	9.4	47.1	11.0
	2	79.2	19.7	82.4	22.2	85.5	22.4	91.5	19.3	65.3	19.0	84.6	13.3	93.5	15.3	86.9	20.5	53.0	8.2	50.6	8.8
	3	82.9	16.8	84.1	20.9	87.8	20.4	93.6	16.3	67.7	18.1	85.9	11.9	95.1	12.8	89.8	16.6	54.0	7.4	51.6	7.8
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 71: Mean (SD) SF-36 score by Household income tertiles by family Structure**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Family Structure (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Couple only	1	68.9	23.5	74.5	26.4	74.2	29.5	86.8	24.1	59.9	22.8	83.6	15.0	89.9	19.1	70.5	28.8	52.7	9.2	44.5	11.6
	2	76.8	21.0	80.3	23.0	82.6	24.7	90.4	20.9	64.7	20.0	85.0	13.7	93.1	16.4	82.5	23.5	53.4	8.5	48.8	9.6
	3	82.2	17.4	83.3	21.6	86.9	21.3	93.4	16.2	68.0	18.4	86.1	12.0	94.6	13.6	89.1	17.5	54.1	7.5	51.2	8.1
Couple with children	1	77.3	20.9	82.8	23.1	84.4	22.9	89.1	21.0	64.5	20.7	81.4	15.7	89.9	18.7	89.2	19.0	50.9	9.7	51.5	8.4
	2	80.8	18.1	84.4	21.2	87.7	20.3	91.2	18.7	65.5	18.8	83.1	13.8	93.1	15.4	91.7	15.9	52.0	8.6	52.5	7.4
	3	83.7	15.9	85.8	19.6	89.4	18.6	93.1	16.9	67.2	17.9	84.5	12.4	94.9	12.8	93.4	13.3	52.9	7.8	53.1	6.7
Sole parent	1	75.5	21.2	82.0	24.1	82.2	24.4	84.1	25.5	61.9	21.3	78.2	17.4	86.2	22.1	87.4	21.2	48.7	11.4	51.3	9.0
	2	74.6	21.9	79.4	24.3	81.2	25.3	85.9	24.8	61.0	21.5	80.7	15.7	89.0	20.2	85.2	24.1	50.2	10.5	49.8	10.3
	3	78.3	19.8	81.0	23.5	84.7	23.7	89.4	20.9	63.5	19.3	81.6	14.3	91.3	18.5	87.2	20.7	51.3	9.1	50.8	8.8
Not in a family nucleus	1	69.1	23.6	73.9	26.3	72.3	29.4	84.0	26.8	57.2	22.8	80.2	17.3	87.8	22.0	68.8	30.1	50.9	11.0	44.5	11.5
	2	76.3	20.2	80.1	23.9	82.9	24.2	89.0	22.0	63.6	20.6	83.4	14.3	91.8	16.6	83.1	24.0	52.3	9.1	49.3	10.0
	3	80.8	18.4	83.3	21.3	86.6	22.0	91.5	18.4	64.9	19.6	83.7	13.4	94.1	14.3	89.1	19.4	52.5	8.4	51.6	8.3
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 72: Mean (SD) SF-36 score by household income tertiles by household structure**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Household Structure (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
One Family	1	73.9	22.3	79.6	24.8	80.3	26.1	87.2	23.2	62.2	21.7	81.5	15.9	89.2	19.6	82.1	25.0	51.1	10.1	48.9	10.4
	2	79.0	19.6	82.6	22.3	85.5	22.4	90.5	20.1	64.7	19.5	83.4	14.0	92.6	16.3	88.3	19.9	52.2	8.8	51.1	8.6
	3	82.7	16.9	84.4	20.8	88.0	20.4	93.0	17.0	67.3	18.3	85.0	12.5	94.6	13.5	91.1	16.1	53.4	7.8	52.1	7.6
Two or more families	1	73.7	24.5	82.9	23.4	80.6	26.5	86.6	24.3	64.1	21.5	80.1	15.4	84.0	24.0	82.6	26.1	49.8	9.6	50.3	9.6
	2	75.1	21.4	82.2	23.9	84.7	22.9	88.0	23.1	66.2	20.5	82.7	15.4	91.1	18.7	86.7	22.0	51.7	10.3	50.6	9.5
	3	80.0	18.1	83.2	23.5	86.4	21.0	91.3	18.2	67.7	18.3	84.9	13.3	91.5	15.6	88.8	17.8	53.0	8.3	51.1	8.2
Other multi-person household	1	78.9	18.5	79.9	24.7	82.5	23.7	88.4	21.0	62.1	19.9	79.6	14.5	88.5	20.4	88.3	21.1	50.1	9.6	51.2	9.3
	2	78.2	18.3	81.0	24.0	85.1	23.1	88.2	21.9	64.0	19.4	82.3	13.9	91.3	16.4	89.2	19.5	51.3	9.2	51.1	9.2
	3	83.1	15.9	84.4	20.2	88.8	19.2	92.3	16.5	65.5	18.4	83.3	12.8	94.2	13.8	92.8	14.8	52.2	8.1	53.0	6.7
One person household	1	67.1	23.7	72.1	26.6	69.7	30.1	82.7	28.0	55.9	23.3	80.0	18.1	87.7	22.3	64.3	29.9	51.0	11.4	42.9	11.3
	2	76.0	20.3	80.4	23.1	82.3	24.6	89.7	21.8	63.2	21.2	84.1	14.5	92.8	15.8	80.2	25.1	52.9	9.0	48.5	10.1
	3	80.6	18.6	83.4	20.9	86.6	21.8	91.9	18.3	65.1	19.9	84.2	13.1	94.7	13.9	88.0	19.7	52.9	8.3	51.2	8.4
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

## 6.4 The Association of Household Income with Mental Distress (K-10)

Overall, the proportion of respondents reporting low levels of mental distress increased with increasing income tertile. This was consistent across age groups, by sex, ethnicity, marital status, family and household structure. This was consequently reflected in declines in the proportion reporting moderate to high level of mental distress with increasing income. There was on average a 10-20% difference in the proportion of respondents reporting low mental distress between tertiles 1 and 3. There were higher levels in Māori and Pacific ethnic groups reporting moderate to high levels of mental distress, particularly in the lower income tertiles.

**Table 73: Overall K-10 group by household income tertiles**

	Kessler Groups (W3)											
	Low		Moderate		High		Very High		NA:DK:REF		Total	
Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
1	3765	68.8	1000	18.3	440	8.0	160	2.9	95	1.7	5470	100.0
2	4770	77.6	910	14.8	300	4.9	90	1.5	70	1.1	6145	100.0
3	5500	83.3	795	12.0	205	3.1	50	0.8	65	1.0	6605	100.0
<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

**Table 74: K-10 group by household income tertiles by age and sex**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	1	135	67.5	45	22.5	15	7.5	10	5.0	10	5.0	200	100.0
	2	175	77.8	40	17.8	15	6.7	10	4.4	10	4.4	225	100.0
	3	125	75.8	25	15.2	10	6.1	.	.	10	6.1	165	100.0
15-24	1	485	66.9	165	22.8	60	8.3	20	2.8	10	1.4	725	100.0
	2	640	69.2	185	20.0	80	8.6	15	1.6	10	1.1	925	100.0
	3	660	76.7	145	16.9	35	4.1	10	1.2	10	1.2	860	100.0
25-34	1	480	66.7	140	19.4	65	9.0	30	4.2	10	1.4	720	100.0
	2	795	77.2	160	15.5	50	4.9	20	1.9	10	1.0	1030	100.0
	3	855	79.9	160	15.0	35	3.3	10	0.9	10	0.9	1070	100.0
35-44	1	615	66.5	180	19.5	85	9.2	35	3.8	15	1.6	925	100.0
	2	1145	78.7	210	14.4	60	4.1	20	1.4	10	0.7	1455	100.0
	3	1170	83.9	155	11.1	45	3.2	10	0.7	15	1.1	1395	100.0
45-54	1	385	63.1	110	18.0	65	10.7	35	5.7	15	2.5	610	100.0
	2	800	80.0	130	13.0	45	4.5	15	1.5	10	1.0	1000	100.0
	3	1410	87.0	145	9.0	45	2.8	10	0.6	10	0.6	1620	100.0
55-64	1	525	72.4	115	15.9	55	7.6	25	3.4	10	1.4	725	100.0
	2	580	80.6	85	11.8	30	4.2	10	1.4	15	2.1	720	100.0
	3	915	86.3	105	9.9	20	1.9	10	0.9	10	0.9	1060	100.0
65+	1	1150	73.7	250	16.0	105	6.7	15	1.0	40	2.6	1560	100.0
	2	640	81.5	100	12.7	20	2.5	10	1.3	15	1.9	785	100.0
	3	355	80.7	55	12.5	15	3.4	10	2.3	15	3.4	440	100.0
Male	1	1565	70.8	390	17.6	165	7.5	50	2.3	45	2.0	2210	100.0
	2	2320	80.0	380	13.1	130	4.5	25	0.9	35	1.2	2900	100.0
	3	2750	84.1	375	11.5	85	2.6	10	0.3	35	1.1	3270	100.0
Female	1	2200	67.6	615	18.9	270	8.3	115	3.5	50	1.5	3255	100.0
	2	2450	75.6	525	16.2	170	5.2	60	1.9	40	1.2	3240	100.0
	3	2740	82.0	420	12.6	115	3.4	30	0.9	30	0.9	3340	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 75: K-10 group by household income tertiles by ethnicity**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	1	2715	70.3	690	17.9	290	7.5	115	3.0	55	1.4	3860	100.0
	2	3830	79.1	695	14.4	210	4.3	65	1.3	45	0.9	4840	100.0
	3	4830	84.0	665	11.6	165	2.9	35	0.6	50	0.9	5750	100.0
Māori	1	520	63.4	165	20.1	80	9.8	35	4.3	15	1.8	820	100.0
	2	525	71.9	120	16.4	55	7.5	15	2.1	10	1.4	730	100.0
	3	410	82.0	65	13.0	15	3.0	10	2.0	10	2.0	500	100.0
Pacific	1	200	58.8	75	22.1	40	11.8	10	2.9	15	4.4	340	100.0
	2	230	70.8	50	15.4	25	7.7	10	3.1	15	4.6	325	100.0
	3	100	71.4	30	21.4	10	7.1	10	7.1	10	7.1	140	100.0
Asian	1	325	73.0	75	16.9	25	5.6	10	2.2	15	3.4	445	100.0
	2	190	74.5	45	17.6	10	3.9	10	3.9	10	3.9	255	100.0
	3	160	74.4	30	14.0	10	4.7	10	4.7	10	4.7	215	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

**Table 76: K-10 group by household income tertiles by legal marital status**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	1	135	65.9	40	19.5	15	7.3	10	4.9	10	4.9	205	100.0
	2	170	73.9	40	17.4	15	6.5	10	4.3	10	4.3	230	100.0
	3	125	78.1	30	18.8	10	6.3	.	.	10	6.3	160	100.0
Never Married	1	960	64.6	305	20.5	140	9.4	65	4.4	20	1.3	1485	100.0
	2	1280	72.5	315	17.8	125	7.1	30	1.7	20	1.1	1765	100.0
	3	1540	79.6	290	15.0	75	3.9	15	0.8	15	0.8	1935	100.0
Divorced Widowed Separated	1	890	67.2	240	18.1	110	8.3	50	3.8	25	1.9	1325	100.0
	2	670	76.1	135	15.3	55	6.3	15	1.7	10	1.1	880	100.0
	3	645	81.1	100	12.6	30	3.8	10	1.3	10	1.3	795	100.0
Married	1	1780	72.4	410	16.7	170	6.9	50	2.0	50	2.0	2460	100.0
	2	2645	81.0	425	13.0	115	3.5	40	1.2	40	1.2	3265	100.0
	3	3185	85.7	380	10.2	90	2.4	20	0.5	40	1.1	3715	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>



**Table 77: K-10 group by household income tertiles by family Structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
		Couple only	1	1050	73.2	235	16.4	100	7.0	25	1.7	30	2.1
	2	1180	80.0	195	13.2	55	3.7	25	1.7	20	1.4	1475	100.0
	3	2100	84.0	295	11.8	65	2.6	10	0.4	25	1.0	2500	100.0
Couple with children	1	1195	69.3	315	18.3	140	8.1	45	2.6	30	1.7	1725	100.0
	2	2480	78.1	465	14.6	145	4.6	45	1.4	40	1.3	3175	100.0
	3	2390	83.6	340	11.9	85	3.0	20	0.7	30	1.0	2860	100.0
Sole parent	1	595	62.0	200	20.8	95	9.9	50	5.2	10	1.0	960	100.0
	2	405	70.4	105	18.3	50	8.7	15	2.6	10	1.7	575	100.0
	3	230	75.4	50	16.4	15	4.9	10	3.3	10	3.3	305	100.0
Not in a family nucleus	1	920	68.1	250	18.5	105	7.8	45	3.3	25	1.9	1350	100.0
	2	710	77.2	140	15.2	50	5.4	15	1.6	10	1.1	920	100.0
	3	775	82.0	120	12.7	30	3.2	15	1.6	10	1.1	945	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 78: K-10 group by household income tertiles by household structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
		One Family	1	2790	69.5	735	18.3	320	8.0	115	2.9	60	1.5
	2	4000	77.8	760	14.8	245	4.8	75	1.5	60	1.2	5140	100.0
	3	4620	83.6	650	11.8	170	3.1	30	0.5	55	1.0	5525	100.0
Two or more families	1	105	58.3	40	22.2	20	11.1	10	5.6	15	8.3	180	100.0
	2	150	71.4	30	14.3	20	9.5	10	4.8	10	4.8	210	100.0
	3	165	75.0	40	18.2	10	4.5	10	4.5	10	4.5	220	100.0
Other multi-person household	1	140	66.7	50	23.8	15	7.1	10	4.8	10	4.8	210	100.0
	2	195	72.2	50	18.5	10	3.7	10	3.7	.	.	270	100.0
	3	285	81.4	45	12.9	15	4.3	10	2.9	10	2.9	350	100.0
One person household	1	730	68.9	185	17.5	85	8.0	40	3.8	25	2.4	1060	100.0
	2	420	80.0	70	13.3	30	5.7	10	1.9	10	1.9	525	100.0
	3	430	82.7	65	12.5	10	1.9	10	1.9	10	1.9	520	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

## 6.5 The Association of Household Income with Perceived Stress

Overall the proportion of respondents reporting that they felt in control most or all of the time increased with increasing income tertile. Similar trends were observed for the other perceived stress questions. Further tables of perceived stress by household income by other demographic variables are not presented in this report, due to many small cell counts.

**Table 79: Perceived stress by household income tertiles**

Income Tertiles (W1)	Unable to control important things (W3)													
	All of the Time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	145	2.7	305	5.6	715	13.1	1065	19.5	3160	57.8	75	1.4	5470	100.0
2	95	1.5	220	3.6	640	10.4	1300	21.2	3835	62.4	60	1.0	6145	100.0
3	75	1.1	155	2.3	560	8.5	1450	22.0	4315	65.3	50	0.8	6605	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>680</b>	<b>3.7</b>	<b>1920</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.1</b>	<b>185</b>	<b>1.0</b>	<b>18215</b>	<b>100.0</b>
Unable to overcome difficulties (W3)														
1	45	0.8	155	2.8	585	10.7	1030	18.8	3585	65.5	70	1.3	5470	100.0
2	50	0.8	95	1.5	485	7.9	1080	17.6	4375	71.2	60	1.0	6145	100.0
3	30	0.5	85	1.3	390	5.9	1070	16.2	4990	75.5	45	0.7	6605	100.0
<b>Total</b>	<b>120</b>	<b>0.7</b>	<b>330</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3175</b>	<b>17.4</b>	<b>12950</b>	<b>71.1</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Confident in handling problems (W3)														
1	1830	33.5	2445	44.7	635	11.6	325	5.9	170	3.1	65	1.2	5470	100.0
2	2235	36.4	2920	47.5	545	8.9	275	4.5	120	2.0	55	0.9	6145	100.0
3	2660	40.3	3160	47.8	430	6.5	210	3.2	105	1.6	50	0.8	6605	100.0
<b>Total</b>	<b>6720</b>	<b>36.9</b>	<b>8520</b>	<b>46.8</b>	<b>1610</b>	<b>8.8</b>	<b>810</b>	<b>4.4</b>	<b>400</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Felt things were going your way (W3)														
1	590	10.8	2490	45.5	1505	27.5	545	10.0	240	4.4	90	1.6	5470	100.0
2	625	10.2	3410	55.5	1495	24.3	420	6.8	135	2.2	60	1.0	6145	100.0
3	725	11.0	3990	60.4	1420	21.5	325	4.9	85	1.3	60	0.9	6605	100.0
<b>Total</b>	<b>1940</b>	<b>10.7</b>	<b>9885</b>	<b>54.3</b>	<b>4430</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18215</b>	<b>100.0</b>

## **6.6 *The Association of Household Income with Chronic Diseases***

Overall, there were higher proportions of respondents reporting chronic diseases in the lowest income quintiles. The difference in the proportion between tertile 1 and 3 was greatest for high blood pressure, heart disease, stroke and diabetes. Consequently, over 15% of respondents in the low income tertile had more than two comorbid diseases. This relationship was consistent the older age groups (ages 45+ years), as well as for the non-Māori, non-Pacific, non-Asian ethnic group. As seen in Chapter 5, Pacific respondents had high proportions reporting diabetes at all income levels. Divorced, widowed or separated respondents had higher proportions reporting high blood pressure, high cholesterol, heart disease, and stroke, than the overall population at all income levels. This group also had high proportions of respondents with more than two comorbid diseases. This may be due to the older age structure of this population. There were high proportions of respondents living in couple only families or one person households, reporting high blood pressure, high cholesterol, heart disease and stroke.

**Table 80: Overall Chronic disease by household income tertiles**

Income Tertiles (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	1045	19.1	1560	28.5	1030	18.8	580	10.6	275	5.0	370	6.8	775	14.2	610	11.2	5465	100.0
2	1145	18.6	1215	19.8	950	15.5	295	4.8	100	1.6	255	4.1	805	13.1	550	9.0	6145	100.0
3	1230	18.6	1215	18.4	1165	17.6	285	4.3	70	1.1	180	2.7	855	12.9	515	7.8	6605	100.0
<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 81: Number of comorbid disease by household income tertiles**

Income Tertiles (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
1	2185	40.0	2455	44.9	810	14.8	15	0.3	5465	100.0
2	2935	47.8	2655	43.2	530	8.6	20	0.3	6145	100.0
3	3120	47.2	2995	45.3	470	7.1	15	0.2	6605	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 82: Chronic Disease by household income tertiles by Age and Sex**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	1	45	22.5	10	5.0	.	.	10	5.0	.	.	.	.	25	12.5	10	5.0	200	100.0
	2	45	20.0	10	4.4	10	4.4	10	4.4	.	.	10	4.4	10	4.4	10	4.4	225	100.0
	3	45	27.3	10	6.1	.	.	.	.	.	.	10	6.1	15	9.1	10	6.1	165	100.0
15-24	1	185	25.5	25	3.4	10	1.4	10	1.4	10	1.4	10	1.4	75	10.3	60	8.3	725	100.0
	2	250	26.9	45	4.8	15	1.6	.	.	10	1.1	10	1.1	110	11.8	70	7.5	930	100.0
	3	240	27.9	35	4.1	15	1.7	10	1.2	.	.	10	1.2	85	9.9	55	6.4	860	100.0
25-34	1	170	23.6	80	11.1	35	4.9	10	1.4	10	1.4	10	1.4	125	17.4	115	16.0	720	100.0
	2	220	21.4	105	10.2	65	6.3	10	1.0	10	1.0	20	1.9	160	15.5	100	9.7	1030	100.0
	3	250	23.4	85	7.9	80	7.5	10	0.9	10	0.9	10	0.9	140	13.1	85	7.9	1070	100.0
35-44	1	175	18.9	145	15.7	100	10.8	20	2.2	15	1.6	35	3.8	155	16.8	125	13.5	925	100.0
	2	265	18.3	180	12.4	180	12.4	20	1.4	10	0.7	35	2.4	210	14.5	150	10.3	1450	100.0
	3	245	17.6	190	13.6	195	14.0	25	1.8	10	0.7	20	1.4	215	15.4	145	10.4	1395	100.0
45-54	1	115	18.9	165	27.0	140	23.0	35	5.7	25	4.1	50	8.2	110	18.0	100	16.4	610	100.0
	2	160	15.9	245	24.4	220	21.9	40	4.0	10	1.0	55	5.5	140	13.9	100	10.0	1005	100.0
	3	245	15.1	355	21.9	390	24.1	55	3.4	15	0.9	50	3.1	235	14.5	150	9.3	1620	100.0
55-64	1	140	19.3	305	42.1	235	32.4	105	14.5	40	5.5	90	12.4	105	14.5	100	13.8	725	100.0
	2	115	16.0	280	38.9	220	30.6	80	11.1	20	2.8	70	9.7	80	11.1	75	10.4	720	100.0
	3	155	14.6	345	32.4	325	30.5	100	9.4	20	1.9	60	5.6	125	11.7	65	6.1	1065	100.0
65+	1	230	14.7	845	54.2	515	33.0	405	26.0	190	12.2	185	11.9	180	11.5	110	7.1	1560	100.0
	2	95	12.1	360	45.9	250	31.8	150	19.1	60	7.6	70	8.9	90	11.5	50	6.4	785	100.0
	3	55	12.5	205	46.6	155	35.2	95	21.6	30	6.8	35	8.0	40	9.1	20	4.5	440	100.0
Male	1	350	15.8	600	27.1	455	20.5	285	12.9	135	6.1	165	7.4	180	8.1	165	7.4	2215	100.0
	2	480	16.6	550	19.0	490	16.9	175	6.0	45	1.6	135	4.7	200	6.9	160	5.5	2900	100.0
	3	550	16.8	610	18.7	675	20.7	180	5.5	40	1.2	110	3.4	265	8.1	175	5.4	3265	100.0
Female	1	700	21.5	960	29.5	575	17.7	295	9.1	145	4.5	205	6.3	595	18.3	440	13.5	3255	100.0
	2	665	20.5	665	20.5	460	14.2	125	3.9	60	1.9	120	3.7	610	18.8	390	12.0	3240	100.0
	3	675	20.2	605	18.1	490	14.7	105	3.1	35	1.0	70	2.1	590	17.7	340	10.2	3335	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 83: Number of comorbid disease by household income tertiles by Age and Sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
0-14	1	140	70.0	55	27.5	10	5.0	10	5.0	200	100.0
	2	160	71.1	60	26.7	10	4.4	.	.	225	100.0
	3	105	63.6	55	33.3	10	6.1	10	6.1	165	100.0
15-24	1	455	62.8	250	34.5	20	2.8	10	1.4	725	100.0
	2	560	60.2	355	38.2	20	2.2	10	1.1	930	100.0
	3	500	58.1	340	39.5	10	1.2	10	1.2	860	100.0
25-34	1	370	51.4	300	41.7	45	6.3	10	1.4	720	100.0
	2	570	55.3	405	39.3	50	4.9	10	1.0	1030	100.0
	3	605	56.5	420	39.3	40	3.7	10	0.9	1070	100.0
35-44	1	470	50.8	380	41.1	70	7.6	10	1.1	925	100.0
	2	775	53.4	585	40.3	85	5.9	10	0.7	1450	100.0
	3	715	51.3	595	42.7	80	5.7	10	0.7	1395	100.0
45-54	1	225	36.9	285	46.7	95	15.6	10	1.6	610	100.0
	2	425	42.3	475	47.3	100	10.0	10	1.0	1005	100.0
	3	680	42.0	820	50.6	120	7.4	10	0.6	1620	100.0
55-64	1	200	27.6	365	50.3	160	22.1	10	1.4	725	100.0
	2	235	32.6	350	48.6	130	18.1	10	1.4	720	100.0
	3	385	36.2	545	51.2	130	12.2	10	0.9	1065	100.0
65+	1	315	20.2	830	53.2	410	26.3	10	0.6	1560	100.0
	2	210	26.8	425	54.1	150	19.1	10	1.3	785	100.0
	3	130	29.5	215	48.9	95	21.6	10	2.3	440	100.0
Male	1	975	44.0	925	41.8	305	13.8	10	0.5	2215	100.0
	2	1495	51.6	1200	41.4	195	6.7	10	0.3	2900	100.0
	3	1615	49.5	1420	43.5	220	6.7	15	0.5	3265	100.0
Female	1	1215	37.3	1530	47.0	505	15.5	10	0.3	3255	100.0
	2	1440	44.4	1450	44.8	335	10.3	15	0.5	3240	100.0
	3	1510	45.3	1575	47.2	250	7.5	10	0.3	3335	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 84: Chronic Disease by household income tertiles by Ethnicity**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	1	735	19.0	1250	32.4	850	22.0	485	12.6	235	6.1	255	6.6	595	15.4	510	13.2	3860	100.0
	2	900	18.6	1010	20.9	805	16.6	265	5.5	90	1.9	185	3.8	680	14.0	480	9.9	4840	100.0
	3	1055	18.3	1075	18.7	1035	18.0	250	4.3	60	1.0	145	2.5	760	13.2	470	8.2	5750	100.0
Māori	1	215	26.4	200	24.5	105	12.9	50	6.1	25	3.1	60	7.4	125	15.3	70	8.6	815	100.0
	2	180	24.7	135	18.5	100	13.7	15	2.1	15	2.1	35	4.8	85	11.6	50	6.8	730	100.0
	3	130	26.0	95	19.0	70	14.0	20	4.0	10	2.0	20	4.0	60	12.0	35	7.0	500	100.0
Pacific	1	55	16.2	70	20.6	35	10.3	35	10.3	10	2.9	40	11.8	25	7.4	15	4.4	340	100.0
	2	30	9.4	50	15.6	25	7.8	10	3.1	10	3.1	30	9.4	15	4.7	10	3.1	320	100.0
	3	25	17.2	30	20.7	20	13.8	10	6.9	10	6.9	10	6.9	15	10.3	10	6.9	145	100.0
Asian	1	45	10.1	40	9.0	35	7.9	10	2.2	10	2.2	20	4.5	25	5.6	15	3.4	445	100.0
	2	35	13.7	25	9.8	25	9.8	10	3.9	.	.	10	3.9	20	7.8	10	3.9	255	100.0
	3	25	11.6	20	9.3	35	16.3	10	4.7	10	4.7	10	4.7	15	7.0	10	4.7	215	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 85: Number of comorbid disease by household income tertiles by prioritised ethnicity**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	1	1325	34.3	1885	48.8	645	16.7	10	0.3	3860	100.0
	2	2200	45.5	2170	44.8	450	9.3	15	0.3	4840	100.0
	3	2675	46.5	2645	46.0	415	7.2	15	0.3	5750	100.0
Māori	1	355	43.6	360	44.2	105	12.9	10	1.2	815	100.0
	2	355	48.6	315	43.2	55	7.5	10	1.4	730	100.0
	3	230	46.0	235	47.0	35	7.0	10	2.0	500	100.0
Pacific	1	195	57.4	110	32.4	35	10.3	10	2.9	340	100.0
	2	205	64.1	95	29.7	15	4.7	10	3.1	320	100.0
	3	75	51.7	55	37.9	10	6.9	10	6.9	145	100.0
Asian	1	315	70.8	110	24.7	20	4.5	10	2.2	445	100.0
	2	175	68.6	75	29.4	10	3.9	.	.	255	100.0
	3	135	62.8	65	30.2	10	4.7	10	4.7	215	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 86: Chronic Disease by household income tertiles by Marital Status**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	1	50	24.4	10	4.9	.	.	10	4.9	.	.	.	.	25	12.2	10	4.9	205	100.0
	2	50	22.2	10	4.4	10	4.4	10	4.4	.	.	10	4.4	15	6.7	10	4.4	225	100.0
	3	45	27.3	10	6.1	.	.	.	.	.	.	10	6.1	10	6.1	10	6.1	165	100.0
Never Married	1	365	24.5	180	12.1	95	6.4	30	2.0	25	1.7	45	3.0	190	12.8	205	13.8	1490	100.0
	2	405	22.9	185	10.5	110	6.2	20	1.1	10	0.6	35	2.0	225	12.7	155	8.8	1770	100.0
	3	470	24.4	165	8.5	150	7.8	20	1.0	10	0.5	20	1.0	225	11.7	160	8.3	1930	100.0
Divorced Widowed Separated	1	260	19.6	555	41.9	330	24.9	225	17.0	110	8.3	120	9.1	230	17.4	205	15.5	1325	100.0
	2	170	19.3	270	30.7	200	22.7	75	8.5	30	3.4	45	5.1	135	15.3	110	12.5	880	100.0
	3	130	16.5	230	29.1	190	24.1	60	7.6	20	2.5	25	3.2	120	15.2	80	10.1	790	100.0
Married	1	375	15.3	825	33.6	605	24.6	325	13.2	145	5.9	205	8.4	325	13.2	195	7.9	2455	100.0
	2	520	15.9	760	23.3	635	19.4	205	6.3	65	2.0	175	5.4	435	13.3	275	8.4	3265	100.0
	3	580	15.6	825	22.2	830	22.3	205	5.5	45	1.2	125	3.4	500	13.5	275	7.4	3715	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 87: Number of comorbid disease by household income tertiles by legal marital status**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	1	140	68.3	55	26.8	10	4.9	10	4.9	205	100.0
	2	165	73.3	60	26.7	10	4.4	.	.	225	100.0
	3	105	63.6	55	33.3	10	6.1	10	6.1	165	100.0
Never Married	1	785	52.7	585	39.3	110	7.4	10	0.7	1490	100.0
	2	990	55.9	695	39.3	75	4.2	10	0.6	1770	100.0
	3	1055	54.7	805	41.7	70	3.6	10	0.5	1930	100.0
Divorced Widowed Separated	1	335	25.3	700	52.8	285	21.5	10	0.8	1325	100.0
	2	320	36.4	435	49.4	125	14.2	10	1.1	880	100.0
	3	310	39.2	385	48.7	95	12.0	10	1.3	790	100.0
Married	1	925	37.7	1115	45.4	405	16.5	10	0.4	2455	100.0
	2	1465	44.9	1460	44.7	330	10.1	10	0.3	3265	100.0
	3	1650	44.4	1750	47.1	310	8.3	10	0.3	3715	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>



**Table 88: Chronic Disease by household income tertiles by Family Structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1	220	15.3	655	45.6	470	32.8	295	20.6	125	8.7	150	10.5	190	13.2	115	8.0	1435	100.0
	2	230	15.5	460	31.1	335	22.6	150	10.1	55	3.7	90	6.1	185	12.5	135	9.1	1480	100.0
	3	455	18.2	595	23.8	560	22.4	155	6.2	35	1.4	95	3.8	315	12.6	180	7.2	2500	100.0
Couple with children	1	320	18.6	255	14.8	175	10.1	55	3.2	30	1.7	70	4.1	220	12.8	140	8.1	1725	100.0
	2	590	18.6	410	12.9	365	11.5	65	2.0	15	0.5	105	3.3	395	12.4	250	7.9	3175	100.0
	3	530	18.5	365	12.8	400	14.0	70	2.4	15	0.5	50	1.7	385	13.5	215	7.5	2860	100.0
Sole parent	1	230	24.1	130	13.6	70	7.3	40	4.2	20	2.1	25	2.6	175	18.3	145	15.2	955	100.0
	2	140	24.6	100	17.5	70	12.3	25	4.4	10	1.8	25	4.4	105	18.4	70	12.3	570	100.0
	3	70	23.3	60	20.0	50	16.7	15	5.0	10	3.3	10	3.3	35	11.7	35	11.7	300	100.0
Not in a family nucleus	1	280	20.7	520	38.5	315	23.3	200	14.8	105	7.8	125	9.3	185	13.7	205	15.2	1350	100.0
	2	180	19.5	250	27.0	175	18.9	55	5.9	25	2.7	40	4.3	120	13.0	100	10.8	925	100.0
	3	175	18.6	195	20.7	155	16.5	45	4.8	15	1.6	25	2.7	115	12.2	85	9.0	940	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 89: Number of comorbid disease by household income tertiles by family structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
Couple only	1	385	26.8	720	50.2	335	23.3	10	0.7	1435	100.0
	2	560	37.8	715	48.3	195	13.2	10	0.7	1480	100.0
	3	1060	42.4	1205	48.2	235	9.4	10	0.4	2500	100.0
Couple with children	1	940	54.5	655	38.0	120	7.0	15	0.9	1725	100.0
	2	1745	55.0	1250	39.4	175	5.5	10	0.3	3175	100.0
	3	1480	51.7	1235	43.2	135	4.7	10	0.3	2860	100.0
Sole parent	1	455	47.6	410	42.9	85	8.9	10	1.0	955	100.0
	2	260	45.6	255	44.7	65	11.4	.	.	570	100.0
	3	140	46.7	140	46.7	25	8.3	.	.	300	100.0
Not in a family nucleus	1	400	29.6	675	50.0	275	20.4	10	0.7	1350	100.0
	2	380	41.1	440	47.6	100	10.8	10	1.1	925	100.0
	3	445	47.3	420	44.7	80	8.5	10	1.1	940	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 90: Chronic Disease by household income tertiles by Household Structure**

		<b>Chronic Diseases (W3)</b>																	
		<b>Asthma</b>		<b>High BP</b>		<b>High Chol</b>		<b>Heart Dis</b>		<b>Stroke</b>		<b>Diabetes</b>		<b>Migraine</b>		<b>Depr-Schiz</b>		<b>Total</b>	
<b>Household Structure (W1)</b>	<b>Income Tertiles (W1)</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
One Family	1	755	18.8	1025	25.5	710	17.7	380	9.5	175	4.4	240	6.0	575	14.3	390	9.7	4015	100.0
	2	950	18.5	960	18.7	770	15.0	240	4.7	80	1.6	210	4.1	680	13.2	460	8.9	5140	100.0
	3	1045	18.9	985	17.8	980	17.8	240	4.3	55	1.0	150	2.7	720	13.0	420	7.6	5520	100.0
Two or more families	1	35	19.4	30	16.7	20	11.1	10	5.6	10	5.6	15	8.3	25	13.9	15	8.3	180	100.0
	2	45	20.9	35	16.3	25	11.6	10	4.7	10	4.7	20	9.3	30	14.0	10	4.7	215	100.0
	3	35	15.9	55	25.0	40	18.2	10	4.5	10	4.5	10	4.5	20	9.1	15	6.8	220	100.0
Other multi-person household	1	55	25.6	25	11.6	10	4.7	10	4.7	10	4.7	10	4.7	30	14.0	25	11.6	215	100.0
	2	65	24.5	35	13.2	30	11.3	10	3.8	.	.	10	3.8	40	15.1	30	11.3	265	100.0
	3	75	21.7	35	10.1	30	8.7	10	2.9	10	2.9	10	2.9	45	13.0	30	8.7	345	100.0
One person household	1	205	19.3	480	45.3	285	26.9	185	17.5	100	9.4	115	10.8	145	13.7	180	17.0	1060	100.0
	2	95	17.9	190	35.8	125	23.6	45	8.5	15	2.8	25	4.7	60	11.3	50	9.4	530	100.0
	3	80	15.4	140	26.9	110	21.2	30	5.8	10	1.9	15	2.9	65	12.5	50	9.6	520	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 91: Number of comorbid disease by household income tertiles by household structure**

		<b>Comorbidity Index (W3)</b>									
		<b>No comorbid</b>		<b>1-2 comorbid</b>		<b>&gt;2 comorbid</b>		<b>NA</b>		<b>Total</b>	
<b>Household Structure (W1)</b>	<b>Income Tertiles (W1)</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
One Family	1	1730	43.1	1745	43.5	530	13.2	15	0.4	4015	100.0
	2	2500	48.6	2185	42.5	430	8.4	20	0.4	5140	100.0
	3	2595	47.0	2530	45.8	375	6.8	15	0.3	5520	100.0
Two or more families	1	90	50.0	70	38.9	10	5.6	10	5.6	180	100.0
	2	115	53.5	80	37.2	15	7.0	.	.	215	100.0
	3	115	52.3	80	36.4	25	11.4	10	4.5	220	100.0
Other multi-person household	1	105	48.8	100	46.5	10	4.7	.	.	215	100.0
	2	130	49.1	125	47.2	15	5.7	.	.	265	100.0
	3	190	55.1	140	40.6	15	4.3	.	.	345	100.0
One person household	1	260	24.5	545	51.4	250	23.6	10	0.9	1060	100.0
	2	190	35.8	265	50.0	70	13.2	10	1.9	530	100.0
	3	220	42.3	240	46.2	55	10.6	10	1.9	520	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

## 6.7 The Association of Household Income with Smoking Status

Overall, there were higher proportions of current smokers in the lowest income tertile, with high proportions of never smokers in the highest income tertile. This linear decline in the proportion of current smokers with increasing income is consistent across all age groups and by sex. The highest proportion of current smokers were aged 25-34 at Wave 1 and in the lowest income tertile. There was no sex differential in the proportion of current smokers in the lowest income quintile. The rates of current smoking in the Māori ethnic group were highest across all income quintiles. Over 30% of never married respondents or living in sole parent families, in income tertiles 1 and 2 were current smokers.

**Table 92: Overall smoking status by household income tertiles**

Income Tertiles (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
1	2665	48.7	1495	27.3	1280	23.4	25	0.5	5470	100.0
2	3260	53.1	1510	24.6	1355	22.1	20	0.3	6145	100.0
3	3875	58.6	1655	25.0	1055	16.0	20	0.3	6610	100.0
<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3695</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 93: Smoking status by household income tertiles by Age and Sex**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
0-14	1	155	77.5	10	5.0	35	17.5	10	5.0	200	100.0
	2	195	84.8	10	4.3	25	10.9	.	.	230	100.0
	3	150	90.9	10	6.1	10	6.1	10	6.1	165	100.0
15-24	1	465	64.1	60	8.3	195	26.9	10	1.4	725	100.0
	2	580	62.4	85	9.1	260	28.0	10	1.1	930	100.0
	3	590	69.0	85	9.9	180	21.1	10	1.2	855	100.0
25-34	1	290	40.0	145	20.0	285	39.3	10	1.4	725	100.0
	2	535	51.9	195	18.9	295	28.6	10	1.0	1030	100.0
	3	655	61.2	205	19.2	205	19.2	10	0.9	1070	100.0
35-44	1	445	48.1	175	18.9	290	31.4	10	1.1	925	100.0
	2	735	50.5	365	25.1	345	23.7	10	0.7	1455	100.0
	3	800	57.3	335	24.0	250	17.9	10	0.7	1395	100.0
45-54	1	275	45.1	150	24.6	180	29.5	10	1.6	610	100.0
	2	475	47.5	290	29.0	240	24.0	10	1.0	1000	100.0
	3	895	55.2	480	29.6	245	15.1	10	0.6	1620	100.0
55-64	1	280	38.6	275	37.9	170	23.4	10	1.4	725	100.0
	2	320	44.4	260	36.1	135	18.8	10	1.4	720	100.0
	3	565	53.1	350	32.9	140	13.1	10	0.9	1065	100.0
65+	1	745	47.8	685	43.9	125	8.0	10	0.6	1560	100.0
	2	420	53.5	310	39.5	50	6.4	10	1.3	785	100.0
	3	215	48.9	190	43.2	30	6.8	10	2.3	440	100.0
Male	1	945	42.8	740	33.5	520	23.5	15	0.7	2210	100.0
	2	1470	50.7	765	26.4	655	22.6	10	0.3	2900	100.0
	3	1850	56.6	845	25.8	555	17.0	15	0.5	3270	100.0
Female	1	1725	53.0	755	23.2	760	23.3	15	0.5	3255	100.0
	2	1790	55.2	745	23.0	695	21.4	10	0.3	3245	100.0
	3	2025	60.6	805	24.1	500	15.0	10	0.3	3340	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 94: Smoking status by household income tertiles by Ethnicity**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	1	1855	48.1	1215	31.5	785	20.3	10	0.3	3860	100.0
	2	2600	53.7	1275	26.3	955	19.7	15	0.3	4840	100.0
	3	3395	59.0	1490	25.9	845	14.7	20	0.3	5750	100.0
Māori	1	250	30.7	195	23.9	365	44.8	10	1.2	815	100.0
	2	275	37.7	165	22.6	290	39.7	10	1.4	730	100.0
	3	230	46.0	115	23.0	155	31.0	10	2.0	500	100.0
Pacific	1	205	60.3	50	14.7	80	23.5	10	2.9	340	100.0
	2	185	56.9	45	13.8	85	26.2	10	3.1	325	100.0
	3	80	55.2	25	17.2	30	20.7	10	6.9	145	100.0
Asian	1	365	81.1	30	6.7	45	10.0	10	2.2	450	100.0
	2	205	80.4	25	9.8	20	7.8	.	.	255	100.0
	3	165	78.6	25	11.9	25	11.9	10	4.8	210	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3695</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 95: Smoking status by household income tertiles by Marital Status**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	1	155	75.6	10	4.9	35	17.1	10	4.9	205	100.0
	2	195	84.8	10	4.3	25	10.9	.	.	230	100.0
	3	150	90.9	10	6.1	10	6.1	10	6.1	165	100.0
Never Married	1	695	46.8	245	16.5	540	36.4	10	0.7	1485	100.0
	2	960	54.4	245	13.9	555	31.4	10	0.6	1765	100.0
	3	1195	61.8	315	16.3	420	21.7	10	0.5	1935	100.0
Divorced Widowed Separated	1	580	43.9	415	31.4	320	24.2	10	0.8	1320	100.0
	2	370	42.0	265	30.1	240	27.3	10	1.1	880	100.0
	3	385	48.4	245	30.8	160	20.1	10	1.3	795	100.0
Married	1	1235	50.3	830	33.8	380	15.5	15	0.6	2455	100.0
	2	1730	52.9	990	30.3	530	16.2	10	0.3	3270	100.0
	3	2150	57.9	1085	29.2	470	12.7	10	0.3	3715	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 96: Smoking status by household income tertiles by Family Structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
Couple only	1	625	43.6	620	43.2	195	13.6	10	0.7	1435	100.0
	2	705	47.6	500	33.8	270	18.2	10	0.7	1480	100.0
	3	1385	55.4	740	29.6	365	14.6	10	0.4	2500	100.0
Couple with children	1	990	57.4	300	17.4	420	24.3	15	0.9	1725	100.0
	2	1815	57.3	685	21.6	665	21.0	10	0.3	3170	100.0
	3	1805	63.0	625	21.8	420	14.7	10	0.3	2865	100.0
Sole parent	1	385	40.3	180	18.8	385	40.3	10	1.0	955	100.0
	2	280	49.1	105	18.4	190	33.3	.	.	570	100.0
	3	155	50.8	75	24.6	70	23.0	10	3.3	305	100.0
Not in a family nucleus	1	665	49.4	390	29.0	285	21.2	10	0.7	1345	100.0
	2	465	50.3	220	23.8	235	25.4	10	1.1	925	100.0
	3	530	56.4	210	22.3	205	21.8	10	1.1	940	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 97: Smoking status by household income tertiles by Household Structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
One Family	1	1955	48.7	1080	26.9	965	24.0	20	0.5	4015	100.0
	2	2765	53.8	1275	24.8	1075	20.9	20	0.4	5140	100.0
	3	3280	59.4	1405	25.4	820	14.8	15	0.3	5525	100.0
Two or more families	1	85	47.2	40	22.2	50	27.8	10	5.6	180	100.0
	2	100	47.6	40	19.0	75	35.7	.	.	210	100.0
	3	100	45.5	60	27.3	60	27.3	10	4.5	220	100.0
Other multi-person household	1	130	61.9	30	14.3	45	21.4	.	.	210	100.0
	2	130	49.1	50	18.9	80	30.2	.	.	265	100.0
	3	205	59.4	65	18.8	75	21.7	.	.	345	100.0
One person household	1	490	46.4	350	33.2	210	19.9	10	0.9	1055	100.0
	2	265	50.5	140	26.7	115	21.9	10	1.9	525	100.0
	3	295	56.7	120	23.1	100	19.2	10	1.9	520	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3695</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

## 6.8 The Association of Household Income with Alcohol Consumption

Overall, consumption of alcohol increased with increasing income. This was seen in the frequency of drinking as well as binge drinking. Consequently, there were larger proportions of never drinkers in the lowest income tertile. This relationship was relatively consistent across age groups and by sex. As shown in Chapter 5, the highest proportions of binge drinkers were in the younger age groups (15-34) as well as in males. There were typically high proportions of non-drinkers in the Pacific and Asian ethnic groups across all income tertiles. Respondents who lived in a couple only family had higher alcohol consumption across the income tertiles. Whereas, respondents who lived in sole parent families or not living in a family nucleus, in the highest income tertile were more likely to binge drink. As were respondents living in other multi-person households.

**Table 98: Overall alcohol consumption by household income tertiles**

Income Tertiles (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	1605	29.3	1210	22.1	1325	24.2	495	9.0	800	14.6	30	0.5	825	15.1	5470	100.0
2	1020	16.6	1225	19.9	1725	28.1	855	13.9	1285	20.9	30	0.5	1360	22.1	6145	100.0
3	630	9.5	915	13.9	1805	27.3	1160	17.6	2060	31.2	35	0.5	1710	25.9	6605	100.0
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 99: Alcohol consumption by household income tertiles by Age and Sex**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	1	90	45.0	60	30.0	35	17.5	10	5.0	10	5.0	10	5.0	25	12.5	200	100.0
	2	80	34.8	85	37.0	45	19.6	10	4.3	10	4.3	.	.	30	13.0	230	100.0
	3	40	24.2	50	30.3	55	33.3	10	6.1	10	6.1	10	6.1	30	18.2	165	100.0
15-24	1	170	23.3	195	26.7	240	32.9	85	11.6	45	6.2	10	1.4	250	34.2	730	100.0
	2	125	13.4	215	23.1	360	38.7	150	16.1	80	8.6	10	1.1	400	43.0	930	100.0
	3	80	9.4	150	17.5	335	39.2	180	21.1	105	12.3	10	1.2	420	49.1	855	100.0
25-34	1	160	22.1	185	25.5	235	32.4	75	10.3	60	8.3	10	1.4	200	27.6	725	100.0
	2	140	13.6	230	22.3	335	32.5	145	14.1	170	16.5	10	1.0	295	28.6	1030	100.0
	3	90	8.4	175	16.4	355	33.2	210	19.6	240	22.4	10	0.9	385	36.0	1070	100.0
35-44	1	245	26.5	215	23.2	250	27.0	115	12.4	100	10.8	10	1.1	160	17.3	925	100.0
	2	190	13.1	255	17.6	445	30.7	255	17.6	300	20.7	10	0.7	355	24.5	1450	100.0
	3	110	7.9	170	12.2	390	28.0	270	19.4	455	32.6	10	0.7	385	27.6	1395	100.0
45-54	1	205	33.6	115	18.9	145	23.8	55	9.0	80	13.1	10	1.6	70	11.5	610	100.0
	2	185	18.4	175	17.4	250	24.9	135	13.4	255	25.4	10	1.0	175	17.4	1005	100.0
	3	150	9.3	200	12.3	355	21.9	285	17.6	630	38.9	10	0.6	315	19.4	1620	100.0
55-64	1	235	32.2	150	20.5	140	19.2	60	8.2	135	18.5	10	1.4	60	8.2	730	100.0
	2	135	18.9	130	18.2	155	21.7	80	11.2	210	29.4	10	1.4	65	9.1	715	100.0
	3	100	9.4	115	10.8	235	22.1	175	16.4	430	40.4	10	0.9	150	14.1	1065	100.0
65+	1	495	31.8	290	18.6	285	18.3	105	6.8	380	24.4	10	0.6	60	3.9	1555	100.0
	2	170	21.7	125	15.9	130	16.6	70	8.9	275	35.0	10	1.3	35	4.5	785	100.0
	3	70	15.9	55	12.5	85	19.3	35	8.0	190	43.2	10	2.3	25	5.7	440	100.0
<b>Male</b>	1	530	24.0	395	17.9	580	26.2	240	10.9	450	20.4	15	0.7	415	18.8	2210	100.0
	2	385	13.3	430	14.8	820	28.2	480	16.5	765	26.3	20	0.7	845	29.1	2905	100.0
	3	255	7.8	335	10.3	825	25.3	625	19.1	1205	36.9	20	0.6	1070	32.8	3265	100.0
<b>Female</b>	1	1075	33.0	815	25.0	745	22.9	250	7.7	350	10.8	15	0.5	415	12.7	3255	100.0
	2	640	19.7	790	24.3	900	27.7	370	11.4	520	16.0	15	0.5	515	15.9	3245	100.0
	3	375	11.2	580	17.4	980	29.3	540	16.2	850	25.4	15	0.4	640	19.2	3340	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>



**Table 100: Alcohol consumption by household income tertiles by Ethnicity**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	1	905	23.4	835	21.6	970	25.1	395	10.2	745	19.3	15	0.4	550	14.2	3860	100.0
	2	595	12.3	930	19.2	1375	28.4	735	15.2	1175	24.3	25	0.5	1025	21.2	4840	100.0
	3	410	7.1	740	12.9	1560	27.1	1065	18.5	1945	33.8	30	0.5	1485	25.8	5750	100.0
Māori	1	240	29.3	230	28.0	240	29.3	65	7.9	30	3.7	10	1.2	230	28.0	820	100.0
	2	140	19.3	190	26.2	225	31.0	85	11.7	85	11.7	10	1.4	255	35.2	725	100.0
	3	80	16.0	105	21.0	160	32.0	70	14.0	80	16.0	10	2.0	175	35.0	500	100.0
Pacific	1	215	62.3	65	18.8	35	10.1	15	4.3	10	2.9	10	2.9	30	8.7	345	100.0
	2	160	50.0	55	17.2	70	21.9	20	6.3	15	4.7	10	3.1	65	20.3	320	100.0
	3	50	34.5	30	20.7	45	31.0	10	6.9	10	6.9	10	6.9	35	24.1	145	100.0
Asian	1	245	54.4	80	17.8	85	18.9	20	4.4	15	3.3	10	2.2	15	3.3	450	100.0
	2	125	49.0	40	15.7	55	21.6	20	7.8	15	5.9	.	.	15	5.9	255	100.0
	3	90	42.9	45	21.4	40	19.0	15	7.1	15	7.1	10	4.8	15	7.1	210	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2505</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 101: Alcohol consumption by household income tertiles by Marital Status**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	1	90	43.9	60	29.3	40	19.5	10	4.9	10	4.9	10	4.9	25	12.2	205	100.0
	2	80	34.8	85	37.0	45	19.6	10	4.3	10	4.3	.	.	30	13.0	230	100.0
	3	40	25.0	55	34.4	55	34.4	15	9.4	10	6.3	10	6.3	30	18.8	160	100.0
Never Married	1	340	22.9	385	25.9	470	31.6	160	10.8	115	7.7	10	0.7	450	30.3	1485	100.0
	2	250	14.2	390	22.1	620	35.1	275	15.6	225	12.7	10	0.6	640	36.3	1765	100.0
	3	150	7.8	305	15.8	665	34.4	415	21.4	385	19.9	10	0.5	795	41.1	1935	100.0
Divorced Widowed Separated	1	420	31.8	285	21.6	305	23.1	115	8.7	185	14.0	15	1.1	140	10.6	1320	100.0
	2	150	17.0	175	19.9	235	26.7	110	12.5	205	23.3	10	1.1	165	18.8	880	100.0
	3	80	10.1	110	13.8	195	24.5	135	17.0	275	34.6	10	1.3	195	24.5	795	100.0
Married	1	745	30.3	480	19.6	510	20.8	210	8.6	495	20.2	10	0.4	215	8.8	2455	100.0
	2	550	16.8	575	17.6	825	25.3	455	13.9	850	26.0	20	0.6	530	16.2	3265	100.0
	3	360	9.7	445	12.0	890	24.0	600	16.2	1400	37.7	20	0.5	690	18.6	3715	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2505</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 102: Alcohol consumption by household income tertiles by Family Structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1	380	26.4	260	18.1	285	19.8	120	8.3	390	27.1	10	0.7	110	7.6	1440	100.0
	2	230	15.5	245	16.6	335	22.6	200	13.5	455	30.7	10	0.7	220	14.9	1480	100.0
	3	200	8.0	330	13.2	615	24.6	400	16.0	945	37.8	15	0.6	530	21.2	2500	100.0
Couple with children	1	535	31.0	400	23.2	450	26.1	155	9.0	170	9.9	15	0.9	310	18.0	1725	100.0
	2	530	16.7	665	20.9	940	29.6	460	14.5	570	18.0	15	0.5	760	23.9	3175	100.0
	3	305	10.7	410	14.3	820	28.7	525	18.4	785	27.4	15	0.5	785	27.4	2860	100.0
Sole parent	1	255	26.6	280	29.2	270	28.1	100	10.4	55	5.7	10	1.0	225	23.4	960	100.0
	2	115	20.2	145	25.4	160	28.1	65	11.4	80	14.0	10	1.8	155	27.2	570	100.0
	3	35	11.5	70	23.0	90	29.5	45	14.8	65	21.3	10	3.3	100	32.8	305	100.0
Not in a family nucleus	1	440	32.6	275	20.4	320	23.7	120	8.9	190	14.1	10	0.7	180	13.3	1350	100.0
	2	145	15.7	170	18.4	290	31.4	135	14.6	175	18.9	10	1.1	225	24.3	925	100.0
	3	90	9.6	110	11.7	280	29.8	195	20.7	260	27.7	10	1.1	290	30.9	940	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 103: Alcohol consumption by household income tertiles by Household Structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	1	1120	27.9	905	22.5	995	24.8	370	9.2	600	14.9	20	0.5	630	15.7	4020	100.0
	2	825	16.1	1030	20.0	1425	27.7	715	13.9	1110	21.6	30	0.6	1115	21.7	5140	100.0
	3	510	9.2	775	14.0	1485	26.9	945	17.1	1775	32.2	30	0.5	1385	25.1	5520	100.0
Two or more families	1	75	41.7	50	27.8	30	16.7	10	5.6	10	5.6	10	5.6	25	13.9	180	100.0
	2	80	38.1	50	23.8	50	23.8	15	7.1	20	9.5	.	.	50	23.8	210	100.0
	3	45	20.5	50	22.7	60	27.3	35	15.9	35	15.9	10	4.5	65	29.5	220	100.0
Other multi-person household	1	35	16.7	45	21.4	80	38.1	35	16.7	20	9.5	10	4.8	80	38.1	210	100.0
	2	35	13.0	40	14.8	105	38.9	55	20.4	35	13.0	.	.	105	38.9	270	100.0
	3	35	10.1	35	10.1	105	30.4	80	23.2	85	24.6	.	.	150	43.5	345	100.0
One person household	1	370	34.9	210	19.8	220	20.8	75	7.1	175	16.5	10	0.9	85	8.0	1060	100.0
	2	80	15.2	105	20.0	145	27.6	70	13.3	125	23.8	10	1.9	90	17.1	525	100.0
	3	40	7.7	55	10.6	150	28.8	105	20.2	160	30.8	10	1.9	120	23.1	520	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

## **Chapter 7 The Association Personal Income with Health Measures**

Personal income is the total income received by respondent aged 15+ years in at Wave 1, CPI adjusted to the December quarter 2001. These were cut into percentiles (below).

Personal income tertiles: 1. low - \$11,670; 2. \$11,670 - \$30,165; 3. \$30,165 – high.

Personal income quintiles: 1. low - \$7,602; 2. \$7,602 - \$14,311; 3. \$14,311 – \$25,652; 4. \$25,652 - \$ 41,487; 5. \$41,487 - high.

### ***7.1 The Association of Personal Income with Demographics***

Overall, males had higher levels of personal income than females, with over twice the proportion of males in the highest income quintile compared to females. Income quintile tended to increase with increasing age, particularly in the middle age groups (35-54 years). Non-Māori, non-Pacific, non-Asian respondents had higher proportions in the upper quintiles compared to Māori, Pacific and Asian respondents who had higher proportions in low quintiles. Married respondents had the highest proportions in the upper income quintiles. Whereas, never married respondents were over-represented in the lower income quintiles, which is related to younger ages. As were respondents living in families with couples with children.

There was less change in personal income between Waves 1 and 2, compared with changes in household income, with only 62% of the population remaining in the same income quintile. The biggest changes in income were increases in quintiles between Waves 1 and 2.

## 7.1.1 Personal income by baseline demographics

**Table 104: Personal income overall and by age and sex**

	Income Quintiles (W1)												Total	
	NA		1		2		3		4		5			
Age, mean SD	13.5	0.5	33.4	17.2	53.3	19.5	48.8	19.4	43.3	14.1	45.6	11.4	44.0	18.2
Age (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	590	100.0	.	.	.	.	.	.	.	.	.	.	590	100.0
15-24	15	0.6	1305	52.0	370	14.7	515	20.5	265	10.6	45	1.8	2510	100.0
25-34	.	.	430	15.2	300	10.6	550	19.5	875	31.0	665	23.6	2820	100.0
35-44	.	.	470	12.5	400	10.6	740	19.6	940	24.9	1220	32.4	3770	100.0
45-54	.	.	340	10.5	365	11.3	590	18.2	805	24.9	1135	35.1	3235	100.0
55-64	.	.	355	14.2	520	20.8	475	19.0	510	20.4	650	25.9	2505	100.0
65+	.	.	130	4.7	1145	41.1	1010	36.3	290	10.4	210	7.5	2785	100.0
<b>Male</b>	<b>305</b>	<b>3.6</b>	<b>1015</b>	<b>12.1</b>	<b>1180</b>	<b>14.1</b>	<b>1355</b>	<b>16.2</b>	<b>1890</b>	<b>22.6</b>	<b>2635</b>	<b>31.4</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>300</b>	<b>3.0</b>	<b>2010</b>	<b>20.4</b>	<b>1925</b>	<b>19.6</b>	<b>2525</b>	<b>25.7</b>	<b>1780</b>	<b>18.1</b>	<b>1290</b>	<b>13.1</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>605</b>	<b>3.3</b>	<b>3030</b>	<b>16.6</b>	<b>3105</b>	<b>17.0</b>	<b>3880</b>	<b>21.3</b>	<b>3675</b>	<b>20.2</b>	<b>3925</b>	<b>21.5</b>	<b>18215</b>	<b>100.0</b>

**Table 105: Personal income by prioritised ethnicity**

	Income Quintiles (W1)												Total	
	NA		1		2		3		4		5			
Ethnicity (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	400	2.8	2125	14.7	2435	16.8	3045	21.1	2945	20.4	3495	24.2	14455	100.0
Māori	125	6.1	370	18.1	365	17.8	500	24.4	400	19.6	285	13.9	2045	100.0
Pacific	40	5.0	200	24.8	150	18.6	200	24.8	170	21.1	50	6.2	805	100.0
Asian	40	4.4	335	36.6	155	16.9	135	14.8	155	16.9	95	10.4	915	100.0
<b>Total</b>	<b>600</b>	<b>3.3</b>	<b>3025</b>	<b>16.6</b>	<b>3105</b>	<b>17.0</b>	<b>3885</b>	<b>21.3</b>	<b>3675</b>	<b>20.2</b>	<b>3925</b>	<b>21.5</b>	<b>18215</b>	<b>100.0</b>

**Table 106: Personal income by legal marital Status**

	Income Quintiles (W1)												Total	
	NA		1		2		3		4		5			
Marital Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	590	99.2	10	1.7	.	.	10	1.7	10	1.7	.	.	595	100.0
Never Married	10	0.2	1500	28.9	765	14.7	1135	21.9	1075	20.7	695	13.4	5190	100.0
Divorced Widowed Separated	.	.	150	5.0	535	17.8	1095	36.5	655	21.8	565	18.8	3000	100.0
Married	.	.	1380	14.6	1810	19.2	1640	17.4	1940	20.6	2665	28.2	9440	100.0
<b>Total</b>	<b>600</b>	<b>3.3</b>	<b>3030</b>	<b>16.6</b>	<b>3105</b>	<b>17.0</b>	<b>3885</b>	<b>21.3</b>	<b>3675</b>	<b>20.2</b>	<b>3930</b>	<b>21.6</b>	<b>18220</b>	<b>100.0</b>

**Table 107: Personal income by family structure**

Family Structure (W1)	Income Quintiles (W1)													
	1		2		3		4		5		NA		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	565	10.4	1325	24.5	1015	18.7	1210	22.3	1295	23.9	.	.	5415	100.0
Couple with children	1885	24.3	900	11.6	1190	15.3	1435	18.5	1880	24.2	465	6.0	7760	100.0
Sole parent	305	16.7	250	13.7	575	31.4	365	19.9	200	10.9	140	7.7	1830	100.0
Not in a family nucleus	270	8.4	630	19.6	1100	34.3	665	20.7	550	17.1	10	0.3	3210	100.0
<b>Total</b>	<b>3030</b>	<b>16.6</b>	<b>3100</b>	<b>17.0</b>	<b>3880</b>	<b>21.3</b>	<b>3675</b>	<b>20.2</b>	<b>3925</b>	<b>21.5</b>	<b>605</b>	<b>3.3</b>	<b>18215</b>	<b>100.0</b>

**Table 108: Personal income by household structure**

Household Structure (W1)	Income Quintiles (W1)													
	NA		1		2		3		4		5		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	585	4.0	2680	18.3	2455	16.7	2690	18.3	2940	20.0	3330	22.7	14680	100.0
Two or more families	20	3.3	135	22.1	115	18.9	155	25.4	110	18.0	65	10.7	610	100.0
Other multi-person household	.	.	130	15.8	150	18.2	190	23.0	220	26.7	135	16.4	825	100.0
One person household	.	.	80	3.8	380	18.1	845	40.1	400	19.0	395	18.8	2105	100.0
<b>Total</b>	<b>600</b>	<b>3.3</b>	<b>3030</b>	<b>16.6</b>	<b>3100</b>	<b>17.0</b>	<b>3880</b>	<b>21.3</b>	<b>3675</b>	<b>20.2</b>	<b>3925</b>	<b>21.5</b>	<b>18215</b>	<b>100.0</b>

### 7.1.2 Changes in personal income

Changes in income between waves 1 and 2 were investigated, rather than waves 1 and 3 because there were some issues with the derivation of income at wave 3 which are being sorted by Statistics NZ.

**Table 109: Changes in personal income between waves 1 and 2.**

Income Quintiles (W1)	Income Quintiles (W2)													
	NA		1		2		3		4		5		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	305	50.8	295	49.2	10	1.7	10	1.7	.	.	.	.	600	100.0
1	.	.	1910	63.0	575	19.0	330	10.9	125	4.1	90	3.0	3030	100.0
2	.	.	380	12.2	1690	54.4	775	25.0	180	5.8	85	2.7	3105	100.0
3	.	.	245	6.3	430	11.1	2260	58.2	775	19.9	170	4.4	3885	100.0
4	.	.	90	2.4	105	2.9	430	11.7	2290	62.3	750	20.4	3675	100.0
5	.	.	95	2.4	55	1.4	175	4.5	465	11.8	3135	79.9	3925	100.0
<b>Total</b>	<b>305</b>	<b>1.7</b>	<b>3025</b>	<b>16.6</b>	<b>2865</b>	<b>15.7</b>	<b>3975</b>	<b>21.8</b>	<b>3830</b>	<b>21.0</b>	<b>4220</b>	<b>23.2</b>	<b>18215</b>	<b>100.0</b>

## 7.2 The Association of Personal Income with Self-Rated Health

The relationship between personal income and self-rated health is not as strong or linear as with personal income and self-rated health. There are lower proportions of respondents in income tertile 2 reporting excellent health status with higher proportions reporting good, or fair, poor health. There are linear increases in the proportion reporting excellent health status across personal income tertiles in the older age groups (35+years). This non-linear pattern was consistent across ethnic groups, marital status, family and household structure. There were high proportions of divorced, widowed or separated respondents in the lower income tertiles, reporting fair or poor health.

**Table 110: Self-rated health, by personal income tertiles, overall**

Income Tertiles (W1)	Self Rated Health (W1)												Total	
	Excellent		Very Good		Good		Fair		Poor		NA:DK:REF			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	335	55.4	185	30.6	70	11.6	10	1.7	10	1.7	.	.	605	100.0
1	1760	36.3	1475	30.4	1090	22.5	415	8.6	110	2.3	10	0.2	4850	100.0
2	1950	30.8	2085	32.9	1555	24.6	585	9.2	155	2.4	10	0.2	6330	100.0
3	2905	45.2	2285	35.5	995	15.5	200	3.1	45	0.7	.	.	6430	100.0
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>10</b>	<b>0.1</b>	<b>18220</b>	<b>100.0</b>



**Table 111: Self-rated health, by personal income tertiles by age and sex**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	325	55.1	185	31.4	70	11.9	10	1.7	10	1.7	590	100.0
15-24	NA	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0
	1	845	54.5	455	29.4	215	13.9	40	2.6	10	0.6	1550	100.0
	2	310	41.1	275	36.4	135	17.9	25	3.3	10	1.3	755	100.0
	3	90	46.2	70	35.9	35	17.9	10	5.1	.	.	195	100.0
25-34	1	265	44.2	205	34.2	90	15.0	35	5.8	10	1.7	600	100.0
	2	400	41.9	325	34.0	170	17.8	50	5.2	10	1.0	955	100.0
	3	695	54.7	420	33.1	130	10.2	25	2.0	.	.	1270	100.0
35-44	1	260	38.0	235	34.3	140	20.4	50	7.3	15	2.2	685	100.0
	2	455	38.4	375	31.6	250	21.1	80	6.8	25	2.1	1185	100.0
	3	905	47.8	660	34.8	265	14.0	55	2.9	15	0.8	1895	100.0
45-54	1	160	28.6	175	31.3	140	25.0	55	9.8	30	5.4	560	100.0
	2	315	31.7	345	34.7	235	23.6	70	7.0	30	3.0	995	100.0
	3	760	45.2	595	35.4	270	16.1	45	2.7	10	0.6	1680	100.0
55-64	1	140	19.7	210	29.6	220	31.0	120	16.9	30	4.2	710	100.0
	2	200	25.0	275	34.4	215	26.9	85	10.6	25	3.1	800	100.0
	3	345	34.8	400	40.4	200	20.2	35	3.5	10	1.0	990	100.0
65+	1	95	12.8	210	28.2	290	38.9	120	16.1	30	4.0	745	100.0
	2	270	16.4	485	29.5	555	33.7	270	16.4	65	4.0	1645	100.0
	3	115	29.1	140	35.4	100	25.3	35	8.9	10	2.5	395	100.0
<b>Male</b>	NA	185	60.7	85	27.9	30	9.8	10	3.3	10	3.3	305	100.0
	1	635	36.6	495	28.5	385	22.2	170	9.8	40	2.3	1735	100.0
	2	695	29.8	760	32.5	605	25.9	220	9.4	65	2.8	2335	100.0
	3	1720	42.9	1455	36.3	655	16.4	150	3.7	30	0.7	4005	100.0
<b>Female</b>	NA	150	50.0	100	33.3	45	15.0	10	3.3	10	3.3	300	100.0
	1	1120	35.8	985	31.5	705	22.6	240	7.7	65	2.1	3125	100.0
	2	1250	31.3	1325	33.2	955	23.9	365	9.1	95	2.4	3995	100.0
	3	1190	49.1	830	34.2	340	14.0	50	2.1	10	0.4	2425	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 112: Self-rated health, by personal income tertiles by prioritised ethnicity**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	215	53.8	125	31.3	40	10.0	10	2.5	10	2.5	400	100.0
	1	1295	36.7	1085	30.8	775	22.0	300	8.5	70	2.0	3525	100.0
	2	1520	30.5	1645	33.0	1240	24.8	460	9.2	125	2.5	4990	100.0
	3	2530	45.7	1980	35.8	815	14.7	175	3.2	40	0.7	5535	100.0
Māori	NA	65	54.2	40	33.3	20	16.7	10	8.3	.	.	120	100.0
	1	180	30.5	180	30.5	160	27.1	60	10.2	15	2.5	590	100.0
	2	210	26.8	275	35.0	195	24.8	90	11.5	15	1.9	785	100.0
	3	215	39.4	210	38.5	110	20.2	20	3.7	10	1.8	545	100.0
Pacific	NA	30	75.0	10	25.0	10	25.0	.	.	.	.	40	100.0
	1	110	37.3	85	28.8	50	16.9	30	10.2	20	6.8	295	100.0
	2	130	40.0	90	27.7	65	20.0	25	7.7	10	3.1	325	100.0
	3	70	46.7	45	30.0	30	20.0	10	6.7	10	6.7	150	100.0
Asian	NA	20	57.1	10	28.6	10	28.6	.	.	.	.	35	100.0
	1	175	39.8	125	28.4	110	25.0	25	5.7	10	2.3	440	100.0
	2	85	35.4	75	31.3	55	22.9	15	6.3	10	4.2	240	100.0
	3	90	46.2	60	30.8	40	20.5	10	5.1	.	.	195	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

**Table 113: Self-rated health, by personal income tertiles by legal marital status**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	325	55.1	185	31.4	65	11.0	10	1.7	10	1.7	590	100.0
	1	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
	2	10	100.0	.	.	.	.	.	.	.	.	10	100.0
	3	.	.	10	100.0	.	.	.	.	.	.	10	100.0
Never Married	NA	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0
	1	955	48.7	575	29.3	320	16.3	90	4.6	20	1.0	1960	100.0
	2	645	35.7	635	35.2	385	21.3	100	5.5	40	2.2	1805	100.0
	3	660	46.8	490	34.8	210	14.9	45	3.2	10	0.7	1410	100.0
Divorced Widowed Separated	1	65	17.8	95	26.0	110	30.1	70	19.2	25	6.8	365	100.0
	2	360	21.9	490	29.8	505	30.7	230	14.0	65	4.0	1645	100.0
	3	395	40.3	350	35.7	175	17.9	45	4.6	10	1.0	980	100.0
Married	1	735	29.1	805	31.9	660	26.1	260	10.3	65	2.6	2525	100.0
	2	940	32.6	965	33.5	660	22.9	255	8.9	55	1.9	2880	100.0
	3	1845	45.7	1445	35.8	610	15.1	110	2.7	25	0.6	4035	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 114: Self-rated health, by personal income tertiles by family structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1	290	20.6	425	30.1	465	33.0	185	13.1	40	2.8	1410	100.0
	2	550	29.1	650	34.4	480	25.4	170	9.0	40	2.1	1890	100.0
	3	905	42.7	780	36.8	350	16.5	70	3.3	10	0.5	2120	100.0
Couple with children	1	1140	46.2	750	30.4	395	16.0	140	5.7	40	1.6	2465	100.0
	2	765	39.5	655	33.9	375	19.4	115	5.9	30	1.6	1935	100.0
	3	1405	48.5	1005	34.7	395	13.6	70	2.4	15	0.5	2895	100.0
	NA	265	57.0	140	30.1	50	10.8	10	2.2	10	2.2	465	100.0
Sole parent	1	160	39.0	120	29.3	90	22.0	25	6.1	15	3.7	410	100.0
	2	260	30.1	265	30.6	225	26.0	90	10.4	30	3.5	865	100.0
	3	175	41.7	150	35.7	70	16.7	20	4.8	10	2.4	420	100.0
	NA	70	50.0	45	32.1	20	14.3	10	7.1	10	7.1	140	100.0
Not in a family nucleus	1	170	29.6	185	32.2	140	24.3	65	11.3	15	2.6	575	100.0
	2	370	22.5	520	31.6	480	29.2	205	12.5	60	3.6	1645	100.0
	3	420	42.2	345	34.7	180	18.1	45	4.5	10	1.0	995	100.0
	NA	10	100.0	.	.	.	.	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>6940</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

**Table 115: Self-rated health, by personal income tertiles by household structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	320	55.2	180	31.0	65	11.2	10	1.7	10	1.7	580	100.0
	1	1575	37.6	1275	30.4	925	22.1	330	7.9	80	1.9	4190	100.0
	2	1530	33.5	1525	33.4	1050	23.0	370	8.1	90	2.0	4570	100.0
	3	2460	46.1	1905	35.7	790	14.8	155	2.9	35	0.7	5340	100.0
Two or more families	NA	15	60.0	10	40.0	10	40.0	.	.	10	40.0	25	100.0
	1	65	31.0	55	26.2	55	26.2	25	11.9	10	4.8	210	100.0
	2	75	31.9	85	36.2	55	23.4	20	8.5	10	4.3	235	100.0
	3	55	37.9	45	31.0	30	20.7	10	6.9	10	6.9	145	100.0
Other multi-person household	1	85	38.6	85	38.6	45	20.5	10	4.5	10	4.5	220	100.0
	2	115	35.9	110	34.4	70	21.9	15	4.7	10	3.1	320	100.0
	3	135	46.6	95	32.8	45	15.5	10	3.4	.	.	290	100.0
One person household	1	40	17.0	65	27.7	65	27.7	50	21.3	10	4.3	235	100.0
	2	225	18.6	370	30.6	385	31.8	175	14.5	55	4.5	1210	100.0
	3	255	38.6	240	36.4	130	19.7	30	4.5	10	1.5	660	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3710</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

### 7.3 The Association of Personal Income with Health-Related Quality of Life (SF-36)

As seen with self-rated health, there is not a linear trend between mean SF-36 scores and increasing personal income tertile. Generally, mean SF-36 scores for personal income tertile 2 was lower than tertiles 1 and 3. There were linear increases with increasing income tertile across most age groups. Mean SF-36 scores for non-Māori, non-Pacific, non-Asian and Asian ethnic group, income tertile 2 respondents were lower than for tertiles 1 and 3. Whereas, mean SF-36 scores for Māori and Pacific respondents, income tertile 2 were higher than for tertiles 1 and 3. There were linear relationships with increasing mean SF-36 score and increasing income for divorced, widowed or separated or married respondents or living in a couple only family across most SF-36 domains. The mean SF-36 scores for respondents living in single person households in the lower income tertiles (1 and 2) were lower than the overall mean SF-36 score. This could be due to the older age structure of this population, however the means presented here are not adjusted for age.

**Table 116: Overall Mean (SD) SF-36 score by personal income tertiles (Wave 1)**

Income Tertiles (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA	83.1	15.9	87.9	18.1	90.4	17.0	92.3	16.9	70.6	17.8	82.5	13.3	93.7	15.1	97.1	9.2	52.1	8.3	54.5	5.4
1	75.7	21.5	80.8	23.9	82.3	24.8	88.5	22.0	62.9	20.5	81.8	15.3	90.3	18.5	84.8	23.3	51.3	9.6	49.9	9.7
2	75.3	21.7	79.3	24.3	80.6	25.9	88.0	22.9	62.0	21.4	82.5	15.3	90.7	18.6	81.2	25.4	51.8	9.7	48.6	10.3
3	82.6	16.8	84.5	20.7	88.3	20.1	92.9	17.1	67.3	18.3	85.1	12.5	94.7	13.5	91.1	16.0	53.4	7.9	52.2	7.5
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 117: Mean (SD) SF-36 score by personal income tertiles by age and Sex**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0-14	NA	83.2	15.7	88.0	17.9	90.5	16.8	92.3	16.8	70.6	17.7	82.6	13.1	93.7	15.0	97.2	8.8	52.1	8.2	54.6	5.4
15-24	NA	78.8	26.3	84.0	27.9	85.9	25.6	89.6	22.5	69.8	25.8	78.3	22.3	95.1	16.8	92.9	20.1	51.1	12.3	52.9	7.9
	1	80.5	17.7	85.9	20.6	88.2	19.8	89.8	19.3	65.7	18.9	81.1	14.5	91.7	16.2	95.1	12.8	50.7	9.2	53.7	6.5
	2	80.4	17.0	83.8	21.0	87.4	19.7	89.2	20.2	64.4	18.9	81.6	14.0	92.3	15.6	94.1	13.5	50.8	9.0	53.1	6.4
	3	82.5	15.1	85.8	20.8	89.7	18.6	92.4	17.9	65.9	18.2	83.5	12.4	95.0	12.3	95.9	11.5	52.1	8.2	53.7	6.4
25-34	1	79.7	18.5	84.1	21.8	85.8	21.2	89.3	20.7	61.4	19.2	80.6	15.8	90.7	17.7	91.6	15.6	50.0	9.8	52.7	7.4
	2	80.0	19.0	84.2	21.5	85.2	21.9	88.9	21.5	63.7	20.8	81.1	15.6	89.7	18.8	92.2	15.3	50.4	10.3	52.7	7.3
	3	84.8	14.6	85.4	20.4	89.8	18.4	92.3	17.1	65.7	18.2	83.5	13.2	93.9	14.3	94.9	11.9	52.1	8.4	53.7	6.2
35-44	1	78.3	20.0	81.5	23.1	83.8	23.1	87.6	22.8	62.9	20.3	80.6	15.9	89.4	19.3	88.8	18.4	50.4	10.0	51.4	8.3
	2	78.1	20.7	80.9	23.6	84.0	23.3	87.1	23.7	62.3	20.5	80.3	16.1	88.8	20.4	88.2	19.2	50.1	10.3	51.3	8.5
	3	83.2	16.4	84.9	20.5	88.6	19.4	92.0	18.1	66.5	18.4	84.0	13.0	94.1	14.1	93.2	13.1	52.5	8.3	52.9	6.9
45-54	1	72.3	24.3	77.5	25.1	79.7	26.8	86.2	24.6	62.5	21.4	80.5	17.1	87.4	21.3	80.9	24.7	50.6	10.7	48.3	10.1
	2	76.1	22.1	77.3	26.3	82.2	25.1	88.6	22.7	63.4	20.6	82.1	16.1	90.4	19.4	84.0	22.8	51.7	9.9	49.2	9.9
	3	82.6	17.0	84.6	20.5	88.6	19.9	94.0	15.8	68.2	17.7	85.6	12.2	95.3	12.7	90.9	15.7	53.9	7.4	52.0	7.5
55-64	1	70.5	23.1	75.8	25.3	78.5	26.3	89.2	22.2	63.4	20.8	83.5	15.2	90.6	18.5	77.2	24.8	52.9	8.9	46.5	10.3
	2	73.3	23.3	77.4	24.6	79.8	26.6	89.1	23.0	63.4	21.1	83.9	15.1	91.4	18.5	79.1	23.7	52.8	9.3	47.4	10.2
	3	81.0	17.9	83.7	21.2	88.0	20.9	94.3	15.9	70.2	17.2	87.5	11.0	95.7	12.0	87.8	17.9	55.2	6.7	50.7	8.0
65+	1	67.5	24.1	73.9	27.2	71.7	30.5	86.7	25.2	58.1	22.9	84.4	14.5	89.8	20.4	64.5	29.8	53.2	9.0	42.7	11.8
	2	68.8	22.9	75.1	25.4	71.7	29.9	86.7	24.3	58.1	23.4	84.9	14.2	91.7	17.9	63.0	29.8	53.7	8.7	42.5	11.5
	3	76.1	20.4	81.5	21.9	80.6	25.2	91.1	19.9	65.9	21.5	88.8	10.5	94.9	14.7	76.5	25.2	55.6	7.2	46.7	9.8
Male	NA	85.6	14.6	89.2	17.1	91.3	16.4	94.2	14.7	72.1	17.0	83.4	12.8	95.2	12.1	97.6	9.6	53.0	7.5	54.9	5.4
	1	75.3	22.0	81.5	24.3	82.7	25.6	88.8	22.1	65.4	20.7	82.8	15.1	90.8	18.5	85.8	23.3	52.0	9.5	50.0	9.9
	2	74.5	22.0	80.9	23.7	81.8	25.8	89.6	21.6	64.7	21.4	83.9	14.6	91.8	17.8	83.2	24.4	52.6	9.2	49.0	9.9
	3	82.0	17.0	84.5	20.7	88.8	20.0	93.6	16.3	68.6	17.8	85.8	12.0	95.5	12.5	91.8	15.3	53.9	7.5	52.2	7.4
Female	NA	80.6	16.9	86.6	19.0	89.6	17.6	90.3	18.6	69.0	18.6	81.6	13.8	92.2	17.4	96.6	8.7	51.2	9.0	54.2	5.4
	1	75.9	21.1	80.4	23.7	82.1	24.3	88.3	22.0	61.6	20.3	81.2	15.4	90.1	18.5	84.3	23.2	50.9	9.6	49.9	9.7
	2	75.8	21.5	78.3	24.6	79.9	25.9	87.1	23.6	60.4	21.2	81.7	15.6	90.0	19.1	80.0	25.8	51.3	9.9	48.4	10.5
	3	83.5	16.5	84.5	20.8	87.4	20.2	91.7	18.3	65.2	18.8	84.0	13.1	93.5	14.9	90.0	16.9	52.6	8.5	52.2	7.6
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 118: Mean (SD) SF-36 score by personal income tertiles by prioritised ethnicity**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Ethnicity (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
nM,nP,nA	NA	83.1	15.4	86.1	18.9	90.6	16.8	92.4	16.5	69.8	17.3	82.5	13.0	94.4	14.4	96.9	9.7	52.2	8.0	54.3	5.6
	1	76.1	21.4	79.9	24.2	82.0	25.1	88.6	21.9	61.8	20.8	81.8	15.4	90.8	18.1	84.4	23.5	51.3	9.6	49.7	9.9
	2	75.2	21.8	78.6	24.5	79.9	26.4	88.1	22.9	61.1	21.5	82.7	15.1	91.4	17.9	79.7	26.2	52.0	9.5	48.1	10.5
	3	82.8	16.8	84.2	20.8	88.3	20.2	93.0	16.9	67.1	18.3	85.3	12.3	94.9	13.3	90.9	16.2	53.5	7.8	52.1	7.6
Māori	NA	82.2	17.5	90.5	17.1	90.0	19.1	91.0	19.4	69.4	18.7	81.4	14.6	91.2	18.6	96.9	9.0	51.1	9.6	55.0	5.6
	1	74.7	22.0	80.9	24.2	81.6	24.9	86.4	24.1	64.9	19.7	81.8	16.1	88.5	20.8	84.7	24.5	51.1	10.4	49.8	9.6
	2	76.2	21.2	81.5	23.2	83.0	24.5	86.8	24.5	64.2	21.4	81.9	16.3	88.1	21.0	86.0	21.7	50.9	10.8	50.5	8.9
	3	81.7	16.8	85.9	20.9	87.8	19.8	92.4	18.4	68.1	17.5	84.8	13.2	93.8	14.7	92.4	14.7	53.0	8.4	52.5	7.0
Pacific	NA	88.1	16.3	90.1	17.3	91.0	13.4	93.6	15.4	80.8	16.4	86.6	10.4	96.6	8.0	98.1	7.5	55.6	6.3	54.4	3.9
	1	70.6	23.3	82.4	24.1	79.1	26.8	84.7	24.1	65.3	20.4	80.0	14.7	84.9	22.5	82.8	25.1	50.1	9.5	49.2	10.3
	2	74.7	22.4	80.7	24.5	80.8	24.5	86.8	22.4	67.1	19.7	80.6	15.4	85.1	23.0	86.0	22.0	50.7	9.6	50.2	9.1
	3	79.8	17.5	86.2	19.4	86.8	20.1	91.2	19.2	69.2	19.2	84.3	12.8	92.1	17.0	93.1	13.4	52.6	9.1	52.6	5.9
Asian	NA	81.4	15.5	94.9	8.9	89.4	16.4	93.3	13.4	72.1	19.2	81.8	14.3	91.5	13.6	99.0	3.1	51.5	8.2	55.9	3.1
	1	77.2	19.0	86.8	20.2	88.2	19.3	92.3	17.5	67.9	17.7	82.6	14.0	92.6	14.6	90.1	17.3	52.1	8.1	52.4	7.6
	2	76.9	19.5	84.5	23.0	86.7	19.0	90.8	18.7	67.4	17.8	81.5	15.4	90.9	16.6	89.6	18.3	51.6	8.9	52.0	7.8
	3	80.9	15.4	88.1	17.8	91.2	15.9	91.8	17.5	68.8	17.9	83.0	13.0	94.2	12.8	93.0	12.4	52.2	8.2	53.6	5.6
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 119: Mean (SD) SF-36 score by personal income tertiles by legal marital status**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Marital Status (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	NA	83.2	15.7	88.0	17.9	90.5	16.8	92.3	16.8	70.6	17.7	82.6	13.1	93.7	15.0	97.2	8.8	52.1	8.2	54.6	5.4
	1	78.5	9.2	100.0	0.0	100.0	0.0	75.0	35.4	62.5	0.0	70.0	35.4	91.7	11.8	100.0	0.0	43.2	17.1	59.7	5.3
	2	85.0	.	100.0	.	100.0	.	100.0	.	68.8	.	90.0	.	100.0	.	100.0	.	54.7	.	56.7	.
	3	82.0	.	84.0	.	37.5	.	100.0	.	25.0	.	90.0	.	100.0	.	65.0	.	53.8	.	41.0	.
Never Married	NA	78.8	26.3	84.0	27.9	85.9	25.6	89.6	22.5	69.8	25.8	78.3	22.3	95.1	16.8	92.9	20.1	51.1	12.3	52.9	7.9
	1	78.7	19.1	84.7	21.5	86.7	21.4	88.9	20.8	64.8	19.2	80.7	15.1	90.7	17.5	92.8	16.2	50.4	9.6	52.9	7.5
	2	78.0	19.7	82.4	22.4	84.3	22.9	87.9	22.2	63.4	20.4	81.0	15.5	89.9	18.7	89.8	18.9	50.5	10.0	51.7	8.2
	3	82.9	16.0	84.9	20.1	88.9	19.0	91.8	17.7	66.3	18.1	83.5	13.1	93.6	14.7	93.3	14.3	52.2	8.4	53.1	6.8
Divorced Widowed Separated	1	65.3	25.6	71.0	27.3	69.4	29.1	81.4	28.7	55.7	23.5	78.1	19.1	84.2	25.1	68.9	28.8	49.3	12.1	44.0	11.4
	2	70.3	23.4	74.4	26.2	74.2	28.9	84.2	26.5	57.7	23.3	81.3	16.8	88.6	20.8	70.0	29.5	51.3	10.8	44.9	11.7
	3	80.8	18.4	83.1	22.2	86.0	22.4	91.4	19.3	65.9	19.7	84.4	13.6	93.7	15.6	88.7	18.6	52.9	8.7	51.2	8.4
Married	1	74.8	22.0	79.2	24.5	80.8	25.8	89.2	21.7	62.5	20.8	83.1	14.7	90.9	18.0	80.9	24.8	52.2	9.0	48.4	10.3
	2	76.6	21.4	80.1	23.9	81.9	25.2	90.3	20.7	63.6	20.4	84.2	14.0	92.3	17.0	82.2	24.0	52.9	8.7	48.9	9.9
	3	82.9	16.7	84.8	20.5	88.6	19.8	93.6	16.3	68.0	17.9	85.9	11.9	95.3	12.4	91.0	15.7	53.9	7.4	52.1	7.5
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 120: Mean (SD) SF-36 score by personal income tertiles by family structure**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Family Structure (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Couple only	1	71.5	23.0	76.4	25.5	77.2	28.1	87.9	23.0	61.8	21.7	83.6	14.9	90.1	19.0	75.0	27.4	52.6	9.3	46.1	11.1
	2	75.7	21.6	78.8	24.1	80.3	26.5	90.0	21.3	63.5	21.1	84.6	14.0	92.8	16.5	79.8	25.2	53.3	8.5	47.9	10.3
	3	82.3	17.3	83.8	21.2	87.6	20.6	93.5	16.1	68.4	18.1	86.6	11.4	95.1	13.0	89.5	17.3	54.3	7.2	51.3	7.9
Couple with children	1	79.0	19.6	83.8	22.0	86.1	21.5	89.9	20.1	64.0	19.6	81.8	14.8	91.4	16.9	90.8	17.6	51.1	9.3	52.2	7.9
	2	79.2	19.7	82.6	22.6	85.6	21.9	90.0	20.3	64.2	19.7	82.6	14.6	91.5	17.3	89.6	18.1	51.6	9.2	51.6	8.2
	3	83.6	15.8	85.8	19.6	89.7	18.6	93.5	16.5	67.8	17.7	84.9	12.4	95.1	12.5	93.2	13.1	53.2	7.7	53.0	6.6
	NA	84.1	15.0	88.4	17.3	90.9	16.0	93.3	15.0	70.8	17.5	82.9	12.5	94.5	13.5	97.4	7.7	52.5	7.5	54.7	5.1
Sole parent	1	74.2	20.9	83.6	22.5	84.1	23.1	86.7	22.6	64.1	20.1	79.2	15.9	89.1	19.0	88.0	21.8	49.7	9.9	51.5	9.0
	2	73.6	22.8	78.5	25.3	79.1	26.3	83.2	26.7	59.0	22.0	78.5	17.5	85.3	22.9	83.2	24.4	48.7	11.5	49.5	10.2
	3	80.2	18.2	82.3	23.6	85.0	22.8	88.2	22.4	63.1	19.5	81.6	14.9	91.0	19.0	89.5	18.0	50.9	9.9	51.7	8.4
	NA	79.6	18.4	85.9	20.5	88.8	20.1	88.6	21.8	69.5	19.0	80.9	15.8	90.8	19.2	95.9	12.8	50.8	10.6	53.9	6.4
Not in a family nucleus	1	72.7	23.3	76.4	26.0	77.4	27.5	85.0	26.3	60.2	21.2	78.8	17.4	87.0	22.5	80.8	25.7	49.8	11.0	48.4	10.4
	2	71.3	22.6	76.2	25.4	75.7	28.3	86.0	24.8	59.2	22.6	82.0	15.8	90.0	19.3	71.8	29.6	51.8	10.0	45.6	11.4
	3	81.2	17.7	83.3	21.3	87.0	21.4	92.0	18.2	65.4	19.3	84.2	13.2	94.3	14.1	89.4	18.7	52.8	8.5	51.6	8.2
	NA	92.0	.	100.0	.	100.0	.	100.0	.	87.5	.	80.0	.	100.0	.	100.0	.	54.9	.	58.6	.
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>



**Table 121: Mean (SD) SF-36 score by personal income tertiles by household structure**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Household Structure (W1)	Income Tertiles (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
One Family	NA	83.0	15.9	87.7	18.2	90.4	17.0	92.3	16.8	70.2	17.8	82.5	13.3	93.8	14.9	97.1	9.1	52.1	8.3	54.5	5.5
	1	76.2	21.1	81.4	23.5	83.0	24.3	89.1	21.2	63.2	20.4	82.2	15.0	90.8	17.8	85.5	22.7	51.5	9.4	50.2	9.6
	2	76.5	21.4	80.1	23.9	82.1	25.0	88.6	22.3	62.8	20.9	82.7	15.1	91.0	18.3	84.0	23.3	51.8	9.6	49.5	9.8
	3	82.9	16.6	84.7	20.6	88.5	19.8	93.1	16.9	67.6	18.0	85.3	12.3	94.8	13.3	91.5	15.4	53.5	7.7	52.3	7.4
Two or more families	NA	86.3	16.9	94.2	14.9	90.8	16.8	92.3	19.6	80.4	18.0	83.1	14.2	90.9	19.5	96.2	10.4	53.6	8.9	55.3	4.2
	1	71.7	23.6	81.5	24.0	80.9	25.6	86.3	25.0	64.5	19.4	80.9	15.2	87.2	20.9	80.5	27.6	50.6	9.6	49.0	10.7
	2	77.5	20.6	81.7	24.2	83.8	22.7	89.2	20.3	64.7	20.1	82.3	15.7	88.5	20.3	88.1	18.8	51.2	9.9	51.2	8.1
	3	80.1	18.5	84.7	22.6	88.2	21.4	91.1	19.8	68.6	20.2	86.0	12.1	92.9	16.0	90.0	16.9	53.4	8.5	51.6	8.1
Other multi-person household	1	79.0	18.2	79.4	24.8	83.8	22.9	87.6	21.7	62.6	19.5	79.4	14.8	89.3	19.8	90.6	17.4	49.9	9.7	51.8	8.3
	2	79.2	18.8	82.5	22.3	84.6	22.9	90.2	19.2	64.5	19.9	83.0	13.2	91.3	16.3	88.2	21.0	51.9	8.5	51.1	9.4
	3	82.8	15.2	83.8	21.5	89.0	19.4	91.5	18.3	65.0	18.0	82.9	13.1	94.2	14.1	92.9	14.9	51.9	8.6	53.0	6.9
One person household	1	67.0	25.5	70.3	27.6	69.5	30.4	80.4	30.6	56.3	22.3	77.1	20.3	84.8	24.9	70.5	27.8	49.1	12.5	44.5	11.1
	2	69.5	22.8	74.8	25.6	73.3	29.0	85.0	26.0	57.7	23.1	81.7	16.5	89.8	20.0	67.2	29.9	51.9	10.4	44.1	11.3
	3	80.4	18.6	83.4	21.0	86.5	21.9	92.1	18.3	65.5	20.1	84.5	13.5	94.5	14.1	88.1	19.5	53.1	8.4	51.1	8.5
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

## 7.4 The Association of Personal Income with Mental Distress (K-10)

Overall, the proportion of respondents reporting low levels of mental distress increased with increasing personal income tertile. This was consistent across age groups, by sex, ethnicity, marital status, family and household structure. This was consequently reflected in declines in the proportion reporting moderate to high level of mental distress with increasing income. There was on average a 10-20% difference in the proportion of respondents reporting low mental distress between tertiles 1 and 3. There were higher levels in Pacific ethnic groups reporting moderate to high levels of mental distress, particularly in the lower personal income tertiles.

**Table 122: Overall K-10 group by personal income tertiles**

Income Tertiles (W1)	Kessler Groups (W3)											
	Low		Moderate		High		Very High		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA	440	73.3	105	17.5	35	5.8	10	1.7	10	1.7	600	100.0
1	3495	72.0	830	17.1	345	7.1	105	2.2	75	1.5	4855	100.0
2	4685	74.0	1045	16.5	365	5.8	140	2.2	95	1.5	6330	100.0
3	5415	84.3	730	11.4	190	3.0	45	0.7	55	0.9	6425	100.0
<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 123: K-10 group by personal income tertiles by age and sex**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	435	73.7	105	17.8	35	5.9	10	1.7	10	1.7	590	100.0
15-24	NA	10	66.7	10	66.7	.	.	10	66.7	.	.	15	100.0
	1	1090	70.3	295	19.0	115	7.4	30	1.9	20	1.3	1550	100.0
	2	530	70.2	160	21.2	45	6.0	10	1.3	10	1.3	755	100.0
	3	150	76.9	30	15.4	10	5.1	10	5.1	10	5.1	195	100.0
25-34	1	435	72.5	110	18.3	30	5.0	15	2.5	10	1.7	600	100.0
	2	670	70.5	175	18.4	75	7.9	25	2.6	10	1.1	950	100.0
	3	1025	80.7	180	14.2	45	3.5	10	0.8	10	0.8	1270	100.0
35-44	1	500	72.5	120	17.4	50	7.2	15	2.2	10	1.4	690	100.0
	2	855	72.2	200	16.9	80	6.8	35	3.0	10	0.8	1185	100.0
	3	1575	82.9	225	11.8	60	3.2	15	0.8	20	1.1	1900	100.0
45-54	1	380	67.9	95	17.0	55	9.8	20	3.6	15	2.7	560	100.0
	2	755	75.9	140	14.1	55	5.5	30	3.0	10	1.0	995	100.0
	3	1460	86.9	155	9.2	50	3.0	10	0.6	10	0.6	1680	100.0
55-64	1	540	75.5	95	13.3	50	7.0	15	2.1	15	2.1	715	100.0
	2	620	77.0	115	14.3	35	4.3	20	2.5	10	1.2	805	100.0
	3	865	87.4	95	9.6	20	2.0	10	1.0	10	1.0	990	100.0
65+	1	550	74.3	110	14.9	50	6.8	15	2.0	15	2.0	740	100.0
	2	1255	76.3	255	15.5	80	4.9	10	0.6	40	2.4	1645	100.0
	3	340	86.1	40	10.1	10	2.5	.	.	10	2.5	395	100.0
<b>Male</b>	NA	230	76.7	45	15.0	15	5.0	10	3.3	10	3.3	300	100.0
	1	1255	72.5	280	16.2	135	7.8	30	1.7	35	2.0	1730	100.0
	2	1760	75.2	370	15.8	135	5.8	35	1.5	35	1.5	2340	100.0
	3	3395	84.7	455	11.3	95	2.4	25	0.6	40	1.0	4010	100.0
<b>Female</b>	NA	210	70.0	60	20.0	20	6.7	10	3.3	10	3.3	300	100.0
	1	2245	72.0	545	17.5	210	6.7	80	2.6	45	1.4	3120	100.0
	2	2925	73.2	675	16.9	230	5.8	105	2.6	60	1.5	3995	100.0
	3	2015	83.3	275	11.4	95	3.9	25	1.0	15	0.6	2420	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

**Table 124: K-10 group by personal income tertiles by prioritised ethnicity**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	305	76.3	70	17.5	25	6.3	10	2.5	10	2.5	400	100.0
	1	2595	73.6	575	16.3	245	7.0	65	1.8	45	1.3	3525	100.0
	2	3770	75.6	805	16.1	250	5.0	105	2.1	65	1.3	4990	100.0
	3	4705	85.0	600	10.8	150	2.7	40	0.7	40	0.7	5535	100.0
Māori	NA	80	64.0	25	20.0	10	8.0	10	8.0	10	8.0	125	100.0
	1	400	67.8	105	17.8	50	8.5	25	4.2	10	1.7	590	100.0
	2	535	68.2	140	17.8	75	9.6	20	2.5	10	1.3	785	100.0
	3	445	80.9	75	13.6	20	3.6	10	1.8	10	1.8	550	100.0
Pacific	NA	25	62.5	10	25.0	10	25.0	.	.	10	25.0	40	100.0
	1	175	59.3	70	23.7	25	8.5	10	3.4	15	5.1	295	100.0
	2	210	65.6	60	18.8	30	9.4	10	3.1	10	3.1	320	100.0
	3	115	76.7	20	13.3	10	6.7	10	6.7	10	6.7	150	100.0
Asian	NA	35	100.0	10	28.6	10	28.6	.	.	.	.	35	100.0
	1	320	71.9	75	16.9	25	5.6	10	2.2	10	2.2	445	100.0
	2	170	72.3	40	17.0	15	6.4	10	4.3	10	4.3	235	100.0
	3	150	76.9	35	17.9	10	5.1	10	5.1	10	5.1	195	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 125: K-10 group by personal income tertiles by legal marital Status**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	430	72.9	110	18.6	35	5.9	10	1.7	10	1.7	590	100.0
	1	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
	2	.	.	.	.	10	100.0	.	.	.	.	10	100.0
	3	10	100.0	.	.	.	.	.	.	.	.	10	100.0
Never Married	NA	10	100.0	10	100.0	.	.	10	100.0	.	.	10	100.0
	1	1370	69.9	370	18.9	150	7.7	50	2.6	25	1.3	1960	100.0
	2	1265	70.1	350	19.4	130	7.2	50	2.8	20	1.1	1805	100.0
	3	1135	80.5	195	13.8	55	3.9	15	1.1	10	0.7	1410	100.0
Divorced Widowed Separated	1	220	59.5	65	17.6	50	13.5	20	5.4	10	2.7	370	100.0
	2	1175	71.4	295	17.9	110	6.7	45	2.7	25	1.5	1645	100.0
	3	815	83.2	110	11.2	35	3.6	10	1.0	10	1.0	980	100.0
Married	1	1900	75.2	390	15.4	145	5.7	45	1.8	40	1.6	2525	100.0
	2	2250	78.1	405	14.1	125	4.3	50	1.7	50	1.7	2880	100.0
	3	3465	85.9	415	10.3	100	2.5	20	0.5	40	1.0	4035	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 126: K-10 group by personal income tertiles by family structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1	1045	74.1	220	15.6	95	6.7	20	1.4	25	1.8	1410	100.0
	2	1475	78.2	275	14.6	80	4.2	25	1.3	30	1.6	1885	100.0
	3	1815	85.6	225	10.6	55	2.6	10	0.5	20	0.9	2120	100.0
Couple with children	1	1810	73.6	415	16.9	155	6.3	50	2.0	40	1.6	2460	100.0
	2	1460	75.5	305	15.8	110	5.7	35	1.8	30	1.6	1935	100.0
	3	2445	84.5	320	11.1	80	2.8	25	0.9	25	0.9	2895	100.0
	NA	345	74.2	80	17.2	25	5.4	10	2.2	10	2.2	465	100.0
Sole parent	1	260	64.2	85	21.0	40	9.9	15	3.7	10	2.5	405	100.0
	2	550	63.6	180	20.8	85	9.8	35	4.0	10	1.2	865	100.0
	3	330	77.6	55	12.9	25	5.9	10	2.4	10	2.4	425	100.0
	NA	90	64.3	30	21.4	10	7.1	10	7.1	.	.	140	100.0
Not in a family nucleus	1	380	66.7	100	17.5	55	9.6	20	3.5	10	1.8	570	100.0
	2	1205	73.3	280	17.0	95	5.8	40	2.4	25	1.5	1645	100.0
	3	820	82.4	125	12.6	30	3.0	10	1.0	10	1.0	995	100.0
	NA	10	100.0	.	.	.	.	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 127: K-10 group by personal income tertiles by household structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	425	73.3	105	18.1	35	6.0	10	1.7	10	1.7	580	100.0
	1	3060	73.0	710	16.9	275	6.6	80	1.9	60	1.4	4190	100.0
	2	3405	74.5	750	16.4	265	5.8	100	2.2	60	1.3	4570	100.0
	3	4520	84.7	585	11.0	155	2.9	35	0.7	45	0.8	5335	100.0
Two or more families	NA	15	75.0	10	50.0	10	50.0	.	.	.	.	20	100.0
	1	135	64.3	35	16.7	25	11.9	10	4.8	10	4.8	210	100.0
	2	165	70.2	45	19.1	15	6.4	10	4.3	10	4.3	235	100.0
	3	110	75.9	20	13.8	10	6.9	10	6.9	10	6.9	145	100.0
Other multi-person household	1	150	68.2	45	20.5	20	9.1	10	4.5	10	4.5	220	100.0
	2	240	76.2	60	19.0	10	3.2	10	3.2	10	3.2	315	100.0
	3	230	80.7	40	14.0	10	3.5	10	3.5	.	.	285	100.0
One person household	1	150	63.8	35	14.9	30	12.8	15	6.4	10	4.3	235	100.0
	2	885	73.1	195	16.1	75	6.2	35	2.9	25	2.1	1210	100.0
	3	550	83.3	80	12.1	20	3.0	10	1.5	10	1.5	660	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

## **7.5 *The Association of Personal Income with Perceived Stress***

Overall the proportion of respondents reporting that they felt in control most or all of the time increased with increasing personal income tertile. Similar trends were observed for the other perceived stress questions. Further tables of perceived stress by personal income by other demographic variables are not presented in this report, due to small cell counts.

**Table 128: Perceived stress by personal income tertiles (Wave 1), overall**

Income Tertiles (W1)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	10	1.7	20	3.3	55	9.1	125	20.7	375	62.0	15	2.5	605	100.0
1	105	2.2	235	4.8	590	12.2	975	20.1	2885	59.4	60	1.2	4855	100.0
2	135	2.1	280	4.4	735	11.6	1285	20.3	3830	60.5	75	1.2	6335	100.0
3	65	1.0	140	2.2	545	8.5	1430	22.2	4215	65.6	35	0.5	6430	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>680</b>	<b>3.7</b>	<b>1920</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.1</b>	<b>185</b>	<b>1.0</b>	<b>18215</b>	<b>100.0</b>
Unable to overcome difficulties (W3)														
NA	10	1.7	10	1.7	60	9.9	135	22.3	380	62.8	15	2.5	605	100.0
1	40	0.8	120	2.5	455	9.4	930	19.2	3255	67.0	55	1.1	4855	100.0
2	45	0.7	130	2.1	555	8.8	1080	17.0	4450	70.2	70	1.1	6335	100.0
3	25	0.4	70	1.1	395	6.1	1025	15.9	4870	75.7	35	0.5	6430	100.0
<b>Total</b>	<b>125</b>	<b>0.7</b>	<b>330</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3180</b>	<b>17.5</b>	<b>12955</b>	<b>71.1</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Confident in handling problems (W3)														
NA	145	24.0	310	51.2	80	13.2	45	7.4	15	2.5	10	1.7	605	100.0
1	1595	32.9	2275	46.9	530	10.9	290	6.0	120	2.5	50	1.0	4855	100.0
2	2330	36.8	2855	45.1	620	9.8	295	4.7	170	2.7	65	1.0	6335	100.0
3	2650	41.2	3075	47.8	380	5.9	185	2.9	95	1.5	40	0.6	6430	100.0
<b>Total</b>	<b>6720</b>	<b>36.9</b>	<b>8520</b>	<b>46.8</b>	<b>1615</b>	<b>8.9</b>	<b>805</b>	<b>4.4</b>	<b>400</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Felt things were going your way (W3)														
NA	55	9.1	270	44.6	205	33.9	50	8.3	15	2.5	10	1.7	605	100.0
1	495	10.2	2435	50.2	1290	26.6	420	8.7	150	3.1	60	1.2	4855	100.0
2	700	11.0	3245	51.2	1580	24.9	510	8.1	215	3.4	90	1.4	6335	100.0
3	695	10.8	3930	61.1	1350	21.0	315	4.9	85	1.3	55	0.9	6430	100.0
<b>Total</b>	<b>1940</b>	<b>10.7</b>	<b>9890</b>	<b>54.3</b>	<b>4430</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18215</b>	<b>100.0</b>

## 7.6 The Association of Personal Income with Chronic Diseases

Unlike the trends seen with household income, there were higher proportions of respondents reporting chronic diseases in personal income tertile 2. Consequently, over 60% of respondents in income tertile 2 had one or more comorbid diseases. This may be due to an over-representation of older ages in the middle income tertile. Divorced, widowed or separated respondents had higher proportions reporting high blood pressure, high cholesterol, heart disease, and stroke, than the overall population at all income levels. This group also had high proportions of respondents with more than two comorbid diseases. This may be due to the older age structure of this population. There were high proportions of respondents living in couple only families or one person households, reporting high blood pressure, high cholesterol, heart disease and stroke.

**Table 129: Chronic disease by personal income tertiles (Wave 1), overall**

Income Tertiles (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	140	23.3	10	1.7	10	1.7	10	1.7	.	.	10	1.7	45	7.5	15	2.5	600	100.0
1	955	19.7	1010	20.8	735	15.1	315	6.5	135	2.8	260	5.4	675	13.9	490	10.1	4855	100.0
2	1240	19.6	1735	27.4	1185	18.7	575	9.1	255	4.0	355	5.6	945	14.9	715	11.3	6330	100.0
3	1095	17.0	1245	19.4	1220	19.0	270	4.2	65	1.0	190	3.0	755	11.8	450	7.0	6425	100.0
<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>



**Table 130: Number of comorbid disease, overall**

Income Tertiles (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA	420	70.0	170	28.3	10	1.7	10	1.7	600	100.0
1	2250	46.3	2070	42.6	515	10.6	15	0.3	4855	100.0
2	2510	39.7	2955	46.7	855	13.5	15	0.2	6330	100.0
3	3065	47.7	2905	45.2	440	6.8	15	0.2	6425	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 131: Chronic disease by personal income tertiles by age and sex**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	135	22.9	10	1.7	10	1.7	10	1.7	.	.	10	1.7	45	7.6	15	2.5	590	100.0
15-24	NA	10	100.0	.	.	.	.	10	100.0	.	.	.	.	10	100.0	10	100.0	10	100.0
	1	395	25.5	45	2.9	20	1.3	10	0.6	10	0.6	10	0.6	145	9.4	105	6.8	1550	100.0
	2	220	29.3	45	6.0	10	1.3	10	1.3	.	.	10	1.3	95	12.7	70	9.3	750	100.0
	3	50	25.6	10	5.1	10	5.1	.	.	.	.	.	.	25	12.8	10	5.1	195	100.0
25-34	1	120	20.0	70	11.7	40	6.7	10	1.7	10	1.7	10	1.7	110	18.3	75	12.5	600	100.0
	2	230	24.2	90	9.5	45	4.7	10	1.1	10	1.1	15	1.6	170	17.9	140	14.7	950	100.0
	3	285	22.4	110	8.7	95	7.5	10	0.8	10	0.8	10	0.8	150	11.8	85	6.7	1270	100.0
35-44	1	115	16.8	90	13.1	70	10.2	15	2.2	10	1.5	20	2.9	130	19.0	95	13.9	685	100.0
	2	235	19.8	175	14.8	130	11.0	25	2.1	20	1.7	45	3.8	215	18.1	170	14.3	1185	100.0
	3	335	17.6	245	12.9	280	14.7	35	1.8	10	0.5	25	1.3	240	12.6	150	7.9	1900	100.0
45-54	1	100	17.9	150	26.8	115	20.5	30	5.4	15	2.7	45	8.0	105	18.8	85	15.2	560	100.0
	2	165	16.6	225	22.6	210	21.1	45	4.5	20	2.0	55	5.5	160	16.1	130	13.1	995	100.0
	3	250	14.9	390	23.2	425	25.3	55	3.3	10	0.6	60	3.6	220	13.1	135	8.0	1680	100.0
55-64	1	120	16.9	290	40.8	235	33.1	85	12.0	30	4.2	85	12.0	100	14.1	90	12.7	710	100.0
	2	150	18.6	320	39.8	265	32.9	100	12.4	30	3.7	75	9.3	115	14.3	90	11.2	805	100.0
	3	130	13.1	315	31.8	280	28.3	95	9.6	20	2.0	60	6.1	95	9.6	60	6.1	990	100.0
65+	1	105	14.2	360	48.6	260	35.1	170	23.0	75	10.1	95	12.8	85	11.5	45	6.1	740	100.0
	2	230	14.0	875	53.4	525	32.0	405	24.7	175	10.7	165	10.1	185	11.3	115	7.0	1640	100.0
	3	40	10.0	175	43.8	135	33.8	80	20.0	30	7.5	35	8.8	35	8.8	10	2.5	400	100.0
Male	NA	80	26.2	10	3.3	10	3.3	10	3.3	.	.	10	3.3	20	6.6	10	3.3	305	100.0
	1	320	18.5	335	19.4	270	15.6	145	8.4	65	3.8	105	6.1	130	7.5	125	7.2	1730	100.0
	2	370	15.8	620	26.6	475	20.3	285	12.2	105	4.5	160	6.9	185	7.9	175	7.5	2335	100.0
	3	620	15.5	800	20.0	870	21.7	205	5.1	45	1.1	145	3.6	310	7.7	200	5.0	4010	100.0
Female	NA	60	20.0	10	3.3	.	.	10	3.3	.	.	10	3.3	30	10.0	10	3.3	300	100.0
	1	640	20.5	670	21.5	460	14.7	170	5.4	65	2.1	155	5.0	550	17.6	370	11.9	3120	100.0
	2	865	21.7	1110	27.8	710	17.8	290	7.3	145	3.6	195	4.9	765	19.2	540	13.5	3990	100.0
	3	475	19.6	450	18.6	355	14.7	65	2.7	20	0.8	45	1.9	445	18.4	255	10.5	2420	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3140</b>	<b>17.2</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 132: Number of comorbid disease by personal income tertiles by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
0-14	NA	410	69.5	170	28.8	10	1.7	10	1.7	590	100.0
15-24	NA	10	100.0	10	100.0	10	100.0	.	.	10	100.0
	1	975	62.9	545	35.2	30	1.9	10	0.6	1550	100.0
	2	410	54.7	330	44.0	15	2.0	.	.	750	100.0
	3	120	61.5	70	35.9	10	5.1	10	5.1	195	100.0
25-34	1	320	53.3	240	40.0	40	6.7	10	1.7	600	100.0
	2	495	52.1	395	41.6	60	6.3	10	1.1	950	100.0
	3	735	57.9	490	38.6	45	3.5	10	0.8	1270	100.0
35-44	1	345	50.4	295	43.1	45	6.6	10	1.5	685	100.0
	2	590	49.8	495	41.8	95	8.0	10	0.8	1185	100.0
	3	1030	54.2	765	40.3	95	5.0	10	0.5	1900	100.0
45-54	1	225	40.2	255	45.5	80	14.3	10	1.8	560	100.0
	2	420	42.2	445	44.7	125	12.6	10	1.0	995	100.0
	3	690	41.1	875	52.1	115	6.8	10	0.6	1680	100.0
55-64	1	215	30.3	360	50.7	140	19.7	10	1.4	710	100.0
	2	240	29.8	395	49.1	170	21.1	10	1.2	805	100.0
	3	370	37.4	510	51.5	105	10.6	10	1.0	990	100.0
65+	1	180	24.3	390	52.7	175	23.6	10	1.4	740	100.0
	2	350	21.3	895	54.6	395	24.1	10	0.6	1640	100.0
	3	125	31.3	195	48.8	75	18.8	10	2.5	400	100.0
Male	NA	205	67.2	90	29.5	10	3.3	10	3.3	305	100.0
	1	870	50.3	685	39.6	165	9.5	10	0.6	1730	100.0
	2	1025	43.9	1025	43.9	290	12.4	10	0.4	2335	100.0
	3	1980	49.4	1755	43.8	260	6.5	15	0.4	4010	100.0
Female	NA	215	71.7	85	28.3	10	3.3	10	3.3	300	100.0
	1	1385	44.4	1385	44.4	345	11.1	10	0.3	3120	100.0
	2	1490	37.3	1930	48.4	565	14.2	10	0.3	3990	100.0
	3	1085	44.8	1155	47.7	175	7.2	10	0.4	2420	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 133: Chronic disease by personal income tertiles by prioritised ethnicity**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	95	23.8	10	2.5	.	.	10	2.5	.	.	10	2.5	35	8.8	10	2.5	400	100.0
	1	700	19.8	785	22.2	585	16.6	245	6.9	105	3.0	160	4.5	545	15.4	420	11.9	3530	100.0
	2	960	19.2	1455	29.1	1025	20.5	510	10.2	225	4.5	265	5.3	785	15.7	615	12.3	4995	100.0
	3	930	16.8	1090	19.7	1080	19.5	240	4.3	60	1.1	150	2.7	675	12.2	415	7.5	5535	100.0
Māori	NA	30	25.0	10	8.3	10	8.3	.	.	.	.	.	.	10	8.3	10	8.3	120	100.0
	1	165	28.0	125	21.2	90	15.3	35	5.9	20	3.4	40	6.8	90	15.3	50	8.5	590	100.0
	2	210	26.9	190	24.4	100	12.8	40	5.1	20	2.6	45	5.8	125	16.0	75	9.6	780	100.0
	3	120	21.8	110	20.0	90	16.4	15	2.7	10	1.8	25	4.5	55	10.0	25	4.5	550	100.0
Pacific	NA	10	25.0	10	25.0	.	.	10	25.0	.	.	.	.	10	25.0	.	.	40	100.0
	1	40	13.6	60	20.3	30	10.2	20	6.8	10	3.4	40	13.6	20	6.8	15	5.1	295	100.0
	2	45	14.1	60	18.8	35	10.9	15	4.7	10	3.1	30	9.4	25	7.8	15	4.7	320	100.0
	3	20	13.3	25	16.7	20	13.3	10	6.7	10	6.7	10	6.7	15	10.0	10	6.7	150	100.0
Asian	NA	10	25.0	.	.	.	.	.	.	.	.	.	.	10	25.0	.	.	40	100.0
	1	55	12.4	40	9.0	35	7.9	10	2.2	10	2.2	20	4.5	25	5.6	10	2.2	445	100.0
	2	20	8.5	30	12.8	25	10.6	10	4.3	.	.	10	4.3	15	6.4	10	4.3	235	100.0
	3	25	12.8	25	12.8	40	20.5	10	5.1	10	5.1	10	5.1	15	7.7	10	5.1	195	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3140</b>	<b>17.2</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 134: Number of comorbid disease by personal income tertiles by prioritised ethnicity**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	265	66.3	130	32.5	10	2.5	10	2.5	400	100.0
	1	1515	42.9	1615	45.8	390	11.0	10	0.3	3530	100.0
	2	1830	36.6	2425	48.5	730	14.6	10	0.2	4995	100.0
	3	2595	46.9	2535	45.8	390	7.0	20	0.4	5535	100.0
Māori	NA	85	70.8	40	33.3	10	8.3	.	.	120	100.0
	1	260	44.1	250	42.4	75	12.7	10	1.7	590	100.0
	2	325	41.7	365	46.8	90	11.5	10	1.3	780	100.0
	3	270	49.1	245	44.5	30	5.5	10	1.8	550	100.0
Pacific	NA	35	87.5	10	25.0	10	25.0	10	25.0	40	100.0
	1	165	55.9	100	33.9	25	8.5	10	3.4	295	100.0
	2	195	60.9	105	32.8	25	7.8	10	3.1	320	100.0
	3	85	56.7	55	36.7	10	6.7	.	.	150	100.0
Asian	NA	35	87.5	10	25.0	.	.	.	.	40	100.0
	1	310	69.7	115	25.8	20	4.5	10	2.2	445	100.0
	2	165	70.2	60	25.5	10	4.3	10	4.3	235	100.0
	3	115	59.0	65	33.3	10	5.1	10	5.1	195	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 135: Chronic disease by personal income tertiles by legal marital status**

		Chronic Diseases (W3)																	
Marital Status (W1)	Income Tertiles (W1)	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	135	22.9	10	1.7	10	1.7	10	1.7	.	.	10	1.7	45	7.6	15	2.5	590	100.0
	1	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0	10	100.0
	2	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	10	100.0	10	100.0
	3	.	.	.	.	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0
Never Married	NA	10	66.7	.	.	.	.	10	66.7	.	.	.	.	10	66.7	10	66.7	15	100.0
	1	485	24.7	120	6.1	80	4.1	15	0.8	15	0.8	30	1.5	200	10.2	175	8.9	1960	100.0
	2	460	25.5	240	13.3	130	7.2	35	1.9	25	1.4	55	3.0	270	15.0	245	13.6	1805	100.0
	3	295	20.9	160	11.3	145	10.3	20	1.4	10	0.7	20	1.4	165	11.7	105	7.4	1410	100.0
Divorced Widowed Separated	1	85	23.0	150	40.5	95	25.7	60	16.2	20	5.4	45	12.2	55	14.9	70	18.9	370	100.0
	2	315	19.1	650	39.4	415	25.2	240	14.5	120	7.3	120	7.3	280	17.0	230	13.9	1650	100.0
	3	165	16.8	250	25.5	205	20.9	55	5.6	15	1.5	30	3.1	150	15.3	100	10.2	980	100.0
Married	1	390	15.4	735	29.1	565	22.4	240	9.5	100	4.0	190	7.5	420	16.6	250	9.9	2525	100.0
	2	460	16.0	845	29.4	640	22.3	300	10.4	110	3.8	180	6.3	395	13.7	240	8.3	2875	100.0
	3	635	15.7	835	20.7	870	21.6	195	4.8	45	1.1	140	3.5	440	10.9	245	6.1	4035	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 136: Number of comorbid disease by personal income tertiles by legal marital status**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	410	69.5	170	28.8	10	1.7	10	1.7	590	100.0
	1	.	.	10	100.0	.	.	.	.	10	100.0
	2	.	.	.	.	10	100.0	.	.	10	100.0
	3	.	.	10	100.0	.	.	.	.	10	100.0
Never Married	NA	10	66.7	10	66.7	10	66.7	.	.	15	100.0
	1	1165	59.4	715	36.5	70	3.6	10	0.5	1960	100.0
	2	875	48.5	800	44.3	125	6.9	10	0.6	1805	100.0
	3	775	55.0	570	40.4	65	4.6	10	0.7	1410	100.0
Divorced Widowed Separated	1	90	24.3	195	52.7	80	21.6	10	2.7	370	100.0
	2	480	29.1	830	50.3	335	20.3	10	0.6	1650	100.0
	3	390	39.8	495	50.5	90	9.2	10	1.0	980	100.0
Married	1	995	39.4	1165	46.1	360	14.3	10	0.4	2525	100.0
	2	1150	40.0	1325	46.1	395	13.7	10	0.3	2875	100.0
	3	1895	47.0	1845	45.7	285	7.1	15	0.4	4035	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 137: Chronic disease by personal income tertiles by family structure**

		Chronic Diseases (W3)																	
Family Structure (W1)	Income Tertiles (W1)	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1	230	16.4	540	38.4	425	30.2	200	14.2	85	6.0	125	8.9	210	14.9	140	10.0	1405	100.0
	2	320	17.0	665	35.3	485	25.7	255	13.5	100	5.3	130	6.9	250	13.3	155	8.2	1885	100.0
	3	360	17.0	500	23.6	470	22.2	140	6.6	35	1.7	85	4.0	235	11.1	130	6.1	2120	100.0
Couple with children	1	490	19.9	295	12.0	200	8.1	55	2.2	25	1.0	80	3.3	355	14.4	220	8.9	2460	100.0
	2	380	19.6	280	14.5	225	11.6	60	3.1	25	1.3	75	3.9	280	14.5	190	9.8	1935	100.0
	3	480	16.6	440	15.2	515	17.8	75	2.6	15	0.5	65	2.2	335	11.6	180	6.2	2890	100.0
	NA	100	21.5	10	2.2	.	.	10	2.2	.	.	10	2.2	30	6.5	10	2.2	465	100.0
Sole parent	1	105	25.9	55	13.6	35	8.6	15	3.7	10	2.5	20	4.9	50	12.3	35	8.6	405	100.0
	2	215	24.9	165	19.1	95	11.0	50	5.8	30	3.5	30	3.5	185	21.4	150	17.3	865	100.0
	3	75	17.9	75	17.9	60	14.3	15	3.6	10	2.4	15	3.6	70	16.7	55	13.1	420	100.0
	NA	35	25.0	10	7.1	10	7.1	10	7.1	.	.	.	.	15	10.7	10	7.1	140	100.0
Not in a family nucleus	1	130	22.8	120	21.1	85	14.9	40	7.0	20	3.5	35	6.1	65	11.4	90	15.8	570	100.0
	2	325	19.8	620	37.7	385	23.4	215	13.1	105	6.4	125	7.6	235	14.3	215	13.1	1645	100.0
	3	175	17.6	225	22.6	180	18.1	45	4.5	20	2.0	30	3.0	120	12.1	85	8.5	995	100.0
	NA	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3140</b>	<b>17.2</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1670</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>



**Table 138: Number of comorbid disease by personal income tertiles by family structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
Couple only	1	440	31.3	700	49.8	265	18.9	10	0.7	1405	100.0
	2	640	34.0	930	49.3	315	16.7	10	0.5	1885	100.0
	3	925	43.6	1010	47.6	185	8.7	10	0.5	2120	100.0
Couple with children	1	1335	54.3	960	39.0	150	6.1	15	0.6	2460	100.0
	2	990	51.2	805	41.6	130	6.7	10	0.5	1935	100.0
	3	1500	51.9	1240	42.9	140	4.8	10	0.3	2890	100.0
	NA	330	71.0	130	28.0	10	2.2	10	2.2	465	100.0
Sole parent	1	215	53.1	160	39.5	30	7.4	.	.	405	100.0
	2	360	41.6	400	46.2	110	12.7	10	1.2	865	100.0
	3	190	45.2	200	47.6	35	8.3	.	.	420	100.0
	NA	90	64.3	45	32.1	10	7.1	.	.	140	100.0
Not in a family nucleus	1	260	45.6	245	43.0	70	12.3	10	1.8	570	100.0
	2	520	31.6	820	49.8	300	18.2	10	0.6	1645	100.0
	3	450	45.2	460	46.2	85	8.5	10	1.0	995	100.0
	NA	.	.	10	100.0	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 139: Chronic disease by personal income tertiles by household structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	135	23.3	10	1.7	10	1.7	10	1.7	.	.	10	1.7	45	7.8	15	2.6	580	100.0
	1	810	19.3	865	20.6	630	15.0	270	6.4	115	2.7	205	4.9	595	14.2	395	9.4	4190	100.0
	2	895	19.6	1090	23.9	805	17.6	365	8.0	150	3.3	225	4.9	710	15.5	500	10.9	4570	100.0
	3	905	16.9	995	18.6	1025	19.2	220	4.1	45	0.8	160	3.0	620	11.6	355	6.6	5340	100.0
Two or more families	NA	10	50.0	.	.	.	.	.	.	.	.	.	.	10	50.0	.	.	20	100.0
	1	40	19.0	40	19.0	30	14.3	10	4.8	10	4.8	25	11.9	30	14.3	10	4.8	210	100.0
	2	50	21.3	50	21.3	25	10.6	10	4.3	10	4.3	10	4.3	25	10.6	15	6.4	235	100.0
	3	25	17.2	30	20.7	30	20.7	10	6.9	10	6.9	10	6.9	20	13.8	10	6.9	145	100.0
Other multi-person household	1	55	25.0	15	6.8	20	9.1	10	4.5	10	4.5	10	4.5	30	13.6	25	11.4	220	100.0
	2	75	23.8	55	17.5	35	11.1	10	3.2	10	3.2	10	3.2	40	12.7	40	12.7	315	100.0
	3	65	22.4	25	8.6	20	6.9	10	3.4	10	3.4	10	3.4	40	13.8	25	8.6	290	100.0
One person household	1	55	23.4	85	36.2	55	23.4	30	12.8	15	6.4	25	10.6	25	10.6	55	23.4	235	100.0
	2	230	19.0	535	44.2	320	26.4	190	15.7	100	8.3	105	8.7	170	14.0	160	13.2	1210	100.0
	3	100	15.2	190	28.8	145	22.0	35	5.3	15	2.3	20	3.0	80	12.1	60	9.1	660	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 140: Number of comorbid disease by personal income tertiles by household structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
One Family	NA	405	69.8	170	29.3	10	1.7	10	1.7	580	100.0
	1	1955	46.7	1780	42.5	435	10.4	15	0.4	4190	100.0
	2	1905	41.7	2100	46.0	550	12.0	15	0.3	4570	100.0
	3	2560	47.9	2415	45.2	340	6.4	20	0.4	5340	100.0
Two or more families	NA	20	100.0	10	50.0	.	.	.	.	20	100.0
	1	105	50.0	85	40.5	15	7.1	.	.	210	100.0
	2	125	53.2	85	36.2	20	8.5	10	4.3	235	100.0
	3	70	48.3	55	37.9	15	10.3	10	6.9	145	100.0
Other multi-person household	1	115	52.3	100	45.5	10	4.5	.	.	220	100.0
	2	155	49.2	140	44.4	20	6.3	.	.	315	100.0
	3	155	53.4	125	43.1	15	5.2	.	.	290	100.0
One person household	1	75	31.9	110	46.8	50	21.3	10	4.3	235	100.0
	2	320	26.4	625	51.7	260	21.5	10	0.8	1210	100.0
	3	275	41.7	315	47.7	70	10.6	10	1.5	660	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

## 7.7 The Association of Personal Income with Smoking Status

Overall, there were higher proportions of current smokers in the personal income tertile 2, with high proportions of never smokers in the income tertiles 1 and 3. This pattern was found in the younger age groups (ages 15-44 years) as well as by sex and within ethnic groups. The highest proportion of current smokers were aged 25-34 at Wave 1 and in the middle income tertile. The rates of current smoking in the Māori ethnic group were highest across all income tertiles.

**Table 141: Personal income tertiles, overall**

Income Tertiles (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA	505	84.2	15	2.5	75	12.5	10	1.7	600	100.0
1	2760	56.9	1100	22.7	975	20.1	20	0.4	4850	100.0
2	3015	47.6	1780	28.1	1505	23.8	25	0.4	6335	100.0
3	3520	54.7	1755	27.3	1135	17.7	20	0.3	6430	100.0
<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 142: Smoking status by personal income tertiles by age and sex**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
0-14	NA	500	84.7	20	3.4	75	12.7	10	1.7	590	100.0
15-24	NA	10	66.7	10	66.7	10	66.7	.	.	15	100.0
	1	1115	71.9	105	6.8	325	21.0	10	0.6	1550	100.0
	2	400	53.3	100	13.3	260	34.7	.	.	750	100.0
	3	115	59.0	30	15.4	50	25.6	10	5.1	195	100.0
25-34	1	315	52.9	120	20.2	155	26.1	10	1.7	595	100.0
	2	420	44.0	180	18.8	350	36.6	10	1.0	955	100.0
	3	745	58.7	250	19.7	275	21.7	10	0.8	1270	100.0
35-44	1	380	55.5	160	23.4	145	21.2	10	1.5	685	100.0
	2	550	46.4	250	21.1	385	32.5	10	0.8	1185	100.0
	3	1065	56.2	465	24.5	365	19.3	10	0.5	1895	100.0
45-54	1	285	50.9	135	24.1	140	25.0	10	1.8	560	100.0
	2	470	47.2	285	28.6	240	24.1	10	1.0	995	100.0
	3	895	53.3	505	30.1	280	16.7	10	0.6	1680	100.0
55-64	1	310	43.7	255	35.9	145	20.4	10	1.4	710	100.0
	2	350	43.8	285	35.6	160	20.0	10	1.3	800	100.0
	3	510	51.5	345	34.8	135	13.6	10	1.0	990	100.0
65+	1	350	47.0	330	44.3	60	8.1	10	1.3	745	100.0
	2	835	50.8	690	41.9	115	7.0	10	0.6	1645	100.0
	3	195	48.8	165	41.3	35	8.8	10	2.5	400	100.0
Male	NA	260	86.7	10	3.3	30	10.0	10	3.3	300	100.0
	1	885	51.0	450	25.9	385	22.2	10	0.6	1735	100.0
	2	1000	42.7	760	32.5	575	24.6	10	0.4	2340	100.0
	3	2125	53.0	1130	28.2	740	18.5	15	0.4	4010	100.0
Female	NA	245	81.7	10	3.3	45	15.0	10	3.3	300	100.0
	1	1875	60.0	655	21.0	585	18.7	10	0.3	3125	100.0
	2	2020	50.6	1025	25.7	930	23.3	20	0.5	3995	100.0
	3	1400	57.9	625	25.8	395	16.3	10	0.4	2420	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 143: Smoking status by personal income tertiles by prioritised ethnicity**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	345	86.3	10	2.5	40	10.0	10	2.5	400	100.0
	1	1975	56.0	890	25.2	650	18.4	10	0.3	3525	100.0
	2	2455	49.2	1525	30.6	1000	20.0	15	0.3	4990	100.0
	3	3070	55.5	1550	28.0	895	16.2	15	0.3	5535	100.0
Māori	NA	90	72.0	10	8.0	30	24.0	.	.	125	100.0
	1	230	39.0	145	24.6	220	37.3	10	1.7	590	100.0
	2	210	26.9	190	24.4	375	48.1	10	1.3	780	100.0
	3	225	40.9	140	25.5	180	32.7	10	1.8	550	100.0
Pacific	NA	35	87.5	.	.	10	25.0	10	25.0	40	100.0
	1	180	62.1	45	15.5	65	22.4	10	3.4	290	100.0
	2	170	53.1	50	15.6	95	29.7	10	3.1	320	100.0
	3	85	56.7	25	16.7	35	23.3	.	.	150	100.0
Asian	NA	40	100.0	.	.	.	.	.	.	40	100.0
	1	375	85.2	25	5.7	40	9.1	10	2.3	440	100.0
	2	175	74.5	15	6.4	35	14.9	10	4.3	235	100.0
	3	140	71.8	35	17.9	20	10.3	10	5.1	195	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 144: Smoking status by personal income tertiles by legal marital status**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	500	84.7	20	3.4	75	12.7	10	1.7	590	100.0
	1	10	100.0	10	100.0	.	.	.	.	10	100.0
	2	.	.	.	.	10	100.0	.	.	10	100.0
	3	.	.	.	.	10	100.0	.	.	10	100.0
Never Married	NA	10	66.7	10	66.7	10	66.7	.	.	15	100.0
	1	1265	64.5	210	10.7	475	24.2	10	0.5	1960	100.0
	2	815	45.2	320	17.7	670	37.1	10	0.6	1805	100.0
	3	770	54.4	275	19.4	365	25.8	10	0.7	1415	100.0
Divorced Widowed Separated	1	120	32.4	130	35.1	115	31.1	10	2.7	370	100.0
	2	745	45.2	510	30.9	390	23.6	10	0.6	1650	100.0
	3	470	48.0	290	29.6	220	22.4	.	.	980	100.0
Married	1	1370	54.3	765	30.3	385	15.2	10	0.4	2525	100.0
	2	1465	51.0	950	33.0	450	15.7	15	0.5	2875	100.0
	3	2280	56.4	1190	29.5	550	13.6	15	0.4	4040	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 145: Smoking status by personal income tertiles by family structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
Couple only	1	655	46.6	525	37.4	225	16.0	10	0.7	1405	100.0
	2	905	48.0	680	36.1	295	15.6	10	0.5	1885	100.0
	3	1150	54.4	655	31.0	305	14.4	10	0.5	2115	100.0
Couple with children	1	1580	64.2	405	16.5	465	18.9	15	0.6	2460	100.0
	2	995	51.4	435	22.5	505	26.1	10	0.5	1935	100.0
	3	1630	56.3	765	26.4	485	16.8	10	0.3	2895	100.0
	NA	400	86.0	10	2.2	50	10.8	10	2.2	465	100.0
Sole parent	1	230	56.8	55	13.6	125	30.9	.	.	405	100.0
	2	300	34.7	200	23.1	365	42.2	10	1.2	865	100.0
	3	190	44.7	110	25.9	120	28.2	.	.	425	100.0
	NA	105	75.0	10	7.1	25	17.9	.	.	140	100.0
Not in a family nucleus	1	290	50.9	125	21.9	155	27.2	10	1.8	570	100.0
	2	820	49.8	470	28.6	345	21.0	10	0.6	1645	100.0
	3	545	54.8	230	23.1	220	22.1	10	1.0	995	100.0
	NA	10	100.0	.	.	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 146: Smoking status by personal income tertiles by household structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%
One Family	NA	485	83.6	15	2.6	70	12.1	10	1.7	580	100.0
	1	2425	57.9	955	22.8	795	19.0	20	0.5	4190	100.0
	2	2165	47.4	1285	28.1	1105	24.2	20	0.4	4570	100.0
	3	2920	54.7	1500	28.1	895	16.8	15	0.3	5335	100.0
Two or more families	NA	15	75.0	.	.	10	50.0	.	.	20	100.0
	1	115	54.8	45	21.4	50	23.8	.	.	210	100.0
	2	85	36.2	55	23.4	95	40.4	10	4.3	235	100.0
	3	65	44.8	40	27.6	40	27.6	10	6.9	145	100.0
Other multi-person household	1	140	63.6	35	15.9	45	20.5	.	.	220	100.0
	2	165	52.4	60	19.0	95	30.2	.	.	315	100.0
	3	165	56.9	60	20.7	65	22.4	.	.	290	100.0
One person household	1	80	34.0	75	31.9	80	34.0	10	4.3	235	100.0
	2	600	49.6	385	31.8	220	18.2	10	0.8	1210	100.0
	3	365	55.3	160	24.2	135	20.5	10	1.5	660	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

## 7.8 The Association of Personal Income with Alcohol Consumption

Overall, consumption of alcohol increased with increasing personal income. This was seen in the frequency of drinking as well as binge drinking. Consequently, there were larger proportions of never drinkers in the lowest income tertile. This relationship was relatively consistent across age groups and by sex. As shown previously, the highest proportions of binge drinkers were in the younger age groups (15-34) as well as in males. There were typically high proportions of non-drinkers in the Pacific and Asian ethnic groups across all income tertiles, although this proportion declined with increasing income. Respondents who lived in a couple only family had higher alcohol consumption across the income tertiles. Whereas, respondents who lived in sole parent families or not living in a family nucleus were more likely to binge drink. As were respondents living in other multi-person households.

**Table 147: Alcohol consumption by personal income tertiles (Wave 1), overall**

Income Tertiles (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	215	35.8	200	33.3	145	24.2	30	5.0	10	1.7	10	1.7	90	15.0	600	100.0
1	1190	24.5	1015	20.9	1305	26.9	570	11.7	740	15.2	25	0.5	965	19.9	4855	100.0
2	1305	20.6	1275	20.1	1660	26.2	750	11.8	1300	20.5	35	0.6	1195	18.9	6330	100.0
3	550	8.6	850	13.2	1735	27.0	1155	18.0	2095	32.6	35	0.5	1645	25.6	6430	100.0
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>



**Table 148: Alcohol consumption by personal income tertiles by age and sex**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	215	36.4	195	33.1	135	22.9	25	4.2	10	1.7	10	1.7	85	14.4	590	100.0
15-24	NA	10	100.0	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0	10	100.0
	1	275	17.7	355	22.9	570	36.8	235	15.2	110	7.1	10	0.6	605	39.0	1550	100.0
	2	75	10.0	165	22.0	285	38.0	135	18.0	95	12.7	10	1.3	365	48.7	750	100.0
	3	20	10.3	40	20.5	70	35.9	40	20.5	25	12.8	10	5.1	100	51.3	195	100.0
25-34	1	145	24.4	135	22.7	185	31.1	70	11.8	60	10.1	10	1.7	120	20.2	595	100.0
	2	150	15.7	240	25.1	315	33.0	130	13.6	115	12.0	10	1.0	290	30.4	955	100.0
	3	95	7.5	210	16.5	430	33.9	235	18.5	300	23.6	10	0.8	470	37.0	1270	100.0
35-44	1	145	21.2	155	22.6	185	27.0	90	13.1	110	16.1	10	1.5	105	15.3	685	100.0
	2	230	19.4	245	20.7	335	28.3	165	13.9	200	16.9	10	0.8	260	21.9	1185	100.0
	3	165	8.7	245	12.9	555	29.3	380	20.1	540	28.5	10	0.5	540	28.5	1895	100.0
45-54	1	165	29.5	110	19.6	110	19.6	55	9.8	115	20.5	10	1.8	60	10.7	560	100.0
	2	225	22.7	185	18.7	240	24.2	120	12.1	210	21.2	10	1.0	135	13.6	990	100.0
	3	140	8.3	190	11.3	395	23.5	300	17.9	640	38.1	10	0.6	365	21.7	1680	100.0
55-64	1	220	31.0	140	19.7	135	19.0	60	8.5	145	20.4	10	1.4	45	6.3	710	100.0
	2	155	19.4	140	17.5	190	23.8	80	10.0	225	28.1	10	1.3	80	10.0	800	100.0
	3	85	8.6	110	11.1	205	20.7	175	17.7	405	40.9	10	1.0	145	14.6	990	100.0
65+	1	240	32.4	120	16.2	125	16.9	55	7.4	205	27.7	.	.	30	4.1	740	100.0
	2	455	27.7	295	18.0	295	18.0	120	7.3	460	28.0	15	0.9	60	3.7	1640	100.0
	3	40	10.1	55	13.9	70	17.7	30	7.6	185	46.8	10	2.5	25	6.3	395	100.0
Male	NA	100	33.3	100	33.3	75	25.0	15	5.0	10	3.3	10	3.3	45	15.0	300	100.0
	1	370	21.3	300	17.3	490	28.2	240	13.8	315	18.2	15	0.9	475	27.4	1735	100.0
	2	410	17.5	340	14.5	610	26.1	335	14.3	645	27.6	15	0.6	590	25.2	2340	100.0
	3	295	7.4	430	10.7	1050	26.2	755	18.8	1455	36.3	25	0.6	1220	30.4	4010	100.0
Female	NA	115	38.3	105	35.0	65	21.7	10	3.3	10	3.3	10	3.3	45	15.0	300	100.0
	1	820	26.3	720	23.1	820	26.3	330	10.6	420	13.5	15	0.5	495	15.9	3120	100.0
	2	895	22.4	940	23.5	1060	26.5	415	10.4	660	16.5	25	0.6	605	15.1	3995	100.0
	3	260	10.7	425	17.6	685	28.3	400	16.5	640	26.4	10	0.4	430	17.8	2420	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 149: Alcohol consumption by personal income tertiles by prioritised ethnicity**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Ethnicity (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	100	25.0	150	37.5	110	27.5	30	7.5	10	2.5	10	2.5	65	16.3	400	100.0
	1	605	17.1	735	20.8	1005	28.5	485	13.7	680	19.3	10	0.3	735	20.8	3530	100.0
	2	840	16.8	950	19.0	1335	26.7	630	12.6	1215	24.3	25	0.5	885	17.7	4995	100.0
	3	370	6.7	670	12.1	1450	26.2	1055	19.1	1970	35.6	30	0.5	1385	25.0	5535	100.0
Māori	NA	50	41.7	40	33.3	25	20.8	10	8.3	.	.	.	.	20	16.7	120	100.0
	1	160	27.1	145	24.6	180	30.5	60	10.2	40	6.8	10	1.7	180	30.5	590	100.0
	2	175	22.3	235	29.9	230	29.3	85	10.8	60	7.6	10	1.3	245	31.2	785	100.0
	3	75	13.6	110	20.0	185	33.6	75	13.6	100	18.2	10	1.8	215	39.1	550	100.0
Pacific	NA	25	62.5	10	25.0	10	25.0	.	.	10	25.0	10	25.0	10	25.0	40	100.0
	1	175	59.3	50	16.9	45	15.3	10	3.4	10	3.4	10	3.4	35	11.9	295	100.0
	2	170	53.1	60	18.8	55	17.2	20	6.3	10	3.1	10	3.1	55	17.2	320	100.0
	3	45	30.0	35	23.3	45	30.0	15	10.0	10	6.7	10	6.7	30	20.0	150	100.0
Asian	NA	30	75.0	10	25.0	10	25.0	.	.	.	.	.	.	.	.	40	100.0
	1	245	55.7	85	19.3	75	17.0	15	3.4	15	3.4	10	2.3	20	4.5	440	100.0
	2	120	51.1	35	14.9	45	19.1	15	6.4	20	8.5	10	4.3	10	4.3	235	100.0
	3	60	30.8	40	20.5	55	28.2	20	10.3	15	7.7	10	5.1	15	7.7	195	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2505</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 150: Alcohol consumption by personal income tertiles by legal marital status**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Marital Status (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	210	35.6	200	33.9	140	23.7	30	5.1	10	1.7	10	1.7	85	14.4	590	100.0
	1	10	100.0	.	.	.	.	10	100.0	.	.	.	.	.	.	10	100.0
	2	.	.	10	100.0	.	.	.	.	.	.	.	.	10	100.0	10	100.0
	3	.	.	.	.	.	.	.	.	10	100.0	.	.	.	.	10	100.0
Never Married	NA	10	66.7	10	66.7	10	66.7	10	66.7	.	.	.	.	10	66.7	15	100.0
	1	365	18.6	445	22.7	685	34.9	290	14.8	165	8.4	15	0.8	710	36.2	1960	100.0
	2	280	15.5	405	22.4	610	33.8	280	15.5	225	12.5	10	0.6	650	36.0	1805	100.0
	3	95	6.7	230	16.3	455	32.2	285	20.1	340	24.0	10	0.7	525	37.1	1415	100.0
Divorced Widowed Separated	1	125	34.2	80	21.9	75	20.5	35	9.6	50	13.7	10	2.7	35	9.6	365	100.0
	2	445	27.0	360	21.8	400	24.2	145	8.8	285	17.3	15	0.9	195	11.8	1650	100.0
	3	75	7.7	135	13.8	260	26.5	180	18.4	325	33.2	10	1.0	255	26.0	980	100.0
Married	1	705	27.9	500	19.8	555	22.0	245	9.7	520	20.6	10	0.4	220	8.7	2525	100.0
	2	575	20.0	515	17.9	650	22.6	325	11.3	790	27.5	20	0.7	350	12.2	2875	100.0
	3	375	9.3	490	12.1	1020	25.3	695	17.2	1430	35.4	25	0.6	860	21.3	4035	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 151: Alcohol consumption by personal income tertiles by family structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Family Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1	355	25.2	245	17.4	290	20.6	145	10.3	375	26.6	10	0.7	120	8.5	1410	100.0
	2	295	15.6	310	16.4	435	23.1	225	11.9	605	32.1	15	0.8	260	13.8	1885	100.0
	3	170	8.0	275	13.0	505	23.8	350	16.5	810	38.2	15	0.7	480	22.6	2120	100.0
Couple with children	1	575	23.3	565	22.9	730	29.6	310	12.6	275	11.2	15	0.6	565	22.9	2465	100.0
	2	375	19.3	390	20.1	550	28.4	260	13.4	350	18.0	10	0.5	470	24.2	1940	100.0
	3	260	9.0	365	12.6	815	28.2	545	18.8	900	31.1	15	0.5	755	26.1	2895	100.0
	NA	165	35.5	155	33.3	115	24.7	20	4.3	10	2.2	10	2.2	65	14.0	465	100.0
Sole parent	1	115	28.0	95	23.2	125	30.5	45	11.0	25	6.1	10	2.4	130	31.7	410	100.0
	2	195	22.5	265	30.6	235	27.2	95	11.0	70	8.1	10	1.2	205	23.7	865	100.0
	3	40	9.4	85	20.0	130	30.6	60	14.1	105	24.7	.	.	125	29.4	425	100.0
	NA	50	37.0	50	37.0	25	18.5	10	7.4	10	7.4	.	.	25	18.5	135	100.0
Not in a family nucleus	1	150	26.1	115	20.0	160	27.8	75	13.0	65	11.3	10	1.7	150	26.1	575	100.0
	2	445	27.1	315	19.1	435	26.4	165	10.0	275	16.7	10	0.6	260	15.8	1645	100.0
	3	75	7.5	130	13.1	290	29.1	205	20.6	290	29.1	10	1.0	290	29.1	995	100.0
	NA	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>3255</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 152: Alcohol consumption by personal income tertiles by household structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Household Structure (W1)	Income Tertiles (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	195	33.3	195	33.3	140	23.9	30	5.1	10	1.7	10	1.7	85	14.5	585	100.0
	1	990	23.6	880	21.0	1140	27.2	500	11.9	665	15.9	20	0.5	805	19.2	4190	100.0
	2	815	17.8	925	20.2	1210	26.5	575	12.6	1015	22.2	25	0.5	890	19.5	4570	100.0
	3	455	8.5	700	13.1	1420	26.6	935	17.5	1790	33.6	25	0.5	1335	25.0	5335	100.0
Two or more families	NA	15	75.0	10	50.0	10	50.0	.	.	10	50.0	.	.	10	50.0	20	100.0
	1	90	43.9	45	22.0	45	22.0	10	4.9	10	4.9	10	4.9	40	19.5	205	100.0
	2	75	31.9	65	27.7	50	21.3	25	10.6	20	8.5	10	4.3	70	29.8	235	100.0
	3	20	13.8	30	20.7	40	27.6	25	17.2	30	20.7	10	6.9	35	24.1	145	100.0
Other multi-person household	1	35	15.9	45	20.5	80	36.4	40	18.2	20	9.1	.	.	90	40.9	220	100.0
	2	50	15.9	45	14.3	115	36.5	60	19.0	45	14.3	10	3.2	120	38.1	315	100.0
	3	15	5.2	35	12.1	90	31.0	65	22.4	75	25.9	.	.	125	43.1	290	100.0
One person household	1	80	34.0	50	21.3	45	19.1	25	10.6	35	14.9	10	4.3	30	12.8	235	100.0
	2	360	29.8	250	20.7	285	23.6	95	7.9	215	17.8	10	0.8	110	9.1	1210	100.0
	3	55	8.3	85	12.9	190	28.8	125	18.9	195	29.5	10	1.5	145	22.0	660	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

## **Chapter 8 The Association of Highest Education with Health Measures**

Education used in this report is the maximum education qualification over the 3 waves and were coded into: No Qualification, School Qualification, Post-school Qualification and Degree or Higher.

Note: data in Tables 155 to 201 for the highest education qualification, no qualification and NA:DK:REF groups are suppressed due to problems with the derivation of this variables (this is in the process of being corrected and will be updated in Version 1.1). From Table 3 it can be seen that 5980 adult respondents at Wave 1 had no education qualification, which can be taken as the sum of the no qualification and NA:DK:REF groups.

### ***8.1 The Association of Education with Demographics***

Overall, more males had were post school qualifications than females. However, there was no difference between males and females in the proportion who held degree or higher qualifications. The proportion of respondents holding a degree or higher qualification peaked in the younger to middle age groups (25-44 years). There were higher proportions of young respondents who did not have any qualification (no qual or NA:DK:REF), which reflects respondents still at school. Over a third of respondents with Asian ethnicity reported having a degree or higher qualification. There were high proportions of married respondents who had an education qualification of post school, degree or higher. The high proportion of respondents living in other multi-person households with degree qualifications or hgiher may reflect the younger age strcuture of this population and univeristy students. However, the numbers presented here are not adjusted for age.

**Table 153: Highest education qualification, overall and by age and sex**

	Highest Education (W3)											
	NA:DK:REF		School Qual		Post school Qual		Degree or Higher		No Qualification		Total	
Age, Mean SD	-	-	38.5	19.0	45.2	16.2	41.2	13.7	-	-	44.0	18.2
Age (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	95	16.1	225	38.1	10	1.7	10	1.7	250	42.4	590	100.0
15-24	315	12.5	1255	50.0	655	26.1	285	11.4	.	.	2510	100.0
25-34	370	13.1	730	25.9	1100	39.0	620	22.0	.	.	2820	100.0
35-44	660	17.5	935	24.8	1460	38.7	715	18.9	.	.	3775	100.0
45-54	730	22.6	725	22.4	1240	38.3	545	16.8	.	.	3235	100.0
55-64	850	33.9	445	17.8	945	37.7	265	10.6	.	.	2505	100.0
65+	1215	43.6	555	19.9	855	30.7	165	5.9	.	.	2785	100.0
<b>Male</b>	<b>1820</b>	<b>21.7</b>	<b>2030</b>	<b>24.2</b>	<b>3180</b>	<b>37.9</b>	<b>1205</b>	<b>14.4</b>	<b>140</b>	<b>1.7</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>2420</b>	<b>24.6</b>	<b>2835</b>	<b>28.8</b>	<b>3085</b>	<b>31.4</b>	<b>1380</b>	<b>14.0</b>	<b>115</b>	<b>1.2</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>4240</b>	<b>23.3</b>	<b>4870</b>	<b>26.7</b>	<b>6270</b>	<b>34.4</b>	<b>2585</b>	<b>14.2</b>	<b>250</b>	<b>1.4</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 154: Highest education qualification by prioritised ethnicity**

	Highest Education (W3)											
	NA:DK:REF		School Qual		Post school Qual		Degree or Higher		No Qualification		Total	
Ethnicity (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	-	-	3795	26.3	5205	36.0	2085	14.4	-	-	14450	100.0
Māori	-	-	480	23.5	685	33.5	145	7.1	-	-	2045	100.0
Pacific	-	-	305	37.9	185	23.0	55	6.8	-	-	805	100.0
Asian	-	-	295	32.4	195	21.4	305	33.5	-	-	910	100.0
<b>Total</b>	<b>-</b>	<b>-</b>	<b>4870</b>	<b>26.7</b>	<b>6270</b>	<b>34.4</b>	<b>2590</b>	<b>14.2</b>	<b>-</b>	<b>-</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 155: Highest education qualification by legal marital status**

	Highest Education (W3)											
	NA:DK:REF		School Qual		Post school Qual		Degree or Higher		No Qualification		Total	
Marital Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	-	-	225	37.8	15	2.5	10	1.7	-	-	595	100.0
Never Married	-	-	1845	35.5	1635	31.5	785	15.1	-	-	5190	100.0
Divorced	-	-	635	21.2	1055	35.2	280	9.3	-	-	2995	100.0
Widowed	-	-	635	21.2	1055	35.2	280	9.3	-	-	2995	100.0
Separated	-	-	635	21.2	1055	35.2	280	9.3	-	-	2995	100.0
Married	-	-	2160	22.9	3565	37.8	1525	16.2	-	-	9440	100.0
<b>Total</b>	<b>-</b>	<b>-</b>	<b>4870</b>	<b>26.7</b>	<b>6270</b>	<b>34.4</b>	<b>2590</b>	<b>14.2</b>	<b>-</b>	<b>-</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 156: Highest education qualification by family structure**

Family Structure (W1)	Highest Education (W3)											
	NA:DK:REF		School Qual		Post school Qual		Degree or Higher		No Qualification		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	-	-	1185	21.9	2015	37.2	725	13.4	-	-	5415	100.0
Couple with children	-	-	2490	32.1	2575	33.2	1190	15.3	-	-	7760	100.0
Sole parent	-	-	495	27.0	615	33.6	165	9.0	-	-	1830	100.0
Not in a family nucleus	-	-	705	22.0	1065	33.2	515	16.0	-	-	3210	100.0
<b>Total</b>	-	-	<b>4870</b>	<b>26.7</b>	<b>6265</b>	<b>34.4</b>	<b>2585</b>	<b>14.2</b>	-	-	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 157: Highest education qualification by household structure**

Household Structure (W1)	Highest Education (W3)											
	NA:DK:REF		School Qual		Post school Qual		Degree or Higher		No Qualification		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
One Family	-	-	4065	27.7	5090	34.7	2045	13.9	-	-	14675	100.0
Two or more families	-	-	170	27.9	200	32.8	50	8.2	-	-	610	100.0
Other multi-person household	-	-	195	23.5	280	33.7	245	29.5	-	-	830	100.0
One person household	-	-	440	20.9	695	33.0	245	11.6	-	-	2105	100.0
<b>Total</b>	-	-	<b>4870</b>	<b>26.7</b>	<b>6270</b>	<b>34.4</b>	<b>2585</b>	<b>14.2</b>	-	-	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

## **8.2 The Association of Education with Self-Rated Health**

The highest proportion of respondents reporting excellent or very good health status were respondents who had a degree qualification or higher. This was consistent across age groups, as well as by sex, marital status, family and household structure. The results by ethnicity were varied, with higher proportions of respondents with only a school qualification in the Maori and Pacific ethnic groups reporting excellent health status.



**Table 158: Self-rated health, by highest education qualification, overall**

Highest Education (W3)	Self Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	2040	41.9	1635	33.6	875	18.0	250	5.1	65	1.3	4870	100.0
Post school Qual	2410	38.4	2150	34.3	1240	19.8	380	6.1	85	1.4	6270	100.0
Degree or Higher	1340	51.7	815	31.5	350	13.5	75	2.9	15	0.6	2590	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 159: Self-rated health, by highest education qualification, by age and sex**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Age (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	135	58.7	70	30.4	20	8.7	10	4.3	.	.	230	100.0
	Post school Qual	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
	Degree or Higher	.	.	10	100.0	.	.	.	.	.	.	10	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
15-24	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	665	53.0	390	31.1	165	13.1	30	2.4	10	0.8	1255	100.0
	Post school Qual	300	45.8	225	34.4	115	17.6	15	2.3	10	1.5	655	100.0
	Degree or Higher	170	59.6	85	29.8	25	8.8	10	3.5	10	3.5	285	100.0
25-34	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	350	48.3	260	35.9	95	13.1	20	2.8	10	1.4	725	100.0
	Post school Qual	520	47.1	390	35.3	145	13.1	45	4.1	10	0.9	1105	100.0
	Degree or Higher	360	58.1	185	29.8	60	9.7	10	1.6	10	1.6	620	100.0
35-44	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	395	42.2	335	35.8	155	16.6	35	3.7	15	1.6	935	100.0
	Post school Qual	645	44.2	475	32.5	255	17.5	70	4.8	20	1.4	1460	100.0
	Degree or Higher	375	52.4	235	32.9	85	11.9	15	2.1	10	1.4	715	100.0
45-54	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	290	40.0	260	35.9	130	17.9	35	4.8	10	1.4	725	100.0
	Post school Qual	485	39.1	425	34.3	240	19.4	55	4.4	25	2.0	1240	100.0
	Degree or Higher	270	49.5	185	33.9	70	12.8	15	2.8	10	1.8	545	100.0
55-64	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	110	24.7	155	34.8	125	28.1	40	9.0	10	2.2	445	100.0
	Post school Qual	280	29.8	360	38.3	215	22.9	70	7.4	20	2.1	940	100.0
	Degree or Higher	120	45.3	75	28.3	45	17.0	20	7.5	10	3.8	265	100.0
65+	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	90	16.4	170	30.9	185	33.6	85	15.5	25	4.5	550	100.0
	Post school Qual	175	20.5	270	31.6	270	31.6	120	14.0	20	2.3	855	100.0
	Degree or Higher	40	25.0	55	34.4	50	31.3	10	6.3	10	6.3	160	100.0
Male	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	885	43.5	690	33.9	330	16.2	100	4.9	30	1.5	2035	100.0
	Post school Qual	1150	36.2	1110	34.9	675	21.2	200	6.3	45	1.4	3180	100.0
	Degree or Higher	625	51.9	365	30.3	165	13.7	35	2.9	10	0.8	1205	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
Female	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	1155	40.7	945	33.3	540	19.0	150	5.3	40	1.4	2835	100.0
	Post school Qual	1260	40.8	1035	33.5	570	18.4	180	5.8	35	1.1	3090	100.0
	Degree or Higher	710	51.3	445	32.1	175	12.6	40	2.9	10	0.7	1385	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>6940</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 160: Self-rated health, by highest education qualification, by prioritised ethnicity**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Ethnicity (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	1575	41.6	1310	34.6	660	17.4	195	5.1	50	1.3	3790	100.0
	Post school Qual	2025	38.9	1800	34.6	1000	19.2	310	6.0	75	1.4	5205	100.0
	Degree or Higher	1120	53.7	635	30.5	255	12.2	60	2.9	15	0.7	2085	100.0
Māori	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	200	42.1	165	34.7	90	18.9	20	4.2	10	2.1	475	100.0
	Post school Qual	215	31.6	245	36.0	170	25.0	50	7.4	10	1.5	680	100.0
Pacific	Degree or Higher	55	37.9	55	37.9	30	20.7	10	6.9	.	.	145	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	145	48.3	75	25.0	55	18.3	15	5.0	10	3.3	300	100.0
Asian	Post school Qual	90	47.4	55	28.9	20	10.5	15	7.9	10	5.3	190	100.0
	Degree or Higher	25	45.5	25	45.5	10	18.2	10	18.2	10	18.2	55	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
Total	School Qual	115	39.0	90	30.5	70	23.7	15	5.1	10	3.4	295	100.0
	Post school Qual	80	42.1	55	28.9	50	26.3	10	5.3	.	.	190	100.0
	Degree or Higher	140	45.9	95	31.1	60	19.7	10	3.3	10	3.3	305	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>6940</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

*- Data suppressed due to problems with derivation*

**Table 161: Self-rated health, by highest education qualification, by legal marital status**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Marital Status (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	140	60.9	70	30.4	20	8.7	10	4.3	.	.	230	100.0
	Post school Qual	10	66.7	10	66.7	.	.	.	.	.	.	15	100.0
	Degree or Higher	.	.	10	100.0	.	.	.	.	.	.	10	100.0
Never Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	885	48.0	595	32.2	285	15.4	60	3.3	15	0.8	1845	100.0
	Post school Qual	680	41.6	575	35.2	290	17.7	75	4.6	20	1.2	1635	100.0
	Degree or Higher	425	54.1	245	31.2	95	12.1	15	1.9	10	1.3	785	100.0
Divorced Widowed Separated	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	195	30.7	210	33.1	140	22.0	60	9.4	20	3.1	635	100.0
	Post school Qual	325	30.8	345	32.7	270	25.6	95	9.0	25	2.4	1055	100.0
Married	Degree or Higher	120	42.9	85	30.4	55	19.6	15	5.4	10	3.6	280	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	820	38.0	760	35.2	425	19.7	125	5.8	30	1.4	2160	100.0
Married	Post school Qual	1395	39.1	1225	34.4	685	19.2	215	6.0	40	1.1	3565	100.0
	Degree or Higher	790	51.8	480	31.5	195	12.8	45	3.0	10	0.7	1525	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 162: Self-rated health, by highest education qualification, by family structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Family Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	390	32.9	420	35.4	275	23.2	80	6.8	20	1.7	1185	100.0
	Post school Qual	695	34.5	715	35.5	435	21.6	145	7.2	25	1.2	2015	100.0
	Degree or Higher	345	47.6	235	32.4	110	15.2	25	3.4	10	1.4	725	100.0
Couple with children	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	1215	48.8	820	32.9	340	13.7	90	3.6	25	1.0	2490	100.0
	Post school Qual	1175	45.6	860	33.4	405	15.7	110	4.3	25	1.0	2575	100.0
	Degree or Higher	665	55.9	365	30.7	130	10.9	25	2.1	10	0.8	1190	100.0
Sole parent	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	205	41.8	155	31.6	95	19.4	30	6.1	10	2.0	490	100.0
	Post school Qual	215	35.0	205	33.3	135	22.0	40	6.5	10	1.6	615	100.0
Not in a family nucleus	Degree or Higher	80	48.5	55	33.3	25	15.2	10	6.1	10	6.1	165	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	230	32.6	235	33.3	165	23.4	60	8.5	15	2.1	705	100.0
Not in a family nucleus	Post school Qual	320	30.0	370	34.7	270	25.4	80	7.5	25	2.3	1065	100.0
	Degree or Higher	250	48.5	165	32.0	80	15.5	15	2.9	10	1.9	515	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 163: Self-rated health, by highest education qualification, by household structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Household Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	1775	43.7	1375	33.8	680	16.7	180	4.4	50	1.2	4065	100.0
	Post school Qual	2060	40.4	1745	34.2	945	18.5	290	5.7	60	1.2	5095	100.0
	Degree or Higher	1080	52.8	635	31.1	260	12.7	55	2.7	10	0.5	2045	100.0
Two or more families	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	70	40.0	45	25.7	40	22.9	10	5.7	10	5.7	175	100.0
	Post school Qual	65	32.5	60	30.0	50	25.0	20	10.0	10	5.0	200	100.0
	Degree or Higher	20	36.4	20	36.4	10	18.2	10	18.2	10	18.2	55	100.0
Other multi-person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	75	39.5	75	39.5	35	18.4	10	5.3	10	5.3	190	100.0
	Post school Qual	110	39.3	95	33.9	65	23.2	10	3.6	10	3.6	280	100.0
	Degree or Higher	135	55.1	85	34.7	20	8.2	10	4.1	.	.	245	100.0
One person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	125	28.1	140	31.5	115	25.8	55	12.4	10	2.2	445	100.0
	Post school Qual	175	25.2	245	35.3	185	26.6	65	9.4	20	2.9	695	100.0
	Degree or Higher	100	40.8	70	28.6	55	22.4	10	4.1	10	4.1	245	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

### **8.3 The Association of Education with Health-Related Quality of Life (SF-36)**

Overall, mean SF-36 scores increased were highest in respondents who held a degree qualification or higher. Typically, the mean SF-36 scores for respondents who held a degree was higher than the overall mean score. These relations appear to be relatively consistent across age groups and by sex and ethnicity. Males tended to have higher mean SF-36 scores than females at all levels of education. The mean SF-36 scores for the divorced separated or widowed population were lower than all other respondents at all levels of education.

**Table 164: Overall mean (SD) SF-36 score, by highest education qualification**

Highest Education (W3)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	79.3	19.4	83.0	22.4	85.0	22.7	90.0	19.9	64.7	19.4	83.1	13.9	92.3	16.0	88.1	20.9	52.0	8.7	51.2	9.0
Post school Qual	79.0	19.7	81.3	23.1	84.3	23.7	89.9	21.2	64.7	20.1	83.6	14.5	92.6	16.5	87.2	20.5	52.4	9.3	50.5	9.0
Degree or Higher	82.4	17.0	85.8	20.1	88.0	20.0	91.9	17.8	65.7	18.0	83.2	12.7	93.5	14.5	92.1	14.9	52.1	8.1	52.9	7.2
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

*- Data suppressed due to problems with derivation*

**Table 165: Mean (SD) SF-36 score by highest education qualification by age and sex**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	Highest Education (W3)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0-14	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	83.2	15.7	87.4	18.6	91.0	15.9	92.0	15.8	69.1	17.9	82.4	12.4	94.3	12.9	97.0	8.6	51.9	7.9	54.5	5.5
	Post school Qual	79.0	16.8	90.0	17.6	93.2	15.2	95.5	10.1	69.9	18.5	84.1	11.8	91.7	18.3	95.5	10.6	52.5	8.5	54.4	5.1
	Degree or Higher	85.0	.	84.0	.	43.8	.	100.0	.	62.5	.	40.0	.	58.3	.	85.0	.	37.6	.	55.5	.
15-24	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	81.5	17.0	86.0	20.4	88.5	19.3	90.4	18.7	65.8	18.8	81.8	14.1	92.6	15.3	95.5	12.1	51.1	8.9	53.8	6.3
	Post school Qual	79.5	17.4	84.5	20.4	88.0	19.4	88.7	20.5	63.9	19.0	80.7	14.4	91.8	15.7	94.5	13.4	50.2	9.5	53.4	6.5
	Degree or Higher	83.2	15.1	85.0	21.2	87.8	19.9	91.7	16.6	64.8	16.2	81.7	11.9	93.2	13.6	96.1	9.1	51.2	7.6	53.9	6.2
25-34	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	82.6	16.6	85.2	21.2	87.0	20.9	89.8	20.0	63.9	19.2	82.0	14.3	91.6	16.7	92.9	15.1	51.0	9.4	53.1	7.3
	Post school Qual	81.9	17.1	83.5	21.9	87.6	19.8	90.6	19.7	64.2	19.6	82.2	15.0	92.1	16.8	93.4	13.6	51.2	9.6	53.0	6.7
	Degree or Higher	83.9	16.1	86.6	19.3	88.3	20.0	91.0	18.5	63.8	18.8	81.7	13.6	92.2	15.8	94.7	12.0	50.8	8.8	54.0	6.4
35-44	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	81.1	18.4	82.8	22.1	86.1	21.1	89.9	19.4	64.3	18.2	82.1	13.9	91.7	16.0	90.2	17.0	51.5	8.5	52.0	8.2
	Post school Qual	81.2	18.7	82.1	22.5	85.6	22.5	88.8	22.3	64.2	20.1	82.4	15.5	91.2	18.2	91.3	15.5	51.2	10.0	52.0	7.6
	Degree or Higher	83.3	15.9	87.2	19.0	90.2	17.2	92.3	17.8	66.4	17.5	83.2	11.9	94.4	13.7	94.0	11.2	52.1	7.7	53.8	6.0
45-54	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	80.2	19.4	82.9	23.0	86.5	22.2	91.6	19.3	66.8	18.9	84.8	13.1	93.1	15.5	88.0	19.1	53.2	8.1	51.0	8.6
	Post school Qual	79.7	19.9	80.7	23.5	85.2	23.0	91.4	20.3	66.7	18.8	84.0	14.5	93.3	16.2	88.0	19.0	53.0	9.0	50.7	8.8
	Degree or Higher	82.4	17.5	84.9	20.6	87.9	20.0	92.3	17.0	66.2	17.8	83.4	12.4	93.7	14.5	91.4	15.2	52.4	8.0	52.6	7.5
55-64	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	74.4	22.9	80.6	22.2	83.1	23.2	91.3	19.9	66.5	19.1	85.7	13.1	92.9	16.5	82.8	21.7	53.8	8.0	48.6	9.2
	Post school Qual	77.9	20.4	79.3	23.9	83.0	25.0	91.5	20.2	67.1	19.6	86.0	12.8	94.7	13.7	83.4	21.5	54.4	7.8	48.7	9.7
	Degree or Higher	80.6	19.5	85.3	21.2	87.3	22.1	91.9	19.1	68.2	18.7	85.2	13.4	93.7	14.4	88.2	18.0	53.5	8.4	51.4	8.4
65+	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	67.9	23.0	73.6	26.6	69.9	29.9	85.7	24.8	58.0	22.4	85.3	14.1	90.8	18.1	62.0	30.5	53.8	8.4	41.7	11.9
	Post school Qual	71.3	23.0	77.6	25.3	75.1	29.7	87.8	23.6	61.0	23.0	86.3	13.1	92.7	16.6	69.1	28.3	54.2	8.4	44.3	11.3
	Degree or Higher	74.5	19.8	80.8	20.9	79.6	24.7	91.7	17.7	65.6	19.9	87.6	11.0	94.5	14.2	75.2	24.8	55.3	7.1	46.3	9.7
Male	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	79.9	19.3	84.8	21.3	87.0	21.8	91.9	18.3	67.6	18.7	84.4	13.1	93.3	15.5	90.7	18.6	52.9	8.1	51.9	8.3
	Post school Qual	78.8	19.5	81.7	22.9	85.2	23.7	91.4	19.6	66.6	19.7	84.9	13.5	94.1	14.6	88.0	20.1	53.3	8.4	50.5	8.9
	Degree or Higher	82.5	16.7	86.9	19.7	89.5	19.2	93.3	16.2	68.3	17.2	84.5	11.7	94.9	12.7	93.1	13.9	53.1	7.4	53.1	6.9
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		SF36 (W3)																				
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS		
Age (W1)	Highest Education (W3)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Female	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	78.8	19.5	81.6	23.1	83.6	23.2	88.7	20.9	62.6	19.6	82.2	14.3	91.5	16.4	86.2	22.2	51.4	9.0	50.6	9.4	
	Post school Qual	79.2	20.0	80.9	23.3	83.4	23.7	88.4	22.6	62.6	20.3	82.2	15.4	91.0	18.1	86.3	20.9	51.4	9.9	50.5	9.1	
	Degree or Higher	82.3	17.3	84.7	20.3	86.7	20.5	90.6	19.0	63.4	18.4	82.0	13.3	92.3	15.8	91.2	15.6	51.2	8.6	52.7	7.5	
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>	

- Data suppressed due to problems with derivation

**Table 166: Mean (SD) SF-36 score by highest education qualification by prioritised ethnicity**

		SF36 (W3)																				
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS		
Ethnicity (W1)	Highest Education (W3)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
nM,nP,nA	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	79.5	19.4	82.4	22.6	85.0	22.9	90.3	19.7	64.1	19.5	83.4	13.7	92.8	15.4	87.4	21.5	52.2	8.5	50.9	9.2	
	Post school Qual	79.1	19.8	81.0	23.1	84.1	24.0	90.1	21.1	64.2	20.1	83.8	14.3	92.9	16.1	86.7	20.9	52.5	9.1	50.3	9.2	
	Degree or Higher	83.0	17.0	85.2	20.2	87.8	20.1	92.0	17.8	65.2	18.2	83.3	12.5	93.9	14.2	92.0	15.2	52.2	8.1	52.8	7.4	
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Māori	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	80.8	17.8	85.8	21.0	85.7	22.5	88.3	21.7	66.5	18.3	82.7	14.6	91.7	16.7	91.8	17.5	51.5	9.3	52.5	7.9	
	Post school Qual	78.6	19.9	81.8	23.5	84.8	22.8	88.7	22.7	65.6	20.2	82.8	16.1	90.5	18.9	88.7	19.1	51.7	10.4	51.1	8.2	
	Degree or Higher	79.2	18.2	86.2	21.0	85.7	22.7	89.6	20.6	64.9	16.8	82.7	13.0	90.6	17.6	91.7	13.4	51.2	8.8	52.5	7.7	
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pacific	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	76.1	21.7	81.9	23.9	80.9	24.3	86.8	22.7	67.7	20.6	80.9	15.0	86.1	21.2	88.0	20.6	50.8	9.8	50.7	9.0	
	Post school Qual	78.6	18.0	82.8	22.4	84.5	21.0	89.5	18.8	67.7	19.0	81.0	13.2	89.9	18.2	91.0	16.3	51.3	8.6	52.0	6.9	
	Degree or Higher	79.7	16.3	92.9	14.2	89.1	20.2	92.4	17.4	69.4	17.2	83.7	12.5	89.7	19.2	93.1	12.7	52.0	8.2	54.0	5.6	
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asian	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	77.5	19.7	87.1	20.5	88.0	17.8	92.2	16.8	67.0	17.3	82.2	13.6	92.0	15.7	90.5	16.7	51.8	8.0	52.6	7.5	
	Post school Qual	78.6	17.4	87.0	20.1	88.2	20.3	90.6	19.8	69.5	18.6	82.7	14.7	93.9	13.4	90.9	18.4	52.3	8.8	52.5	7.8	
	Degree or Higher	80.2	16.6	88.0	18.9	90.2	17.6	92.1	16.8	68.6	17.7	82.4	13.9	92.7	13.7	92.7	13.6	51.9	8.4	53.5	6.2	
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>	

- Data suppressed due to problems with derivation



**Table 167: Mean (SD) SF-36 score by highest education qualification by legal marital status**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Marital Status (W1)	Highest Education (W3)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	83.2	15.7	87.4	18.6	91.0	15.9	92.0	15.8	69.1	17.9	82.4	12.4	94.3	12.9	97.0	8.6	51.9	7.9	54.5	5.5
	Post school Qual	79.4	15.0	92.1	16.1	94.6	13.6	92.9	15.3	68.8	16.4	82.5	15.3	92.3	16.5	96.4	9.5	51.3	9.5	55.3	5.1
	Degree or Higher	83.5	2.1	84.0	0.0	40.6	4.4	100.0	0.0	43.8	26.5	65.0	35.4	79.2	29.5	75.0	14.1	45.7	11.5	48.2	10.2
Never Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	80.7	17.9	85.2	20.9	87.2	20.8	90.0	19.5	65.3	18.9	81.8	14.4	92.1	15.9	93.6	14.8	51.1	9.1	53.2	7.2
	Post school Qual	79.2	18.6	83.0	21.7	86.5	20.8	88.7	21.4	63.8	19.7	81.1	15.3	90.8	17.8	91.9	16.3	50.5	10.0	52.5	7.4
	Degree or Higher	82.9	16.4	85.6	20.0	88.3	19.9	90.7	18.3	64.7	17.7	81.5	12.5	92.5	15.3	94.3	12.9	51.0	8.4	53.7	6.7
Divorced Widowed Separated	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	74.8	22.0	78.0	24.8	78.4	27.5	87.1	24.0	61.1	21.5	82.9	15.0	90.3	19.1	76.9	28.2	52.1	9.6	47.2	11.3
	Post school Qual	75.6	22.0	77.7	25.5	79.6	26.8	86.4	25.1	61.6	22.3	82.3	16.5	89.9	19.6	80.4	25.0	51.6	10.6	48.2	10.5
	Degree or Higher	78.4	20.2	81.3	23.5	83.1	23.6	87.3	22.7	62.4	19.9	81.8	14.3	91.0	18.0	86.2	19.5	51.0	9.5	50.5	8.8
Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	79.0	20.0	82.0	23.0	84.5	22.8	90.6	19.3	64.8	19.1	84.3	13.1	92.7	15.4	85.7	21.8	52.8	8.0	50.2	9.4
	Post school Qual	79.9	19.4	81.5	22.9	84.7	23.8	91.5	19.6	65.9	19.5	85.1	13.2	94.1	14.5	86.9	20.2	53.4	8.3	50.3	9.0
	Degree or Higher	82.9	16.6	86.7	19.3	88.9	19.1	93.3	16.3	66.8	17.7	84.3	12.3	94.5	13.2	92.1	14.6	52.9	7.7	52.9	7.1
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

- Data suppressed due to problems with derivation

**Table 168: Mean (SD) SF-36 score by highest education qualification by family structure**

		SF36 (W3)																			
Family Structure (W1)	Highest Education (W3)	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Couple only	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	77.6	20.8	81.0	23.5	83.2	23.6	90.2	19.4	65.0	19.6	85.2	13.0	92.7	15.4	83.3	23.9	53.3	7.8	49.2	10.0
	Post school Qual Degree or Higher	78.2	20.5	79.6	23.8	82.0	26.0	90.6	20.6	65.8	20.3	85.4	13.3	93.8	15.3	83.4	22.8	53.8	8.4	48.8	9.8
Couple with children	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	81.4	17.9	85.1	20.9	87.6	20.3	91.0	18.7	65.7	18.7	82.9	13.4	92.8	15.1	92.2	15.7	51.8	8.5	52.8	7.5
	Post school Qual	81.6	17.8	83.6	21.5	87.7	20.4	91.4	19.1	65.6	19.1	83.5	14.0	93.4	15.1	92.0	15.0	52.2	8.9	52.4	7.3
	Post school Qual Degree or Higher	83.5	15.8	87.1	19.4	89.7	18.4	92.9	16.8	66.4	17.3	83.4	12.1	94.6	13.1	93.7	13.1	52.3	7.7	53.6	6.8
Sole parent	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	77.2	19.9	82.3	23.0	82.6	23.7	86.6	22.3	62.6	20.0	79.7	15.1	89.1	18.7	89.3	19.9	49.8	9.9	51.6	8.9
	Post school Qual	76.5	20.9	80.5	25.0	82.5	24.1	84.6	25.5	60.8	20.8	79.7	16.8	87.0	21.4	87.3	20.6	49.3	11.1	50.9	9.5
Not in a family nucleus	Post school Qual Degree or Higher	80.5	18.0	82.2	22.4	84.4	22.5	87.8	23.0	62.2	17.8	80.5	14.5	90.2	19.9	90.4	15.3	50.2	9.8	52.1	7.3
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	76.1	20.8	79.2	24.5	80.6	26.8	88.7	22.8	62.3	20.6	82.6	15.2	91.6	17.9	80.6	27.3	52.1	9.2	48.5	10.8
<b>Total</b>	Post school Qual	75.8	21.1	79.3	23.8	81.7	25.3	88.0	23.4	62.6	21.1	82.3	15.8	91.4	17.8	82.4	24.6	51.8	10.0	49.0	9.9
	Post school Qual Degree or Higher	81.2	18.4	83.6	21.5	85.8	22.3	89.1	20.1	63.4	19.5	81.9	12.8	91.6	16.6	89.8	17.9	51.1	8.8	52.1	8.1
	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

- Data suppressed due to problems with derivation

**Table 169: Mean (SD) SF-36 score by highest education qualification by household structure**

		SF36 (W3)																			
Household Structure (W1)	Highest Education (W3)	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
One Family	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	79.8	19.1	83.6	22.0	85.9	21.8	90.3	19.3	65.1	19.1	83.2	13.6	92.5	15.6	89.4	19.3	52.0	8.5	51.6	8.6
	Post school Qual	79.7	19.3	81.7	22.8	84.9	23.3	90.3	20.7	65.0	19.9	83.8	14.2	92.8	16.1	88.2	19.3	52.5	9.1	50.8	8.7
	Degree or Higher	82.8	16.7	86.2	19.7	88.5	19.4	92.5	17.2	66.3	17.6	83.6	12.5	94.0	14.0	92.7	14.0	52.4	7.9	53.1	7.0
Two or more families	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	78.2	20.0	82.3	24.4	82.5	23.9	87.8	21.7	66.1	19.7	81.2	14.5	88.2	19.2	87.6	21.4	51.0	9.3	51.0	9.4
	Post school Qual	76.9	22.1	81.7	25.6	84.1	24.5	89.5	21.4	66.5	20.1	84.5	14.6	91.3	17.9	85.8	23.3	52.7	9.4	50.3	9.6
	Degree or Higher	77.2	16.6	87.7	16.7	88.1	19.6	93.8	17.1	61.8	20.0	79.9	14.3	93.1	11.5	90.5	17.0	50.1	7.7	53.4	6.8
Other multi-person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	81.6	15.6	84.8	20.4	88.2	19.3	91.4	18.8	65.6	15.3	82.6	13.0	93.7	15.3	93.4	13.3	51.7	8.0	53.0	7.0
	Post school Qual	79.3	18.0	80.6	23.4	86.5	21.4	90.2	19.4	64.5	19.5	82.0	13.2	92.5	15.5	89.9	18.9	51.6	8.6	51.5	8.6
	Degree or Higher	84.8	14.0	84.8	21.7	87.7	20.1	90.7	16.6	64.0	18.6	81.6	12.6	92.1	15.0	95.0	11.1	50.9	8.4	53.9	6.3
One person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	73.5	22.4	76.6	25.3	77.0	29.0	87.6	24.6	60.5	22.6	83.2	15.9	91.2	18.6	73.7	29.8	52.6	9.7	46.1	11.5
	Post school Qual	74.4	21.8	78.7	23.9	79.5	26.8	87.0	24.8	61.6	21.8	82.3	16.7	91.0	18.9	78.9	26.3	51.8	10.5	47.9	10.3
	Degree or Higher	77.8	21.2	82.4	21.3	84.1	23.9	87.4	22.9	62.6	20.5	82.1	13.4	91.2	17.8	84.6	21.5	51.2	9.3	50.4	9.3
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

- Data suppressed due to problems with derivation

### 8.4 The Association of Education with Mental Distress (K-10)

Overall, the highest proportion of respondents reporting low levels of mental distress were those who held a degree qualification of higher. This was consistent across age groups, by sex, ethnicity, marital status, family and household structure. Male respondents tended to have higher proportions of low mental distress than females at all levels of education. Non-Maori, non-Pacific, non-Asian respondents tended to report higher proportions of low mental distress at all levels of education compared to other ethnic groups. Respondents who were married at Wave 1 had higher proportions of low mental distress at all levels of education, compared to other marital status groups. Respondents in sole parent families with a school or post-school qualification had low proportions of low mental distress.

**Table 170: K-10 groups by highest education qualification, overall**

Highest Education (W3)	Kessler Groups (W3)											
	Low		Moderate		High		Very High		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	3700	76.0	780	16.0	260	5.3	60	1.2	65	1.3	4870	100.0
Post school Qual	4905	78.2	915	14.6	270	4.3	110	1.8	65	1.0	6270	100.0
Degree or Higher	2145	83.0	330	12.8	75	2.9	15	0.6	15	0.6	2585	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 171: K-10 groups by highest education qualification by age and sex**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Age (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	165	71.7	40	17.4	10	4.3	10	4.3	10	4.3	230	100.0
	Post school Qual	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0
	No Qualification Degree or Higher	-	-	-	-	-	-	-	-	-	-	-	-
15-24	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	915	72.9	230	18.3	80	6.4	20	1.6	10	0.8	1255	100.0
	Post school Qual	445	67.9	160	24.4	40	6.1	10	1.5	10	1.5	655	100.0
	Degree or Higher	220	77.2	50	17.5	15	5.3	10	3.5	10	3.5	285	100.0
25-34	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	545	74.7	120	16.4	40	5.5	10	1.4	10	1.4	730	100.0
	Post school Qual	840	76.0	175	15.8	55	5.0	25	2.3	10	0.9	1105	100.0
	Degree or Higher	490	79.0	100	16.1	20	3.2	10	1.6	10	1.6	620	100.0
35-44	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	720	77.0	140	15.0	50	5.3	10	1.1	10	1.1	935	100.0
	Post school Qual	1135	77.7	210	14.4	70	4.8	30	2.1	15	1.0	1460	100.0
	Degree or Higher	610	85.3	80	11.2	15	2.1	10	1.4	10	1.4	715	100.0
45-54	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	585	81.3	80	11.1	40	5.6	10	1.4	10	1.4	720	100.0
	Post school Qual	1005	81.0	150	12.1	50	4.0	25	2.0	10	0.8	1240	100.0
	Degree or Higher	465	86.1	55	10.2	15	2.8	10	1.9	10	1.9	540	100.0
55-64	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	355	79.8	55	12.4	20	4.5	10	2.2	10	2.2	445	100.0
	Post school Qual	795	84.1	105	11.1	25	2.6	15	1.6	10	1.1	945	100.0
	Degree or Higher	220	83.0	35	13.2	10	3.8	10	3.8	10	3.8	265	100.0
65+	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	415	74.8	100	18.0	25	4.5	10	1.8	15	2.7	555	100.0
	Post school Qual	685	80.1	110	12.9	30	3.5	10	1.2	10	1.2	855	100.0
	Degree or Higher	140	87.5	15	9.4	10	6.3	.	.	10	6.3	160	100.0
Male	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	1575	77.4	320	15.7	95	4.7	15	0.7	25	1.2	2035	100.0
	Post school Qual	2570	80.8	430	13.5	110	3.5	35	1.1	40	1.3	3180	100.0
	No Qualification Degree or Higher	1030	85.5	135	11.2	25	2.1	10	0.8	10	0.8	1205	100.0
Female	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	2130	75.1	460	16.2	165	5.8	50	1.8	40	1.4	2835	100.0
	Post school Qual	2340	75.7	490	15.9	155	5.0	75	2.4	25	0.8	3090	100.0
	No Qualification Degree or Higher	1115	80.8	200	14.5	45	3.3	10	0.7	10	0.7	1380	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 172: K-10 groups by highest education qualification by prioritised ethnicity**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Ethnicity (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	2945	77.7	595	15.7	170	4.5	45	1.2	40	1.1	3790	100.0
	Post school Qual	4140	79.5	735	14.1	205	3.9	85	1.6	45	0.9	5205	100.0
	Degree or Higher	1755	84.2	245	11.8	60	2.9	10	0.5	10	0.5	2085	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
Māori	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	355	74.0	80	16.7	30	6.3	10	2.1	10	2.1	480	100.0
	Post school Qual	500	73.0	105	15.3	50	7.3	25	3.6	10	1.5	685	100.0
	Degree or Higher	115	79.3	25	17.2	10	6.9	.	.	10	6.9	145	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	190	63.3	55	18.3	40	13.3	10	3.3	10	3.3	300	100.0
	Post school Qual	125	67.6	45	24.3	10	5.4	10	5.4	10	5.4	185	100.0
	Degree or Higher	45	81.8	10	18.2	10	18.2	10	18.2	10	18.2	55	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
Asian	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	220	74.6	45	15.3	15	5.1	10	3.4	10	3.4	295	100.0
	Post school Qual	140	71.8	40	20.5	10	5.1	10	5.1	10	5.1	195	100.0
	Degree or Higher	230	75.4	60	19.7	10	3.3	10	3.3	10	3.3	305	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

*- Data suppressed due to problems with derivation*

**Table 173: K-10 groups by highest education qualification by legal marital status**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Marital Status (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	170	73.9	45	19.6	10	4.3	10	4.3	10	4.3	230	100.0
	Post school Qual	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	Degree or Higher	10	100.0	.	.	10	100.0	.	.	.	.	10	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
Never Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	1355	73.4	325	17.6	115	6.2	30	1.6	20	1.1	1845	100.0
	Post school Qual	1180	72.2	310	19.0	95	5.8	40	2.4	15	0.9	1635	100.0
	Degree or Higher	620	79.5	120	15.4	30	3.8	10	1.3	10	1.3	780	100.0
Divorced Widowed Separated	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	470	74.0	110	17.3	30	4.7	15	2.4	15	2.4	635	100.0
	Post school Qual	795	75.4	160	15.2	60	5.7	30	2.8	10	0.9	1055	100.0
	Degree or Higher	230	82.1	35	12.5	15	5.4	10	3.6	.	.	280	100.0
Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	1705	78.9	300	13.9	110	5.1	15	0.7	35	1.6	2160	100.0
	Post school Qual	2925	82.0	445	12.5	115	3.2	45	1.3	40	1.1	3565	100.0
	Degree or Higher	1300	85.5	175	11.5	30	2.0	10	0.7	10	0.7	1520	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 174: K-10 groups by highest education qualification by family structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Family Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	930	78.5	175	14.8	55	4.6	10	0.8	20	1.7	1185	100.0
	Post school Qual	1635	81.1	255	12.7	75	3.7	20	1.0	25	1.2	2015	100.0
	Degree or Higher	610	84.1	95	13.1	15	2.1	10	1.4	10	1.4	725	100.0
Couple with children	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	1900	76.3	390	15.7	140	5.6	25	1.0	40	1.6	2490	100.0
	Post school Qual	2060	80.0	365	14.2	90	3.5	45	1.7	20	0.8	2575	100.0
	Degree or Higher	1005	84.5	145	12.2	30	2.5	10	0.8	10	0.8	1190	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
Sole parent	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	330	67.3	105	21.4	40	8.2	15	3.1	10	2.0	490	100.0
	Post school Qual	405	65.9	135	22.0	50	8.1	20	3.3	10	1.6	615	100.0
	Degree or Higher	135	84.4	10	6.3	10	6.3	10	6.3	10	6.3	160	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-
Not in a family nucleus	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	540	76.6	110	15.6	30	4.3	15	2.1	10	1.4	705	100.0
	Post school Qual	810	76.1	165	15.5	55	5.2	30	2.8	10	0.9	1065	100.0
	Degree or Higher	400	78.4	85	16.7	20	3.9	10	2.0	10	2.0	510	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 175: K-10 groups by highest education qualification by household structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Household Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	3100	76.3	655	16.1	220	5.4	45	1.1	55	1.4	4065	100.0
	Post school Qual	4015	78.9	735	14.4	210	4.1	85	1.7	45	0.9	5090	100.0
	Degree or Higher	1730	84.6	240	11.7	50	2.4	10	0.5	15	0.7	2045	100.0
No Qualification	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	115	67.6	30	17.6	15	8.8	10	5.9	10	5.9	170	100.0
	Post school Qual	150	75.0	35	17.5	10	5.0	10	5.0	10	5.0	200	100.0
	Degree or Higher	40	72.7	10	18.2	10	18.2	10	18.2	10	18.2	55	100.0
No Qualification	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	150	78.9	25	13.2	10	5.3	10	5.3	.	.	190	100.0
	Post school Qual	210	73.7	55	19.3	15	5.3	10	3.5	.	.	285	100.0
	Degree or Higher	185	75.5	45	18.4	10	4.1	10	4.1	10	4.1	245	100.0
One person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	340	77.3	70	15.9	20	4.5	10	2.3	10	2.3	440	100.0
	Post school Qual	525	76.1	100	14.5	40	5.8	25	3.6	10	1.4	690	100.0
	Degree or Higher	195	79.6	35	14.3	10	4.1	10	4.1	10	4.1	245	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

### **8.5 The Association of Education with Perceived Stress**

Overall, most respondents reported that they felt in control most or all of the time.

However, there were slightly lower proportions of respondents with school qualification only who felt able to control of important things in life most or all of the time. Similar trends were observed for the other perceived stress questions. Further tables of perceived stress by highest education by other demographic variables are not presented in this report, due to small cell counts.



**Table 176: Perceived stress by highest education qualification, overall**

Highest Education (W3)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	70	1.4	160	3.3	530	10.9	1100	22.6	2965	60.9	50	1.0	4870	100.0
Post school Qual	110	1.8	225	3.6	660	10.5	1350	21.5	3885	62.0	45	0.7	6265	100.0
Degree or Higher	25	1.0	75	2.9	240	9.3	660	25.5	1585	61.3	15	0.6	2585	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1920</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.1</b>	<b>180</b>	<b>1.0</b>	<b>18215</b>	<b>100.0</b>
Unable to overcome difficulties (W3)														
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	30	0.6	95	2.0	385	7.9	925	19.0	3390	69.6	50	1.0	4870	100.0
Post school Qual	45	0.7	105	1.7	480	7.7	1100	17.6	4505	71.9	40	0.6	6265	100.0
Degree or Higher	10	0.4	35	1.4	160	6.2	490	19.0	1885	72.9	15	0.6	2585	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>120</b>	<b>0.7</b>	<b>330</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3180</b>	<b>17.5</b>	<b>12955</b>	<b>71.1</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Confident in handling problems (W3)														
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	1690	34.7	2360	48.5	445	9.1	245	5.0	80	1.6	45	0.9	4870	100.0
Post school Qual	2490	39.7	2860	45.7	510	8.1	245	3.9	115	1.8	45	0.7	6265	100.0
Degree or Higher	885	34.2	1405	54.4	180	7.0	75	2.9	35	1.4	10	0.4	2585	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>6715</b>	<b>36.9</b>	<b>8520</b>	<b>46.8</b>	<b>1610</b>	<b>8.8</b>	<b>805</b>	<b>4.4</b>	<b>395</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Felt things were going your way (W3)														
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	485	10.0	2645	54.3	1215	24.9	350	7.2	120	2.5	50	1.0	4870	100.0
Post school Qual	660	10.5	3500	55.9	1480	23.6	420	6.7	150	2.4	55	0.9	6265	100.0
Degree or Higher	255	9.9	1620	62.7	555	21.5	115	4.4	25	1.0	20	0.8	2585	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1940</b>	<b>10.7</b>	<b>9890</b>	<b>54.3</b>	<b>4425</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

## **8.6 *The Association of Education with Chronic Diseases***

Overall, there were higher proportions of respondents reporting chronic diseases in the post-school qualification work group, particularly high blood pressure, high cholesterol, heart disease and stroke. This may be due to the older age structure of this population. Note, the numbers presented here are not adjusted for age structure. This relationship was not consistent across age groups.

**Table 177: Chronic diseases by highest education qualification, overall**

Highest Education (W3)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	950	19.5	855	17.6	680	14.0	240	4.9	90	1.8	170	3.5	620	12.7	400	8.2	4870	100.0
Post school Qual	1160	18.5	1395	22.2	1140	18.2	400	6.4	140	2.2	245	3.9	875	14.0	620	9.9	6270	100.0
Degree or Higher	500	19.3	385	14.9	400	15.5	85	3.3	25	1.0	55	2.1	355	13.7	235	9.1	2585	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3140</b>	<b>17.2</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 178: Number of comorbid disease by highest education qualification, overall**

Highest Education (W3)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	-	-	-	-	-	-	-	-	-	-
School Qual	2405	49.4	2070	42.5	380	7.8	15	0.3	4870	100.0
Post school Qual	2765	44.1	2870	45.8	620	9.9	15	0.2	6270	100.0
Degree or Higher	1280	49.5	1130	43.7	165	6.4	10	0.4	2585	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 179: Chronic diseases by highest education qualification by age and sex**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Age (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	50	21.7	10	4.3	.	.	.	.	.	.	10	4.3	25	10.9	10	4.3	230	100.0
	Post school Qual	10	66.7	.	.	.	.	.	.	.	.	.	.	10	66.7	.	.	15	100.0
	No Qualification Degree or Higher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15-24	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	350	27.9	40	3.2	10	0.8	10	0.8	10	0.8	10	0.8	110	8.8	70	5.6	1255	100.0
	Post school Qual	175	26.7	30	4.6	10	1.5	10	1.5	10	1.5	10	1.5	80	12.2	70	10.7	655	100.0
	Degree or Higher	80	28.1	10	3.5	10	3.5	10	3.5	.	.	.	.	40	14.0	15	5.3	285	100.0
25-34	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	160	21.9	75	10.3	55	7.5	10	1.4	10	1.4	10	1.4	115	15.8	70	9.6	730	100.0
	Post school Qual	255	23.1	115	10.4	70	6.3	10	0.9	10	0.9	10	0.9	180	16.3	125	11.3	1105	100.0
	Degree or Higher	155	25.0	40	6.5	40	6.5	10	1.6	10	1.6	10	1.6	75	12.1	60	9.7	620	100.0
35-44	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	155	16.6	135	14.4	105	11.2	15	1.6	10	1.1	20	2.1	155	16.6	120	12.8	935	100.0
	Post school Qual	280	19.2	200	13.7	195	13.4	30	2.1	10	0.7	25	1.7	225	15.4	160	11.0	1460	100.0
	Degree or Higher	115	16.1	70	9.8	95	13.3	10	1.4	10	1.4	10	1.4	105	14.7	60	8.4	715	100.0
45-54	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	100	13.8	145	20.0	180	24.8	25	3.4	10	1.4	40	5.5	100	13.8	65	9.0	725	100.0
	Post school Qual	195	15.8	305	24.7	275	22.3	50	4.0	20	1.6	55	4.5	185	15.0	120	9.7	1235	100.0
	Degree or Higher	85	15.7	95	17.6	130	24.1	15	2.8	.	.	10	1.9	75	13.9	60	11.1	540	100.0
55-64	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	65	14.6	165	37.1	140	31.5	55	12.4	15	3.4	40	9.0	70	15.7	40	9.0	445	100.0
	Post school Qual	135	14.3	325	34.4	300	31.7	100	10.6	20	2.1	65	6.9	105	11.1	85	9.0	945	100.0
	Degree or Higher	45	17.0	85	32.1	80	30.2	25	9.4	10	3.8	15	5.7	35	13.2	25	9.4	265	100.0
65+	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	75	13.5	285	51.4	195	35.1	130	23.4	60	10.8	55	9.9	55	9.9	30	5.4	555	100.0
	Post school Qual	110	12.9	410	48.0	285	33.3	210	24.6	80	9.4	85	9.9	100	11.7	50	5.8	855	100.0
	Degree or Higher	25	15.6	80	50.0	45	28.1	35	21.9	10	6.3	10	6.3	15	9.4	10	6.3	160	100.0
Male	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	390	19.2	340	16.7	325	16.0	115	5.7	40	2.0	80	3.9	125	6.1	95	4.7	2035	100.0
	Post school Qual	500	15.7	730	22.9	675	21.2	255	8.0	85	2.7	145	4.6	270	8.5	215	6.8	3185	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		<b>Chronic Diseases (W3)</b>																	
		<b>Asthma</b>		<b>High BP</b>		<b>High Chol</b>		<b>Heart Dis</b>		<b>Stroke</b>		<b>Diabetes</b>		<b>Migraine</b>		<b>Depr-Schiz</b>		<b>Total</b>	
<b>Age (W1)</b>	<b>Highest Education (W3)</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
	Degree or Higher	195	16.2	195	16.2	240	19.9	55	4.6	15	1.2	30	2.5	100	8.3	70	5.8	1205	100.0
Female	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	560	19.8	510	18.0	350	12.3	125	4.4	50	1.8	95	3.4	495	17.5	305	10.8	2835	100.0
	Post school Qual	660	21.4	670	21.7	465	15.1	145	4.7	55	1.8	100	3.2	605	19.6	405	13.1	3085	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Degree or Higher	305	22.0	190	13.7	160	11.6	30	2.2	10	0.7	25	1.8	255	18.4	160	11.6	1385	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 180: Number of comorbid disease by highest education qualification by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
0-14	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	165	71.7	60	26.1	10	4.3	.	.	230	100.0
	Post school Qual	10	66.7	10	66.7	.	.	.	.	15	100.0
	Degree or Higher	10	100.0	.	.	.	.	.	.	10	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
15-24	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	770	61.4	460	36.7	15	1.2	10	0.8	1255	100.0
	Post school Qual	385	58.8	255	38.9	15	2.3	.	.	655	100.0
	Degree or Higher	160	56.1	120	42.1	10	3.5	.	.	285	100.0
25-34	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	390	53.4	305	41.8	30	4.1	10	1.4	730	100.0
	Post school Qual	580	52.5	460	41.6	60	5.4	10	0.9	1105	100.0
	Degree or Higher	360	58.1	235	37.9	30	4.8	10	1.6	620	100.0
35-44	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	490	52.4	380	40.6	65	7.0	10	1.1	935	100.0
	Post school Qual	750	51.4	615	42.1	90	6.2	10	0.7	1460	100.0
	Degree or Higher	400	55.9	285	39.9	30	4.2	10	1.4	715	100.0
45-54	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	315	43.4	340	46.9	70	9.7	10	1.4	725	100.0
	Post school Qual	520	42.1	600	48.6	115	9.3	10	0.8	1235	100.0
	Degree or Higher	230	42.6	280	51.9	35	6.5	10	1.9	540	100.0
55-64	NA:DK:REF	270	31.8	415	48.8	165	19.4	10	1.2	850	100.0
	School Qual	145	32.6	220	49.4	75	16.9	10	2.2	445	100.0
	Post school Qual	310	32.8	485	51.3	140	14.8	10	1.1	945	100.0
	Degree or Higher	90	34.0	135	50.9	35	13.2	10	3.8	265	100.0
65+	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	125	22.5	295	53.2	130	23.4	10	1.8	555	100.0
	Post school Qual	210	24.6	450	52.6	195	22.8	.	.	855	100.0
	Degree or Higher	45	28.1	80	50.0	35	21.9	.	.	160	100.0
Male	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1070	52.6	830	40.8	130	6.4	10	0.5	2035	100.0
	Post school Qual	1505	47.3	1375	43.2	295	9.3	10	0.3	3185	100.0
	Degree or Higher	610	50.6	520	43.2	70	5.8	10	0.8	1205	100.0

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
	No Qualification	95	67.9	40	28.6	10	7.1	10	7.1	140	100.0
Female	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1335	47.1	1235	43.6	250	8.8	10	0.4	2835	100.0
	Post school Qual	1265	41.0	1495	48.5	320	10.4	10	0.3	3085	100.0
	Degree or Higher	670	48.4	610	44.0	100	7.2	10	0.7	1385	100.0
	No Qualification	80	69.6	30	26.1	.	.	10	8.7	115	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 181: Chronic diseases by highest education qualification by prioritised ethnicity**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Ethnicity (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	750	19.8	715	18.8	580	15.3	205	5.4	75	2.0	120	3.2	520	13.7	360	9.5	3795	100.0
	Post school Qual	935	18.0	1195	23.0	990	19.0	365	7.0	120	2.3	195	3.7	735	14.1	535	10.3	5205	100.0
	Degree or Higher	425	20.4	345	16.5	340	16.3	75	3.6	25	1.2	40	1.9	315	15.1	210	10.1	2085	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Māori	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	120	25.0	60	12.5	40	8.3	10	2.1	10	2.1	10	2.1	60	12.5	25	5.2	480	100.0
	Post school Qual	175	25.5	150	21.9	110	16.1	25	3.6	20	2.9	35	5.1	105	15.3	65	9.5	685	100.0
	Degree or Higher	45	31.0	15	10.3	15	10.3	10	6.9	.	.	10	6.9	20	13.8	15	10.3	145	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	45	15.0	50	16.7	30	10.0	10	3.3	10	3.3	25	8.3	20	6.7	10	3.3	300	100.0
	Post school Qual	35	18.9	30	16.2	20	10.8	10	5.4	10	5.4	10	5.4	25	13.5	10	5.4	185	100.0
	Degree or Higher	10	18.2	10	18.2	10	18.2	10	18.2	.	.	10	18.2	10	18.2	10	18.2	55	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asian	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	45	15.3	30	10.2	25	8.5	10	3.4	10	3.4	15	5.1	20	6.8	10	3.4	295	100.0
	Post school Qual	15	7.9	15	7.9	20	10.5	10	5.3	10	5.3	10	5.3	10	5.3	10	5.3	190	100.0
	Degree or Higher	30	9.8	20	6.6	35	11.5	10	3.3	10	3.3	10	3.3	20	6.6	10	3.3	305	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation



**Table 182: Number of comorbid disease by highest education qualification by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Ethnicity (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1765	46.5	1690	44.5	325	8.6	10	0.3	3795	100.0
	Post school Qual	2240	43.0	2430	46.7	520	10.0	10	0.2	5205	100.0
	Degree or Higher	955	45.8	970	46.5	155	7.4	10	0.5	2085	100.0
Māori	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	255	53.1	200	41.7	20	4.2	10	2.1	480	100.0
	Post school Qual	285	41.6	320	46.7	70	10.2	.	.	685	100.0
Pacific	Degree or Higher	75	51.7	70	48.3	10	6.9	.	.	145	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	185	61.7	90	30.0	15	5.0	10	3.3	300	100.0
Asian	Post school Qual	100	54.1	70	37.8	10	5.4	10	5.4	185	100.0
	Degree or Higher	30	54.5	20	36.4	10	18.2	.	.	55	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	School Qual	200	67.8	80	27.1	15	5.1	.	.	295	100.0
	Post school Qual	140	73.7	50	26.3	10	5.3	10	5.3	190	100.0
	Degree or Higher	225	73.8	80	26.2	10	3.3	.	.	305	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 183: Chronic diseases by highest education qualification by legal marital status**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Marital Status (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	45	19.6	10	4.3	.	.	.	.	.	.	10	4.3	20	8.7	10	4.3	230	100.0
	Post school Qual	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	10	100.0	10	100.0
	No Qualification Degree or Higher	-	-	-	-	10	100.0	.	.	.	.	.	.	.	.	.	.	.	10
Never Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	475	25.7	130	7.0	90	4.9	15	0.8	10	0.5	25	1.4	190	10.3	145	7.9	1845	100.0
	Post school Qual	390	23.9	185	11.3	110	6.7	20	1.2	10	0.6	30	1.8	230	14.1	205	12.5	1635	100.0
	Degree or Higher	200	25.6	65	8.3	65	8.3	10	1.3	10	1.3	10	1.3	105	13.5	80	10.3	780	100.0
Divorced Widowed Separated	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	120	18.9	205	32.3	145	22.8	80	12.6	35	5.5	35	5.5	110	17.3	75	11.8	635	100.0
	Post school Qual	190	18.0	315	29.9	225	21.3	105	10.0	40	3.8	50	4.7	180	17.1	150	14.2	1055	100.0
	Degree or Higher	50	17.9	65	23.2	70	25.0	20	7.1	10	3.6	10	3.6	50	17.9	40	14.3	280	100.0
Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	310	14.4	520	24.1	445	20.6	140	6.5	45	2.1	110	5.1	305	14.1	175	8.1	2160	100.0
	Post school Qual	575	16.1	895	25.1	805	22.6	275	7.7	85	2.4	165	4.6	465	13.0	260	7.3	3565	100.0
	Degree or Higher	250	16.4	255	16.7	260	17.0	60	3.9	10	0.7	35	2.3	195	12.8	115	7.5	1525	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 184: Number of comorbid disease by highest education qualification by legal marital status**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Marital Status (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	160	69.6	65	28.3	10	4.3	.	.	230	100.0
	Post school Qual	10	100.0	10	100.0	10	100.0	.	.	10	100.0
	Degree or Higher	10	100.0	10	100.0	.	.	.	.	10	100.0
Never Married	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1060	57.5	720	39.0	60	3.3	10	0.5	1845	100.0
	Post school Qual	860	52.6	680	41.6	100	6.1	10	0.6	1635	100.0
Divorced Widowed Separated	Degree or Higher	405	51.9	350	44.9	25	3.2	.	.	780	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	215	33.9	315	49.6	105	16.5	10	1.6	635	100.0
Married	Post school Qual	385	36.5	520	49.3	145	13.7	10	0.9	1055	100.0
	Degree or Higher	100	35.7	140	50.0	40	14.3	.	.	280	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	School Qual	970	44.9	970	44.9	215	10.0	10	0.5	2160	100.0
	Post school Qual	1520	42.6	1670	46.8	370	10.4	10	0.3	3565	100.0
	Degree or Higher	780	51.1	640	42.0	100	6.6	10	0.7	1525	100.0
	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 185: Chronic diseases by highest education qualification by family structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Family Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	185	15.6	345	29.1	285	24.1	110	9.3	40	3.4	75	6.3	160	13.5	90	7.6	1185	100.0
	Post school Qual	325	16.1	610	30.3	520	25.8	220	10.9	65	3.2	105	5.2	245	12.2	155	7.7	2015	100.0
	Degree or Higher	150	20.7	155	21.4	135	18.6	45	6.2	10	1.4	15	2.1	95	13.1	65	9.0	725	100.0
Couple with children	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	495	19.9	265	10.6	235	9.4	50	2.0	15	0.6	55	2.2	290	11.6	180	7.2	2490	100.0
	Post school Qual	475	18.4	395	15.3	360	14.0	65	2.5	25	1.0	70	2.7	375	14.6	215	8.3	2575	100.0
	Degree or Higher	210	17.7	125	10.5	170	14.3	20	1.7	10	0.8	15	1.3	160	13.5	95	8.0	1185	100.0
Sole parent	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	130	26.5	50	10.2	35	7.1	15	3.1	10	2.0	10	2.0	85	17.3	55	11.2	490	100.0
	Post school Qual	135	22.0	110	17.9	70	11.4	25	4.1	15	2.4	25	4.1	115	18.7	95	15.4	615	100.0
	Degree or Higher	35	21.9	25	15.6	25	15.6	10	6.3	10	6.3	10	6.3	25	15.6	25	15.6	160	100.0
Not in a family nucleus	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	135	19.1	185	26.2	130	18.4	70	9.9	30	4.3	30	4.3	90	12.8	75	10.6	705	100.0
	Post school Qual	220	20.7	285	26.8	190	17.8	85	8.0	35	3.3	45	4.2	140	13.1	150	14.1	1065	100.0
	Degree or Higher	105	20.6	80	15.7	70	13.7	15	2.9	10	2.0	15	2.9	80	15.7	55	10.8	510	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 186: Number of comorbid disease by highest education qualification by family structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Family Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
Couple only	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	470	39.7	560	47.3	145	12.2	10	0.8	1185	100.0
	Post school Qual	755	37.5	975	48.4	270	13.4	10	0.5	2015	100.0
	Degree or Higher	320	44.1	335	46.2	65	9.0	10	1.4	725	100.0
Couple with children	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1400	56.2	965	38.8	110	4.4	10	0.4	2490	100.0
	Post school Qual	1305	50.7	1115	43.3	155	6.0	10	0.4	2575	100.0
	Degree or Higher	645	54.4	490	41.4	55	4.6	10	0.8	1185	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
Sole parent	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	235	48.0	215	43.9	40	8.2	.	.	490	100.0
	Post school Qual	280	45.5	270	43.9	65	10.6	10	1.6	615	100.0
	Degree or Higher	70	43.8	75	46.9	10	6.3	.	.	160	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
Not in a family nucleus	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	300	42.6	320	45.4	85	12.1	10	1.4	705	100.0
	Post school Qual	430	40.4	505	47.4	130	12.2	10	0.9	1065	100.0
	Degree or Higher	245	48.0	225	44.1	40	7.8	.	.	510	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 187: Chronic diseases by highest education qualification by household structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Household Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	800	19.7	650	16.0	535	13.2	170	4.2	60	1.5	135	3.3	525	12.9	330	8.1	4065	100.0
	Post school Qual	920	18.1	1090	21.4	935	18.4	315	6.2	105	2.1	185	3.6	720	14.1	470	9.2	5095	100.0
	Degree or Higher	395	19.3	300	14.7	325	15.9	70	3.4	20	1.0	35	1.7	275	13.4	175	8.6	2045	100.0
Two or more families	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	30	17.6	25	14.7	20	11.8	10	5.9	10	5.9	10	5.9	15	8.8	10	5.9	170	100.0
	Post school Qual	40	20.0	45	22.5	30	15.0	10	5.0	10	5.0	15	7.5	30	15.0	15	7.5	200	100.0
Other multi-person household	Degree or Higher	10	20.0	10	20.0	10	20.0	10	20.0	.	.	10	20.0	10	20.0	10	20.0	50	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	50	26.3	15	7.9	10	5.3	10	5.3	10	5.3	10	5.3	20	10.5	15	7.9	190	100.0
One person household	Post school Qual	65	22.8	35	12.3	20	7.0	10	3.5	10	3.5	10	3.5	40	14.0	35	12.3	285	100.0
	Degree or Higher	55	22.4	10	4.1	10	4.1	10	4.1	10	4.1	10	4.1	30	12.2	20	8.2	245	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	70	15.7	165	37.1	115	25.8	60	13.5	30	6.7	25	5.6	60	13.5	45	10.1	445	100.0
<b>Total</b>	Post school Qual	135	19.6	230	33.3	155	22.5	70	10.1	30	4.3	35	5.1	85	12.3	110	15.9	690	100.0
	Degree or Higher	50	20.4	65	26.5	50	20.4	10	4.1	10	4.1	15	6.1	40	16.3	30	12.2	245	100.0
	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 188: Number of comorbid disease by highest education qualification by household structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Household Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
One Family	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	2050	50.4	1715	42.2	285	7.0	15	0.4	4065	100.0
	Post school Qual	2285	44.8	2320	45.5	480	9.4	15	0.3	5095	100.0
	Degree or Higher	1015	49.6	900	44.0	125	6.1	10	0.5	2045	100.0
Two or more families	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	100	58.8	60	35.3	10	5.9	.	.	170	100.0
	Post school Qual	95	47.5	85	42.5	20	10.0	10	5.0	200	100.0
Other multiperson household	Degree or Higher	30	60.0	15	30.0	10	20.0	.	.	50	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	110	57.9	75	39.5	10	5.3	.	.	190	100.0
One person household	Post school Qual	145	50.9	130	45.6	10	3.5	.	.	285	100.0
	Degree or Higher	145	59.2	100	40.8	10	4.1	.	.	245	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	150	33.7	215	48.3	80	18.0	10	2.2	445	100.0
<b>Total</b>	Post school Qual	245	35.5	340	49.3	110	15.9	10	1.4	690	100.0
	Degree or Higher	95	38.8	115	46.9	35	14.3	.	.	245	100.0
	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

## 8.7 The Association of Education with Smoking Status

Overall, there were higher proportions of current smokers in respondents with a school or post-school qualification, with high proportions of never smokers in respondents who had a degree qualification or higher. This relationship was consistent across most age groups and by sex. Over 30% of never married respondents or living in sole parent families, who had a post-school qualification were current smokers.

**Table 189: Smoking status by highest education qualification, overall**

Highest Education (W3)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	-	-	-	-	-	-	-	-	-	-
School Qual	2830	58.2	1085	22.3	935	19.2	20	0.4	4865	100.0
Post school Qual	3135	50.0	1760	28.1	1355	21.6	20	0.3	6265	100.0
Degree or Higher	1815	70.1	550	21.2	225	8.7	10	0.4	2590	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3695</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation



**Table 190: Smoking status by highest education qualification by age and sex**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Age (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
0-14	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	205	91.1	10	4.4	20	8.9	10	4.4	225	100.0
	Post school Qual	10	100.0	.	.	10	100.0	.	.	10	100.0
	Degree or Higher	10	100.0	.	.	.	.	.	.	10	100.0
15-24	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	905	72.1	100	8.0	245	19.5	10	0.8	1255	100.0
	Post school Qual	365	55.3	80	12.1	210	31.8	.	.	660	100.0
	Degree or Higher	235	82.5	20	7.0	25	8.8	.	.	285	100.0
25-34	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	355	49.0	155	21.4	215	29.7	10	1.4	725	100.0
	Post school Qual	530	48.2	230	20.9	340	30.9	10	0.9	1100	100.0
	Degree or Higher	470	75.8	95	15.3	55	8.9	10	1.6	620	100.0
35-44	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	485	51.9	245	26.2	200	21.4	10	1.1	935	100.0
	Post school Qual	770	52.7	335	22.9	350	24.0	10	0.7	1460	100.0
	Degree or Higher	505	70.6	145	20.3	60	8.4	10	1.4	715	100.0
45-54	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	380	52.4	205	28.3	140	19.3	10	1.4	725	100.0
	Post school Qual	615	49.6	380	30.6	235	19.0	10	0.8	1240	100.0
	Degree or Higher	355	65.7	140	25.9	50	9.3	10	1.9	540	100.0
55-64	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	230	51.7	135	30.3	80	18.0	10	2.2	445	100.0
	Post school Qual	445	47.1	340	36.0	155	16.4	10	1.1	945	100.0
	Degree or Higher	155	58.5	85	32.1	25	9.4	10	3.8	265	100.0
65+	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	285	51.4	235	42.3	35	6.3	10	1.8	555	100.0
	Post school Qual	400	46.8	390	45.6	60	7.0	10	1.2	855	100.0
	Degree or Higher	90	56.3	60	37.5	15	9.4	.	.	160	100.0
Male	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1135	55.9	475	23.4	415	20.4	10	0.5	2030	100.0
	Post school Qual	1525	48.0	970	30.5	680	21.4	10	0.3	3180	100.0
	Degree or Higher	815	67.6	265	22.0	120	10.0	10	0.8	1205	100.0
Female	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1700	59.9	605	21.3	525	18.5	10	0.4	2840	100.0
	Post school Qual	1615	52.4	790	25.6	675	21.9	10	0.3	3085	100.0
	Degree or Higher	995	72.1	280	20.3	105	7.6	10	0.7	1380	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 191: Smoking status by highest education qualification by prioritised ethnicity**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Ethnicity (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	2140	56.5	955	25.2	685	18.1	15	0.4	3790	100.0
	Post school Qual	2680	51.5	1535	29.5	980	18.8	15	0.3	5205	100.0
	Degree or Higher	1445	69.5	465	22.4	165	7.9	10	0.5	2080	100.0
Māori	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	240	50.0	75	15.6	165	34.4	10	2.1	480	100.0
	Post school Qual	225	32.8	165	24.1	295	43.1	10	1.5	685	100.0
Pacific	Degree or Higher	85	58.6	40	27.6	30	20.7	.	.	145	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	195	65.0	30	10.0	70	23.3	10	3.3	300	100.0
Asian	Post school Qual	95	50.0	35	18.4	55	28.9	10	5.3	190	100.0
	Degree or Higher	45	90.0	10	20.0	10	20.0	.	.	50	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
Total	School Qual	255	86.4	20	6.8	25	8.5	.	.	295	100.0
	Post school Qual	140	71.8	25	12.8	25	12.8	10	5.1	195	100.0
	Degree or Higher	235	77.0	40	13.1	30	9.8	.	.	305	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3695</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 192: Smoking status by highest education qualification by legal marital status**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Marital Status (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	205	89.1	10	4.3	15	6.5	10	4.3	230	100.0
	Post school Qual	10	66.7	10	66.7	10	66.7	.	.	15	100.0
	Degree or Higher	10	100.0	.	.	10	100.0	.	.	10	100.0
Never Married	No Qualification	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1145	62.1	245	13.3	445	24.1	10	0.5	1845	100.0
	Post school Qual	795	48.6	285	17.4	550	33.6	10	0.6	1635	100.0
Divorced	Degree or Higher	575	73.7	125	16.0	85	10.9	.	.	780	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	300	47.2	200	31.5	140	22.0	10	1.6	635	100.0
	Post school Qual	455	43.3	335	31.9	265	25.2	10	1.0	1050	100.0
Widowed	Degree or Higher	160	57.1	85	30.4	35	12.5	.	.	280	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1185	54.9	635	29.4	335	15.5	10	0.5	2160	100.0
	Post school Qual	1870	52.5	1145	32.1	535	15.0	15	0.4	3565	100.0
Separated	Degree or Higher	1075	70.7	340	22.4	105	6.9	10	0.7	1520	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1185	54.9	635	29.4	335	15.5	10	0.5	2160	100.0
Married	Post school Qual	1870	52.5	1145	32.1	535	15.0	15	0.4	3565	100.0
	Degree or Higher	1075	70.7	340	22.4	105	6.9	10	0.7	1520	100.0
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 193: Smoking status by highest education qualification by family structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Family Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
Couple only	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	605	51.1	375	31.6	205	17.3	10	0.8	1185	100.0
	Post school Qual	960	47.6	720	35.7	330	16.4	10	0.5	2015	100.0
	Degree or Higher	485	66.9	185	25.5	50	6.9	10	1.4	725	100.0
Couple with children	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	1580	63.5	445	17.9	450	18.1	10	0.4	2490	100.0
	Post school Qual	1435	55.7	625	24.3	505	19.6	10	0.4	2575	100.0
	Degree or Higher	865	72.7	230	19.3	90	7.6	10	0.8	1190	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
Sole parent	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	285	58.2	85	17.3	120	24.5	.	.	490	100.0
	Post school Qual	230	37.4	130	21.1	255	41.5	10	1.6	615	100.0
	Degree or Higher	95	59.4	40	25.0	25	15.6	.	.	160	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-
Not in a family nucleus	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	360	51.1	180	25.5	160	22.7	10	1.4	705	100.0
	Post school Qual	510	47.9	285	26.8	265	24.9	10	0.9	1065	100.0
	Degree or Higher	360	69.9	90	17.5	60	11.7	.	.	515	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3695</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 194: Smoking status by highest education qualification by household structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Household Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%
One Family	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	2410	59.3	885	21.8	755	18.6	15	0.4	4065	100.0
	Post school Qual	2590	50.9	1440	28.3	1045	20.5	15	0.3	5090	100.0
	Degree or Higher	1435	70.2	445	21.8	160	7.8	10	0.5	2045	100.0
Two or more families	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	100	58.8	30	17.6	40	23.5	.	.	170	100.0
	Post school Qual	80	40.0	50	25.0	70	35.0	10	5.0	200	100.0
	Degree or Higher	35	63.6	10	18.2	10	18.2	.	.	55	100.0
Other multi-person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	105	55.3	30	15.8	55	28.9	.	.	190	100.0
	Post school Qual	140	49.1	65	22.8	80	28.1	.	.	285	100.0
	Degree or Higher	185	75.5	30	12.2	30	12.2	.	.	245	100.0
One person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-
	School Qual	220	49.4	135	30.3	90	20.2	10	2.2	445	100.0
	Post school Qual	330	47.8	200	29.0	160	23.2	10	1.4	690	100.0
	Degree or Higher	160	65.3	60	24.5	30	12.2	.	.	245	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3695</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

## **8.8 The Association of Education with Alcohol Consumption**

Overall, consumption of alcohol was greater in respondents who had a post-school or degree qualification or higher. This relationship was relatively consistent across age groups and by sex. The proportion of males drinking four or more times a week or binge drinking was much greater than females at all levels of education. There were high proportions of respondents who had never been married, were in sole parent families, or not living in a family nucleus or living in other multi-person households who were more likely to be binge drinkers at all levels of education.

**Table 195: Alcohol consumption by highest education qualification, overall**

Highest Education (W3)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
School Qual	850	17.5	925	19.0	1405	28.9	690	14.2	980	20.1	30	0.6	1245	25.6	4870	100.0
Post school Qual	820	13.1	1090	17.4	1700	27.1	985	15.7	1645	26.2	30	0.5	1425	22.7	6270	100.0
Degree or Higher	375	14.5	345	13.3	685	26.4	455	17.6	725	28.0	10	0.4	475	18.3	2590	100.0
No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 196: Alcohol consumption by highest education qualification by age and sex**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	70	30.4	80	34.8	60	26.1	10	4.3	10	4.3	10	4.3	35	15.2	230	100.0
	Post school Qual	10	100.0	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0	10	100.0
	Degree or Higher	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
15-24	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	200	15.9	275	21.9	465	37.1	205	16.3	105	8.4	10	0.8	530	42.2	1255	100.0
	Post school Qual	85	12.9	160	24.2	240	36.4	105	15.9	65	9.8	10	1.5	280	42.4	660	100.0
	Degree or Higher	35	12.3	45	15.8	115	40.4	65	22.8	25	8.8	.	.	125	43.9	285	100.0
25-34	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	105	14.4	155	21.2	245	33.6	110	15.1	105	14.4	10	1.4	235	32.2	730	100.0
	Post school Qual	110	10.0	225	20.4	380	34.4	175	15.8	210	19.0	10	0.9	390	35.3	1105	100.0
	Degree or Higher	105	16.9	105	16.9	180	29.0	115	18.5	110	17.7	10	1.6	145	23.4	620	100.0
35-44	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	125	13.4	175	18.7	260	27.8	155	16.6	225	24.1	10	1.1	245	26.2	935	100.0
	Post school Qual	155	10.6	245	16.8	430	29.5	280	19.2	345	23.6	10	0.7	365	25.0	1460	100.0
	Degree or Higher	110	15.3	100	13.9	185	25.7	130	18.1	190	26.4	10	1.4	125	17.4	720	100.0
45-54	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	115	15.9	95	13.1	160	22.1	100	13.8	250	34.5	10	1.4	125	17.2	725	100.0
	Post school Qual	165	13.3	180	14.5	310	25.0	205	16.5	370	29.8	10	0.8	230	18.5	1240	100.0
	Degree or Higher	75	13.9	50	9.3	130	24.1	95	17.6	195	36.1	10	1.9	65	12.0	540	100.0
55-64	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	90	20.2	60	13.5	100	22.5	60	13.5	125	28.1	10	2.2	50	11.2	445	100.0
	Post school Qual	125	13.2	135	14.3	195	20.6	140	14.8	340	36.0	10	1.1	115	12.2	945	100.0
	Degree or Higher	25	9.4	30	11.3	50	18.9	35	13.2	125	47.2	10	3.8	20	7.5	265	100.0
65+	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	140	25.2	90	16.2	110	19.8	40	7.2	165	29.7	10	1.8	20	3.6	555	100.0
	Post school Qual	175	20.5	140	16.4	150	17.5	75	8.8	315	36.8	.	.	45	5.3	855	100.0
	Degree or Higher	20	12.5	15	9.4	25	15.6	15	9.4	80	50.0	10	6.3	10	6.3	160	100.0

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Male	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	265	13.1	295	14.5	585	28.8	360	17.7	515	25.4	15	0.7	715	35.2	2030	100.0
	Post school Qual	345	10.8	385	12.1	855	26.9	555	17.5	1025	32.2	20	0.6	890	28.0	3180	100.0
	Degree or Higher	130	10.8	125	10.4	290	24.1	220	18.3	430	35.7	10	0.8	255	21.2	1205	100.0
Female	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	580	20.5	635	22.4	815	28.7	325	11.5	460	16.2	20	0.7	530	18.7	2835	100.0
	Post school Qual	470	15.2	705	22.8	845	27.3	425	13.8	615	19.9	10	0.3	530	17.2	3090	100.0
Total	Degree or Higher	240	17.4	220	15.9	395	28.6	230	16.7	295	21.4	10	0.7	225	16.3	1380	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation



**Table 197: Alcohol consumption by highest education qualification by prioritised ethnicity**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Ethnicity (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	440	11.6	685	18.1	1140	30.0	595	15.7	915	24.1	25	0.7	1000	26.4	3795	100.0
	Post school Qual	535	10.3	835	16.0	1390	26.7	870	16.7	1540	29.6	25	0.5	1155	22.2	5205	100.0
	Degree or Higher	175	8.4	250	12.0	560	26.9	405	19.4	685	32.9	10	0.5	415	19.9	2085	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Māori	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	85	17.7	125	26.0	155	32.3	65	13.5	55	11.5	10	2.1	180	37.5	480	100.0
	Post school Qual	120	17.5	170	24.8	230	33.6	80	11.7	80	11.7	10	1.5	230	33.6	685	100.0
	Degree or Higher	30	20.7	25	17.2	45	31.0	20	13.8	25	17.2	.	.	40	27.6	145	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	165	55.0	55	18.3	65	21.7	10	3.3	10	3.3	10	3.3	45	15.0	300	100.0
	Post school Qual	75	39.5	45	23.7	40	21.1	20	10.5	10	5.3	10	5.3	35	18.4	190	100.0
	Degree or Higher	25	45.5	10	18.2	10	18.2	10	18.2	10	18.2	.	.	10	18.2	55	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asian	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	160	54.2	60	20.3	45	15.3	15	5.1	10	3.4	.	.	15	5.1	295	100.0
	Post school Qual	85	44.7	40	21.1	45	23.7	10	5.3	15	7.9	10	5.3	10	5.3	190	100.0
	Degree or Higher	140	45.9	55	18.0	70	23.0	25	8.2	15	4.9	.	.	15	4.9	305	100.0
	No Qualification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 198: Alcohol consumption by highest education qualification by legal marital status**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Marital Status (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	75	32.6	80	34.8	55	23.9	10	4.3	10	4.3	10	4.3	35	15.2	230	100.0
	Post school Qual	10	66.7	10	66.7	10	66.7	10	66.7	.	.	.	.	10	66.7	15	100.0
	Degree or Higher No Qualification	10	100.0	.	.	.	.	.	.	10	100.0	.	.	.	.	10	100.0
Never Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	260	14.1	390	21.1	655	35.5	315	17.1	215	11.7	10	0.5	725	39.3	1845	100.0
	Post school Qual	185	11.3	365	22.3	550	33.6	280	17.1	245	15.0	10	0.6	610	37.3	1635	100.0
	Degree or Higher	90	11.5	105	13.5	265	34.0	165	21.2	155	19.9	.	.	250	32.1	780	100.0
Divorced Widowed Separated	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	120	18.9	110	17.3	175	27.6	85	13.4	145	22.8	10	1.6	115	18.1	635	100.0
	Post school Qual	180	17.1	195	18.5	260	24.6	145	13.7	270	25.6	10	0.9	210	19.9	1055	100.0
	Degree or Higher	35	12.5	35	12.5	75	26.8	40	14.3	90	32.1	.	.	50	17.9	280	100.0
Married	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	395	18.3	350	16.2	515	23.8	275	12.7	615	28.5	15	0.7	365	16.9	2160	100.0
	Post school Qual	460	12.9	530	14.9	890	25.0	555	15.6	1125	31.6	15	0.4	600	16.8	3565	100.0
	Degree or Higher	250	16.4	205	13.4	345	22.6	240	15.7	480	31.5	10	0.7	180	11.8	1525	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 199: Alcohol consumption by highest education qualification by family structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Family Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	190	16.0	160	13.5	295	24.9	170	14.3	360	30.4	10	0.8	240	20.3	1185	100.0
	Post school Qual	230	11.4	300	14.9	450	22.3	295	14.6	740	36.7	10	0.5	345	17.1	2015	100.0
	Degree or Higher	70	9.7	95	13.2	175	24.3	115	16.0	270	37.5	10	1.4	110	15.3	720	100.0
Couple with children	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	430	17.3	520	20.9	745	29.9	355	14.3	425	17.1	15	0.6	680	27.3	2490	100.0
	Post school Qual	310	12.0	435	16.9	770	29.9	440	17.1	600	23.3	10	0.4	645	25.0	2575	100.0
	Degree or Higher	220	18.6	165	13.9	285	24.1	210	17.7	305	25.7	10	0.8	185	15.6	1185	100.0
Sole parent	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	110	22.4	135	27.6	140	28.6	65	13.3	50	10.2	.	.	145	29.6	490	100.0
	Post school Qual	105	17.1	175	28.5	180	29.3	75	12.2	75	12.2	10	1.6	175	28.5	615	100.0
	Degree or Higher	25	15.6	30	18.8	55	34.4	20	12.5	30	18.8	.	.	30	18.8	160	100.0
Not in a family nucleus	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	125	17.7	110	15.6	220	31.2	95	13.5	145	20.6	10	1.4	180	25.5	705	100.0
	Post school Qual	170	16.0	185	17.4	300	28.2	170	16.0	235	22.1	10	0.9	255	23.9	1065	100.0
Degree or Higher	65	12.6	60	11.7	165	32.0	105	20.4	120	23.3	.	.	150	29.1	515	100.0	
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

**Table 200: Alcohol consumption by highest education qualification by household structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Household Structure (W1)	Highest Education (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	675	16.6	780	19.2	1170	28.8	580	14.3	830	20.4	25	0.6	1045	25.7	4065	100.0
	Post school Qual	615	12.1	880	17.3	1380	27.1	800	15.7	1390	27.3	20	0.4	1140	22.4	5090	100.0
	Degree or Higher No Qualification	295	14.4	280	13.7	515	25.2	340	16.6	605	29.6	10	0.5	330	16.1	2045	100.0
Two or more families	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	65	38.2	40	23.5	35	20.6	15	8.8	15	8.8	.	.	40	23.5	170	100.0
	Post school Qual	50	25.0	50	25.0	45	22.5	25	12.5	30	15.0	10	5.0	50	25.0	200	100.0
	Degree or Higher No Qualification	20	36.4	10	18.2	15	27.3	10	18.2	10	18.2	.	.	10	18.2	55	100.0
Other multi-person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	25	13.2	25	13.2	70	36.8	35	18.4	35	18.4	.	.	95	50.0	190	100.0
	Post school Qual	25	8.9	45	16.1	100	35.7	60	21.4	50	17.9	10	3.6	120	42.9	280	100.0
	Degree or Higher	30	12.2	25	10.2	90	36.7	55	22.4	45	18.4	.	.	100	40.8	245	100.0
One person household	NA:DK:REF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	School Qual	85	19.3	70	15.9	120	27.3	55	12.5	100	22.7	10	2.3	65	14.8	440	100.0
	Post school Qual	130	18.7	115	16.5	170	24.5	95	13.7	170	24.5	10	1.4	120	17.3	695	100.0
	Degree or Higher	35	14.3	25	10.2	65	26.5	45	18.4	70	28.6	.	.	45	18.4	245	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

- Data suppressed due to problems with derivation

## **Chapter 9 The Association of Labour Force Status with Health Measures**

A respondent's labour force involvement is defined as being either employed, not employed but seeking work, or not employed and not seeking work at the HED (interview date).

### **9.1 The Association of Labour Force Status with Demographics**

Overall, more males had were employed than females at Wave 1. The proportion of respondents working peaked in the middle age groups. There were higher proportions of unemployed respondents (not employed, looking for work) in the younger age groups. The high proportions of not employed, not looking for work respondents in the 15-24 and 65+ age groups reflects the numbers of students and retirees, respectively. The high proportion of female respondents not employed and not looking for work may reflect motherhood, however, these numbers are not adjusted for age. Non-Māori, non-Pacific, non-Asian respondents had highest proportion working, along with married respondents, and couples living with children. The high proportion of respondents who were separated, divorced or widowed or living in single person households who were not employed and not looking for work may reflect high proportions of retirees in this group.

If a respondent was working in Wave 1 there wasn't a lot of change in their labour force status, with 91% remaining working in Wave 3. Of the Wave 1 working population 8% moved to not employed and not looking for work. Over 54% of respondents who were unemployed (looking for work) at Wave 1 were working at Wave 3.

## 9.1.1 Labour force status by baseline demographics

**Table 201: Labour force status, overall and by age and sex**

Age (W1)	Labour Force Status (W1)											
	NA		Under 15		Working		Not employed, looking for work		Not employed, not looking for work		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
0-14	310	52.5	285	48.3	.	.	.	.	.	.	590	100.0
15-24	.	.	.	.	1270	50.6	95	3.8	1145	45.6	2510	100.0
25-34	.	.	.	.	2140	75.8	75	2.7	605	21.4	2825	100.0
35-44	.	.	.	.	3045	80.8	105	2.8	620	16.4	3770	100.0
45-54	.	.	.	.	2720	84.1	60	1.9	450	13.9	3235	100.0
55-64	.	.	.	.	1685	67.1	50	2.0	770	30.7	2510	100.0
65+	.	.	.	.	355	12.8	10	0.4	2415	86.9	2780	100.0
Male	160	1.9	140	1.7	5770	68.9	195	2.3	2115	25.2	8380	100.0
Female	150	1.5	145	1.5	5445	55.3	205	2.1	3895	39.6	9840	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>285</b>	<b>1.6</b>	<b>11220</b>	<b>61.6</b>	<b>400</b>	<b>2.2</b>	<b>6005</b>	<b>33.0</b>	<b>18220</b>	<b>100.0</b>

\*Note Overseas removed

**Table 202: Labour force status by prioritised ethnicity**

Ethnicity (W1)	Labour Force Status (W1)											
	NA		Working		Not employed, looking for work		Not employed, not looking for work		Under 15		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	200	1.4	9125	63.1	250	1.7	4685	32.4	195	1.3	14455	100.0
Māori	65	3.2	1175	57.5	90	4.4	660	32.3	55	2.7	2045	100.0
Pacific	25	3.1	440	54.7	30	3.7	300	37.3	15	1.9	805	100.0
Asian	20	2.2	480	52.7	30	3.3	365	40.1	20	2.2	910	100.0
<b>Total</b>	<b>305</b>	<b>1.7</b>	<b>11215</b>	<b>61.6</b>	<b>400</b>	<b>2.2</b>	<b>6005</b>	<b>33.0</b>	<b>285</b>	<b>1.6</b>	<b>18220</b>	<b>100.0</b>

**Table 203: Labour force status by legal marital status**

Marital Status (W1)	Labour Force Status (W1)											
	NA		Working		Not employed, looking for work		Under 15		Not employed, not looking for work		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	310	52.1	10	1.7	10	1.7	280	47.1	.	.	595	100.0
Never Married	.	.	3215	61.9	195	3.8	.	.	1775	34.2	5190	100.0
Divorced	.	.	1535	51.3	60	2.0	.	.	1400	46.7	2995	100.0
Widowed	.	.	6465	68.5	135	1.4	.	.	2835	30.0	9440	100.0
Separated	.	.	6465	68.5	135	1.4	.	.	2835	30.0	9440	100.0
Married	.	.	6465	68.5	135	1.4	.	.	2835	30.0	9440	100.0
<b>Total</b>	<b>305</b>	<b>1.7</b>	<b>11220</b>	<b>61.6</b>	<b>400</b>	<b>2.2</b>	<b>280</b>	<b>1.5</b>	<b>6010</b>	<b>33.0</b>	<b>18215</b>	<b>100.0</b>

**Table 204: Labour force status by family structure**

Family Structure (W1)	Labour Force Status (W1)											
	Working		Not employed, looking for work		Not employed, not looking for work		NA		Under 15		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	3360	62.1	80	1.5	1975	36.5	.	.	.	.	5410	100.0
Couple with children	5325	68.6	150	1.9	1830	23.6	235	3.0	220	2.8	7760	100.0
Sole parent	890	48.5	85	4.6	725	39.5	70	3.8	65	3.5	1835	100.0
Not in a family nucleus	1650	51.4	85	2.6	1475	46.0	.	.	.	.	3210	100.0
<b>Total</b>	<b>11220</b>	<b>61.6</b>	<b>400</b>	<b>2.2</b>	<b>6010</b>	<b>33.0</b>	<b>310</b>	<b>1.7</b>	<b>285</b>	<b>1.6</b>	<b>18220</b>	<b>100.0</b>

**Table 205: Labour force status by household structure**

Household Structure (W1)	Labour Force Status (W1)											
	NA		Working		Not employed, looking for work		Not employed, not looking for work		Under 15		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
One Family	295	2.0	9380	63.9	295	2.0	4430	30.2	275	1.9	14675	100.0
Two or more families	10	1.6	325	53.3	30	4.9	230	37.7	10	1.6	610	100.0
Other multi-person household	.	.	565	68.5	25	3.0	235	28.5	.	.	825	100.0
One person household	.	.	950	45.1	50	2.4	1105	52.5	.	.	2105	100.0
<b>Total</b>	<b>305</b>	<b>1.7</b>	<b>11220</b>	<b>61.6</b>	<b>400</b>	<b>2.2</b>	<b>6010</b>	<b>33.0</b>	<b>280</b>	<b>1.5</b>	<b>18215</b>	<b>100.0</b>

### 9.1.2 Changes in labour force status

**Table 206: Changes in labour force status between waves 1 and 3.**

Labour Force Status (W1)	Labour Force Status (W3)							
	Working		Not employed, looking for work		Not employed, not looking for work		Total	
	N	%	N	%	N	%	N	%
NA	60	19.7	10	3.3	240	78.7	305	100.0
Working	10240	91.3	100	0.9	870	7.8	11220	100.0
Not employed, looking for work	215	53.8	60	15.0	125	31.3	400	100.0
Not employed, not looking for work	1275	21.2	150	2.5	4585	76.4	6005	100.0
Under 15	105	36.8	20	7.0	160	56.1	285	100.0
<b>Total</b>	<b>11900</b>	<b>65.3</b>	<b>330</b>	<b>1.8</b>	<b>5980</b>	<b>32.8</b>	<b>18220</b>	<b>100.0</b>

## 9.2 The Association of Labour Force Status with Self-Rated Health

The highest proportion of respondents reporting excellent or very good health status were respondents who were working at Wave 1. This was consistent across age groups, as well as by sex, ethnicity, marital status, family and household structure. There were high proportions of respondents who were not employed and not looking for work, reporting fair or poor health. This was particularly evident in respondents who were separated, divorced, or widowed, not living in a family nucleus or single person households.

**Table 207: Self-rated health, by labour force status, overall**

Labour Force Status (W1)	Self Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA	165	53.2	95	30.6	35	11.3	10	3.2	10	3.2	310	100.0
Working	4860	43.3	4000	35.7	1910	17.0	400	3.6	50	0.4	11220	100.0
Not employed, looking for work	120	30.0	125	31.3	115	28.8	30	7.5	10	2.5	400	100.0
Not employed, not looking for work	1630	27.1	1730	28.8	1620	27.0	765	12.7	255	4.2	6010	100.0
Overseas	10	100.0	.	.	.	.	.	.	.	.	10	100.0
Under 15	160	56.1	85	29.8	30	10.5	10	3.5	.	.	285	100.0
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>



**Table 208: Self-rated health, by labour force status, by age and sex**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Age (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	165	54.1	100	32.8	40	13.1	10	3.3	10	3.3	305	100.0
	Under 15	165	57.9	85	29.8	30	10.5	10	3.5	.	.	285	100.0
15-24	Working	605	47.6	435	34.3	200	15.7	30	2.4	10	0.8	1270	100.0
	Not employed, looking for work	35	36.8	30	31.6	25	26.3	10	10.5	.	.	95	100.0
	Not employed, not looking for work	605	52.8	330	28.8	165	14.4	30	2.6	10	0.9	1145	100.0
25-34	Working	1090	50.9	735	34.3	250	11.7	60	2.8	10	0.5	2140	100.0
	Not employed, looking for work	30	40.0	25	33.3	15	20.0	10	13.3	.	.	75	100.0
	Not employed, not looking for work	245	40.5	190	31.4	120	19.8	45	7.4	10	1.7	605	100.0
35-44	Working	1390	45.6	1055	34.6	480	15.8	105	3.4	20	0.7	3045	100.0
	Not employed, looking for work	30	28.6	30	28.6	30	28.6	10	9.5	10	9.5	105	100.0
	Not employed, not looking for work	195	31.2	185	29.6	145	23.2	65	10.4	35	5.6	625	100.0
45-54	Working	1125	41.4	980	36.0	510	18.8	100	3.7	10	0.4	2720	100.0
	Not employed, looking for work	10	15.4	20	30.8	25	38.5	10	15.4	10	15.4	65	100.0
	Not employed, not looking for work	105	23.3	115	25.6	110	24.4	65	14.4	60	13.3	450	100.0
55-64	Working	545	32.3	675	40.1	370	22.0	80	4.7	10	0.6	1685	100.0
	Not employed, looking for work	15	27.3	15	27.3	20	36.4	10	18.2	.	.	55	100.0
	Not employed, not looking for work	130	16.9	190	24.7	245	31.8	150	19.5	55	7.1	770	100.0
65+	Working	115	32.4	125	35.2	95	26.8	20	5.6	10	2.8	355	100.0
	Not employed, looking for work	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0
	Not employed, not looking for work	360	14.9	710	29.4	840	34.8	410	17.0	95	3.9	2415	100.0
Male	NA	100	64.5	45	29.0	10	6.5	10	6.5	10	6.5	155	100.0
	Under 15	80	57.1	40	28.6	15	10.7	10	7.1	.	.	140	100.0
	Working	2420	41.9	2075	35.9	1020	17.7	225	3.9	30	0.5	5775	100.0
	Not employed, looking for work	60	30.8	60	30.8	55	28.2	20	10.3	10	5.1	195	100.0
	Not employed, not looking for work	565	26.7	570	27.0	575	27.2	305	14.4	105	5.0	2115	100.0
Female	NA	65	43.3	55	36.7	25	16.7	10	6.7	10	6.7	150	100.0
	Under 15	85	58.6	45	31.0	15	10.3	10	6.9	.	.	145	100.0
	Working	2440	44.8	1920	35.3	890	16.3	180	3.3	20	0.4	5445	100.0
	Not employed, looking for work	60	29.3	60	29.3	65	31.7	15	7.3	10	4.9	205	100.0
	Not employed, not looking for work	1065	27.4	1165	29.9	1040	26.7	465	12.0	155	4.0	3890	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 209: Self-rated health, by labour force status, by prioritised ethnicity**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Ethnicity (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	105	53.8	60	30.8	25	12.8	10	5.1	10	5.1	195	100.0
	Working	4035	44.2	3265	35.8	1475	16.2	305	3.3	40	0.4	9125	100.0
	Not employed, looking for work	75	30.0	80	32.0	70	28.0	20	8.0	10	4.0	250	100.0
	Not employed, not looking for work	1230	26.3	1365	29.1	1280	27.3	610	13.0	195	4.2	4685	100.0
	Under 15	105	53.8	70	35.9	15	7.7	10	5.1	.	.	195	100.0
Māori	NA	30	46.2	25	38.5	10	15.4	10	15.4	.	.	65	100.0
	Working	410	34.9	450	38.3	255	21.7	60	5.1	10	0.9	1175	100.0
	Not employed, looking for work	20	22.2	25	27.8	35	38.9	10	11.1	10	11.1	90	100.0
	Not employed, not looking for work	170	25.6	195	29.3	180	27.1	95	14.3	25	3.8	665	100.0
	Under 15	30	54.5	15	27.3	10	18.2	.	.	.	.	55	100.0
Pacific	NA	15	60.0	10	40.0	10	40.0	.	.	.	.	25	100.0
	Working	200	45.5	130	29.5	85	19.3	20	4.5	10	2.3	440	100.0
	Not employed, looking for work	15	42.9	10	28.6	10	28.6	10	28.6	.	.	35	100.0
	Not employed, not looking for work	95	32.2	75	25.4	55	18.6	35	11.9	30	10.2	295	100.0
	Under 15	10	66.7	.	.	10	66.7	.	.	.	.	15	100.0
Asian	NA	10	50.0	10	50.0	10	50.0	.	.	.	.	20	100.0
	Working	210	43.8	155	32.3	95	19.8	20	4.2	.	.	480	100.0
	Not employed, looking for work	15	50.0	10	33.3	10	33.3	10	33.3	.	.	30	100.0
	Not employed, not looking for work	130	35.6	95	26.0	100	27.4	25	6.8	10	2.7	365	100.0
	Under 15	10	50.0	10	50.0	10	50.0	.	.	.	.	20	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

**Table 210: Self-rated health, by labour force status, by legal marital status**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Marital Status (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	160	52.5	100	32.8	40	13.1	10	3.3	10	3.3	305	100.0
	Working	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
	Not employed, looking for work	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
	Under 15	165	58.9	85	30.4	30	10.7	10	3.6	.	.	280	100.0
Never Married	Working	1450	45.1	1120	34.8	530	16.5	100	3.1	10	0.3	3215	100.0
	Not employed, looking for work	65	32.5	70	35.0	55	27.5	10	5.0	.	.	200	100.0
	Not employed, not looking for work	750	42.4	510	28.8	340	19.2	120	6.8	55	3.1	1770	100.0
Divorced	Working	590	38.6	545	35.6	315	20.6	70	4.6	10	0.7	1530	100.0
Widowed	Not employed, looking for work	10	16.7	15	25.0	30	50.0	10	16.7	10	16.7	60	100.0
Separated	Not employed, not looking for work	220	15.7	375	26.8	450	32.1	265	18.9	90	6.4	1400	100.0
Married	Working	2820	43.6	2330	36.0	1060	16.4	230	3.6	30	0.5	6465	100.0
	Not employed, looking for work	45	33.3	40	29.6	40	29.6	15	11.1	10	7.4	135	100.0
	Not employed, not looking for work	660	23.3	845	29.8	830	29.3	380	13.4	115	4.1	2835	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 211: Self-rated health, by labour force status, by family structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Family Structure (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	Working	1370	40.8	1255	37.4	605	18.0	115	3.4	10	0.3	3360	100.0
	Not employed, looking for work	20	25.0	25	31.3	30	37.5	10	12.5	.	.	80	100.0
	Not employed, not looking for work	355	18.0	580	29.4	655	33.2	310	15.7	80	4.1	1975	100.0
Couple with children	Working	2485	46.7	1840	34.6	800	15.0	175	3.3	25	0.5	5320	100.0
	Not employed, looking for work	55	36.7	40	26.7	35	23.3	15	10.0	10	6.7	150	100.0
	Not employed, not looking for work	780	42.6	525	28.7	335	18.3	130	7.1	55	3.0	1830	100.0
	NA	130	55.3	70	29.8	30	12.8	10	4.3	10	4.3	235	100.0
	Under 15	130	59.1	70	31.8	20	9.1	10	4.5	.	.	220	100.0
Sole parent	Working	350	39.3	315	35.4	185	20.8	45	5.1	10	1.1	890	100.0
	Not employed, looking for work	25	29.4	25	29.4	30	35.3	10	11.8	.	.	85	100.0
	Not employed, not looking for work	225	30.8	200	27.4	175	24.0	85	11.6	45	6.2	730	100.0
	NA	30	42.9	25	35.7	10	14.3	10	14.3	10	14.3	70	100.0
	Under 15	35	53.8	20	30.8	10	15.4	.	.	.	.	65	100.0
Not in a family nucleus	Working	655	39.7	595	36.1	320	19.4	70	4.2	15	0.9	1650	100.0
	Not employed, looking for work	20	23.5	30	35.3	30	35.3	10	11.8	10	11.8	85	100.0
	Not employed, not looking for work	275	18.6	425	28.7	450	30.4	240	16.2	75	5.1	1480	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 212: Self-rated health, by labour force status, by household structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Household Structure (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	155	52.5	95	32.2	35	11.9	10	3.4	10	3.4	295	100.0
	Working	4150	44.2	3325	35.4	1545	16.5	325	3.5	35	0.4	9380	100.0
	Not employed, looking for work	90	30.5	90	30.5	85	28.8	25	8.5	10	3.4	295	100.0
	Not employed, not looking for work	1325	29.9	1295	29.2	1130	25.5	510	11.5	170	3.8	4430	100.0
	Overseas	10	100.0	.	.	.	.	.	.	.	.	10	100.0
	Under 15	160	57.1	85	30.4	30	10.7	10	3.6	.	.	280	100.0
Two or more families	NA	10	66.7	10	66.7	10	66.7	.	.	10	66.7	15	100.0
	Working	120	36.9	120	36.9	65	20.0	15	4.6	10	3.1	325	100.0
	Not employed, looking for work	10	33.3	10	33.3	10	33.3	10	33.3	.	.	30	100.0
	Not employed, not looking for work	60	26.1	50	21.7	65	28.3	40	17.4	15	6.5	230	100.0
	Overseas	10	100.0	.	.	.	.	.	.	.	.	10	100.0
	Under 15	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
Other multi-person household	Working	250	44.2	200	35.4	100	17.7	20	3.5	.	.	565	100.0
	Not employed, looking for work	10	33.3	10	33.3	10	33.3	.	.	.	.	30	100.0
	Not employed, not looking for work	80	33.3	85	35.4	55	22.9	15	6.3	10	4.2	240	100.0
One person household	Working	350	36.8	355	37.4	195	20.5	45	4.7	10	1.1	950	100.0
	Not employed, looking for work	10	20.0	15	30.0	15	30.0	10	20.0	10	20.0	50	100.0
	Not employed, not looking for work	165	14.9	300	27.1	370	33.5	210	19.0	60	5.4	1105	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3710</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

### 9.3 The Association of Labour Force Status with Health-Related Quality of Life (SF-36)

Overall, mean SF-36 scores increased were highest in younger respondents (labour force status NA or Under 15), however the number of respondents in these groups are relatively small. Typically, the mean SF-36 scores for respondents who were working was higher than the overall mean score. Respondents who were not employed and not looking for work had the lowest mean SF-36 scores, lower than the overall mean scores. The PCS score for respondents who were not employed and not looking for work was around 47, which is three points below the mean of 50, indicating much worse physical functioning in this population than the NZ population. These relations appear to be relatively consistent across age groups and by sex and ethnicity. The mean SF-36 scores for the divorced separated or widowed population is lower than all other respondents at all labour force status groups.

**Table 213: Overall mean (SD) SF-36 score, by labour force status**

Labour Force Status (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA	83.9	15.3	88.8	16.4	90.7	16.4	93.3	16.1	72.3	17.1	83.5	12.7	94.4	14.8	97.5	7.7	52.9	8.1	54.6	4.9
Working	81.8	17.2	83.9	21.3	87.9	20.1	92.2	17.9	66.5	18.5	84.2	13.2	93.8	14.5	91.3	15.4	52.8	8.3	52.2	7.4
Not employed, looking for work	72.3	23.0	79.5	23.8	81.5	24.1	85.3	25.1	62.5	19.7	78.9	16.7	87.6	20.8	86.6	19.6	49.4	10.6	50.3	8.7
Not employed, not looking for work	71.4	23.3	77.5	25.5	76.6	28.2	86.0	24.7	59.9	22.5	81.7	16.2	89.1	20.3	75.6	28.5	51.3	10.2	46.7	11.3
Overseas	84.7	9.3	94.7	9.2	89.6	13.0	91.7	14.4	68.8	10.8	66.7	15.3	77.8	24.1	98.3	2.9	44.7	8.3	59.2	5.0
Under 15	82.4	16.1	87.0	19.4	90.4	17.3	91.3	17.4	68.7	18.1	81.5	13.5	92.9	15.2	96.9	9.9	51.4	8.3	54.5	5.8
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 214: Mean (SD) SF-36 score by labour force status by age and sex**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	Labour Force Status (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0-14	NA	83.9	15.3	88.8	16.4	90.7	16.4	93.3	16.1	72.3	17.1	83.5	12.7	94.4	14.8	97.5	7.7	52.9	8.1	54.6	4.9
	Under 15	82.4	16.1	87.0	19.4	90.4	17.3	91.3	17.4	68.7	18.1	81.5	13.5	92.9	15.2	96.9	9.9	51.4	8.3	54.5	5.8
15-24	Working	80.8	16.8	84.3	21.2	88.5	19.0	90.4	18.8	65.1	18.1	82.3	13.4	93.2	14.1	95.5	11.5	51.2	8.6	53.4	6.3
	Not employed, looking for work	75.3	23.8	82.0	24.2	84.2	25.0	84.1	24.6	65.4	21.8	77.6	17.4	87.2	21.7	90.4	18.4	48.9	11.3	52.1	9.0
	Not employed, not looking for work	80.9	17.3	86.6	20.1	87.9	19.9	89.6	19.7	65.6	19.4	80.9	14.8	91.4	16.8	94.5	13.8	50.5	9.4	53.8	6.4
25-34	Working	83.6	15.8	85.6	20.3	89.0	19.2	91.7	18.0	65.3	18.6	82.9	13.9	93.0	15.4	94.3	12.8	51.7	8.8	53.6	6.4
	Not employed, looking for work	73.9	21.6	81.2	23.7	81.8	20.5	88.8	20.7	63.0	18.5	80.0	14.2	89.7	17.2	91.1	15.1	50.0	9.0	51.3	7.6
	Not employed, not looking for work	77.7	20.2	82.2	23.0	82.5	23.3	86.6	23.7	60.0	21.7	79.4	16.9	88.0	20.3	90.0	17.3	49.1	11.0	51.9	8.0
35-44	Working	82.4	17.1	84.0	21.2	87.7	20.0	91.3	18.9	65.7	18.9	83.2	13.6	93.0	15.6	92.4	13.6	52.1	8.7	52.7	7.0
	Not employed, looking for work	72.8	21.5	77.8	22.3	80.4	24.0	81.3	29.8	59.8	19.2	77.8	18.1	86.2	22.5	86.7	17.2	48.1	12.2	50.2	7.8
	Not employed, not looking for work	73.9	23.2	79.3	25.5	80.0	26.3	83.4	27.0	59.6	21.6	77.9	18.0	85.6	23.1	83.4	24.6	48.6	11.4	49.8	10.1
45-54	Working	81.7	17.6	83.2	22.0	87.8	20.3	93.4	16.7	67.4	18.2	85.1	12.6	94.6	13.5	89.8	16.7	53.6	7.7	51.6	7.9
	Not employed, looking for work	67.0	25.4	75.3	25.5	78.3	25.2	85.0	23.9	60.2	17.9	78.9	17.5	86.5	19.8	80.9	22.3	49.4	9.3	47.7	9.4
	Not employed, not looking for work	63.2	27.2	69.5	28.4	69.6	31.7	77.6	30.2	56.5	24.0	75.0	20.6	80.1	26.9	71.5	29.8	47.3	13.0	44.7	11.8
55-64	Working	80.2	18.3	82.8	21.4	87.1	21.2	93.9	16.8	69.0	17.9	86.8	11.8	95.1	13.0	86.9	17.6	54.7	7.2	50.4	8.0
	Not employed, looking for work	69.6	22.4	78.4	24.6	82.2	27.2	89.2	23.6	64.3	19.6	80.9	14.7	89.7	22.4	82.8	22.9	51.2	9.0	49.3	9.9
	Not employed, not looking for work	65.7	25.1	72.2	26.9	72.8	28.9	85.3	25.4	59.9	22.5	82.1	16.8	88.3	21.0	71.2	27.6	51.9	10.0	44.1	11.3
65+	Working	79.4	18.4	82.3	21.7	83.9	23.1	92.9	17.7	67.8	18.9	88.9	11.1	95.9	12.7	79.7	21.4	55.9	6.8	48.1	8.6
	Not employed, looking for work	69.7	25.3	91.9	13.7	81.9	21.5	93.1	14.1	63.9	22.9	85.6	17.9	86.1	17.2	67.8	30.5	53.5	10.0	47.0	7.9
	Not employed, not looking for work	68.0	23.3	74.7	25.9	71.3	30.1	86.5	24.8	57.9	23.5	84.8	14.2	91.0	18.9	63.2	30.0	53.6	8.8	42.4	11.6
Male	NA	86.2	14.4	91.3	14.3	91.2	16.5	94.4	15.2	74.6	15.5	84.3	11.9	95.9	11.7	98.5	5.7	53.7	7.3	55.2	4.5
	Under 15	85.2	13.5	86.9	19.0	91.6	15.6	94.3	13.3	69.0	17.8	82.3	12.8	94.5	12.0	97.1	11.3	52.2	7.2	54.7	6.1
	Working	81.8	17.1	84.5	21.0	88.9	19.6	93.5	16.4	68.6	18.0	85.4	12.5	94.9	13.3	92.4	14.5	53.6	7.8	52.3	7.1
	Not employed, looking for work	73.7	21.8	81.0	23.7	81.4	26.4	84.8	25.5	64.9	19.6	79.9	16.9	87.4	22.2	88.9	19.1	49.8	10.4	50.8	8.9
	Not employed, not looking for work	69.6	24.1	78.4	25.4	76.4	29.0	86.4	24.6	62.0	22.7	82.9	15.7	89.8	19.8	76.1	28.4	52.1	9.9	46.5	11.4

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	Labour Force Status (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Female	NA	81.5	15.8	86.2	18.0	90.1	16.3	92.1	17.0	69.8	18.5	82.6	13.5	92.8	17.4	96.4	9.3	52.0	8.7	54.1	5.2
	Under 15	79.8	17.9	87.1	19.8	89.2	18.8	88.4	20.2	68.4	18.4	80.8	14.0	91.3	17.7	96.7	8.3	50.5	9.2	54.3	5.6
	Working	81.9	17.3	83.2	21.5	86.7	20.6	90.8	19.2	64.4	18.6	83.0	13.7	92.6	15.5	90.1	16.2	51.9	8.8	52.0	7.6
	Not employed, looking for work	70.9	24.0	78.0	23.8	81.7	21.9	85.7	24.8	60.3	19.6	78.0	16.5	87.8	19.4	84.4	19.9	49.0	10.8	49.8	8.5
	Not employed, not looking for work	72.4	22.8	77.0	25.6	76.7	27.7	85.7	24.8	58.8	22.3	81.0	16.4	88.7	20.6	75.3	28.6	50.9	10.3	46.8	11.3
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>



**Table 215: Mean (SD) SF-36 score by labour force status qualification by prioritised ethnicity**

		SF36 (W3)																			
(W1)		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Ethnicity	Labour Force Status	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
nM,nP,nA	NA	83.9	15.3	87.6	16.7	90.8	16.2	93.2	16.6	71.8	17.0	83.7	12.4	94.1	15.7	97.6	6.5	52.9	8.0	54.5	4.8
	Working	82.2	17.1	83.6	21.2	88.0	20.1	92.4	17.7	66.1	18.5	84.3	13.1	94.2	14.1	91.1	15.5	52.9	8.3	52.1	7.4
	Not employed, looking for work	71.7	23.6	77.8	24.1	80.7	25.1	84.9	25.2	60.4	19.7	78.6	16.4	87.1	21.7	86.3	19.6	48.9	10.6	50.0	8.9
	Not employed, not looking for work	71.3	23.4	76.4	25.8	75.6	28.7	86.1	24.6	59.0	22.7	82.1	16.0	89.9	19.5	73.9	29.0	51.7	10.0	46.0	11.5
	Overseas Under 15	86.0	12.7	92.0	11.3	87.5	17.7	87.5	17.7	65.6	13.3	60.0	14.1	70.8	29.5	97.5	3.5	41.2	7.9	59.9	6.8
Māori	NA	83.8	15.7	91.3	16.4	90.1	18.6	93.8	14.9	70.9	18.4	82.8	13.9	94.3	14.9	96.7	10.7	52.5	8.8	54.9	5.7
	Working	80.6	17.9	84.3	21.8	87.1	20.8	91.4	19.2	67.4	18.1	84.3	13.7	92.8	15.5	91.7	15.3	52.7	8.8	52.1	7.4
	Not employed, looking for work	69.7	23.6	80.2	25.6	80.2	24.5	82.8	27.6	64.1	19.4	77.4	18.7	86.0	21.5	85.0	21.8	48.7	11.3	49.9	9.7
	Not employed, not looking for work	72.5	22.9	79.8	24.2	78.9	26.6	83.5	27.0	62.4	22.4	80.5	17.4	85.1	24.0	80.1	27.1	50.0	11.7	48.7	10.3
	Under 15	80.8	19.2	89.4	18.3	89.4	20.3	87.3	23.6	66.7	18.9	79.3	15.6	87.0	22.0	97.1	6.9	49.0	10.4	55.1	5.7
Pacific	NA	85.9	15.9	88.4	17.8	91.2	13.6	92.0	18.3	78.0	15.4	85.0	12.1	97.3	6.5	97.0	9.7	54.6	6.8	54.0	4.4
	Working	78.9	18.4	84.3	21.7	85.4	21.0	90.3	18.7	70.1	18.1	82.9	13.4	89.7	18.3	91.5	15.4	52.2	8.4	52.1	6.9
	Not employed, looking for work	78.1	19.8	87.8	17.5	84.9	21.5	83.9	24.6	67.5	21.7	79.7	15.5	89.5	16.9	87.3	19.1	50.2	10.6	52.1	6.3
	Not employed, not looking for work	66.8	25.3	79.2	26.1	74.9	28.7	82.0	26.4	62.1	21.4	78.6	16.1	81.2	26.0	78.1	28.0	48.9	10.5	47.5	11.3
	Under 15	89.9	17.8	91.3	17.9	90.4	14.1	95.0	11.4	83.3	18.1	87.3	7.3	95.0	10.4	100.0	0.0	56.1	5.5	55.0	3.4
Asian	NA	82.3	13.0	94.1	10.1	91.1	13.9	94.1	13.4	76.3	15.1	82.1	12.8	93.9	12.7	99.5	1.6	52.6	8.0	55.9	2.7
	Working	80.3	16.6	87.2	19.8	90.2	17.3	91.8	17.5	69.1	17.3	83.4	12.9	93.2	14.2	93.0	13.3	52.4	8.0	53.3	6.4
	Not employed, looking for work	78.5	15.6	83.2	19.3	89.7	15.4	97.4	9.7	70.3	15.6	85.6	12.2	95.1	11.0	93.3	10.6	54.2	5.9	52.2	5.8
	Not employed, not looking for work	74.9	20.4	85.8	21.6	86.1	20.1	91.2	18.7	66.2	18.4	80.7	15.8	91.4	15.8	87.2	20.1	51.2	8.9	51.6	8.3
	Overseas Under 15	82.0	.	100.0	.	93.8	.	100.0	.	75.0	.	80.0	.	91.7	.	100.0	.	51.8	.	57.7	.
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 216: Mean (SD) SF-36 score by labour force status by legal marital status**

		SF36 (W3)																			
(W1)		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Marital Status	Labour Force Status	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	NA	83.9	15.3	88.8	16.4	90.7	16.4	93.3	16.1	72.3	17.1	83.5	12.7	94.4	14.8	97.5	7.7	52.9	8.1	54.6	4.9
	Working	83.5	2.1	92.0	11.3	68.8	44.2	100.0	0.0	43.8	26.5	92.5	3.5	100.0	0.0	82.5	24.7	54.6	1.1	48.5	10.6
	Not employed, looking for work	78.5	9.2	100.0	0.0	100.0	0.0	75.0	35.4	65.6	4.4	67.5	31.8	91.7	11.8	100.0	0.0	42.9	16.7	60.1	4.7
	Under 15	82.4	16.1	87.0	19.4	90.4	17.3	91.3	17.4	68.7	18.1	81.5	13.5	92.9	15.2	96.9	9.9	51.4	8.3	54.5	5.8
Never Married	Working	81.3	17.1	84.3	20.9	88.0	19.7	90.7	18.6	65.4	18.7	82.6	13.8	92.6	15.4	93.6	13.4	51.5	8.8	53.0	6.8
	Not employed, looking for work	74.7	22.5	80.4	23.6	83.2	23.7	85.0	25.1	64.6	20.2	78.9	16.6	87.2	21.4	89.6	18.1	49.4	10.8	51.4	8.2
	Not employed, not looking for work	77.1	20.5	83.7	22.3	84.1	23.7	87.3	23.0	63.5	20.6	80.0	16.2	89.2	19.5	89.1	21.2	50.0	10.3	51.8	8.7
	Overseas	84.7	9.3	94.7	9.2	89.6	13.0	91.7	14.4	68.8	10.8	66.7	15.3	77.8	24.1	98.3	2.9	44.7	8.3	59.2	5.0
Divorced	Working	80.5	18.3	81.3	23.2	85.3	22.1	90.3	20.9	64.8	20.1	83.4	14.6	92.2	17.1	88.0	18.3	52.3	9.5	51.0	8.4
Widowed	Not employed, looking for work	62.3	24.8	72.1	25.3	74.3	25.8	79.6	30.0	54.2	19.2	74.7	16.2	80.3	25.4	76.0	24.7	46.3	10.1	46.8	10.3
Separated	Not employed, not looking for work	65.5	24.6	72.2	27.1	69.0	30.6	82.1	27.9	55.2	24.1	80.6	17.8	87.5	22.4	62.8	30.4	51.0	11.2	42.3	11.9
Married	Working	82.5	17.0	84.3	20.9	88.4	19.8	93.4	16.6	67.5	17.9	85.3	12.4	94.8	13.1	90.9	15.4	53.5	7.6	52.1	7.4
	Not employed, looking for work	73.2	21.7	81.2	22.8	82.2	23.7	88.3	22.1	63.3	18.5	81.1	16.6	91.6	16.3	86.8	17.5	50.9	10.2	50.2	8.2
	Not employed, not looking for work	70.8	23.5	76.2	25.8	75.6	28.4	87.0	23.9	60.0	22.4	83.3	15.2	89.8	19.7	73.5	28.1	52.3	9.5	45.6	11.3
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 217: Mean (SD) SF-36 score by labour force status by family structure**

		SF36 (W3)																			
(W1)		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Family Structure	Labour Force Status	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Couple only	Working	82.2	17.3	83.4	21.5	87.6	20.6	93.4	16.5	67.9	18.2	85.7	12.4	94.7	13.2	89.9	16.4	53.9	7.6	51.5	7.7
	Not employed, looking for work	71.1	23.4	80.0	23.6	83.6	22.8	85.8	25.4	62.6	19.5	80.2	15.5	90.5	18.6	86.1	20.0	50.1	10.7	50.1	8.5
	Not employed, not looking for work	69.0	23.6	74.7	25.9	73.3	29.4	86.6	24.1	60.1	22.8	84.4	14.7	90.0	19.6	69.4	28.8	53.1	9.2	44.0	11.4
Couple with children	Working	82.5	16.7	85.1	20.4	89.0	19.0	92.5	17.4	66.8	18.0	84.2	12.9	94.2	13.9	92.7	13.8	52.7	8.1	52.8	6.8
	Not employed, looking for work	74.0	23.1	82.1	22.4	82.3	24.1	87.9	21.8	61.2	19.3	79.3	17.5	88.6	18.8	88.3	16.2	49.5	10.8	51.1	8.1
	Not employed, not looking for work	76.8	21.5	82.1	23.5	83.2	23.9	88.2	22.2	62.3	21.1	80.9	15.9	89.7	18.9	87.9	21.2	50.5	9.9	51.1	9.1
	NA	84.7	14.5	89.0	16.1	91.0	16.0	93.6	15.6	72.1	16.7	83.7	11.9	94.8	13.7	97.5	7.8	53.0	7.3	54.7	5.0
	Under 15	83.3	15.7	87.8	18.3	90.9	15.9	93.0	14.4	69.4	17.9	82.1	12.9	94.1	13.5	97.4	7.8	51.9	7.5	54.7	5.2
Sole parent	Working	79.1	19.1	81.3	24.0	84.5	22.2	87.4	22.7	62.6	19.8	81.0	15.2	89.6	19.1	90.1	16.4	50.3	10.2	51.7	8.1
	Not employed, looking for work	72.9	20.2	79.8	23.4	82.4	22.3	81.8	26.1	65.2	19.7	78.7	15.7	86.4	20.4	87.8	19.0	49.1	10.3	50.7	8.4
	Not employed, not looking for work	71.0	23.4	79.9	24.9	78.3	27.7	83.0	26.9	59.2	22.5	77.6	17.9	85.4	23.4	80.6	27.6	48.5	11.5	49.0	11.0
	NA	81.3	17.5	88.3	17.5	89.7	17.8	92.0	17.8	72.8	18.7	82.8	15.0	93.1	18.2	97.5	7.6	52.4	10.4	54.4	4.3
	Under 15	79.2	17.4	84.2	22.5	88.6	21.5	85.5	24.5	66.2	18.6	79.6	15.3	88.5	19.7	95.2	14.9	49.4	10.3	53.8	7.7
Not in a family nucleus	Working	80.7	17.5	82.4	21.8	86.5	21.2	91.3	18.7	65.0	19.1	83.2	13.9	93.0	15.4	89.9	17.2	52.2	8.8	51.7	7.8
	Not employed, looking for work	69.5	24.9	74.0	26.1	77.4	27.0	83.5	28.9	62.1	20.6	77.2	17.4	84.3	25.6	82.9	24.6	48.8	10.6	48.7	10.1
	Not employed, not looking for work	68.1	23.9	74.3	26.6	71.9	29.9	83.8	27.0	57.1	23.4	81.2	16.9	88.8	21.2	66.3	30.7	51.4	10.7	43.7	11.8
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 218: Mean (SD) SF-36 score by labour force status by household structure**

		SF36 (W3)																			
(W1)		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Household Structure	Labour Force Status	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
One Family	NA	84.1	15.1	88.6	16.5	90.6	16.4	93.2	16.2	72.1	17.0	83.5	12.6	94.3	14.9	97.6	7.4	52.9	8.0	54.6	4.9
	Working	82.1	17.2	84.1	21.2	88.1	20.0	92.4	17.7	66.8	18.3	84.4	13.0	94.0	14.2	91.5	15.1	52.9	8.2	52.3	7.3
	Not employed, looking for work	72.3	22.6	80.0	24.0	82.3	23.5	85.4	24.6	61.5	19.5	78.6	16.8	87.8	19.8	86.7	19.2	49.1	10.8	50.6	8.5
	Not employed, not looking for work	72.4	23.1	78.4	25.1	77.9	27.5	86.7	23.9	60.8	22.2	82.0	15.9	89.3	20.0	78.4	27.3	51.4	10.0	47.5	11.1
	Under 15	82.1	16.1	86.9	19.4	90.4	17.3	91.4	17.1	68.2	18.0	81.6	13.5	93.2	14.8	96.8	10.0	51.3	8.3	54.4	5.8
Two or more families	NA	80.4	18.7	94.4	14.0	91.8	17.4	95.2	14.0	76.9	20.5	83.1	15.6	95.5	13.9	94.6	12.8	53.7	9.6	54.7	3.7
	Working	80.6	17.6	83.8	23.1	87.3	20.2	92.0	17.2	68.0	18.9	85.0	12.6	92.0	15.7	91.3	14.6	53.0	8.2	52.0	7.3
	Not employed, looking for work	75.7	22.0	83.3	19.4	83.3	22.1	85.5	26.2	70.4	18.8	83.1	15.8	91.1	18.1	90.5	15.7	52.0	10.3	51.0	7.9
	Not employed, not looking for work	69.9	24.7	80.3	25.1	79.1	27.3	84.3	26.3	61.6	20.8	79.6	17.0	84.8	23.8	77.6	28.5	49.6	10.8	48.3	11.0
	Under 15	95.7	7.3	93.0	18.5	89.3	18.3	85.7	28.3	86.6	13.2	80.7	11.3	81.0	26.7	100.0	0.0	52.2	8.1	57.0	5.0
Other multi-person household	Working	82.2	15.5	83.4	21.5	88.1	19.2	91.7	17.0	65.5	17.7	83.2	12.7	93.3	14.4	92.3	15.2	52.1	8.2	52.6	7.2
	Not employed, looking for work	77.6	19.6	82.1	20.4	86.8	21.7	89.8	18.0	69.2	21.6	81.7	12.7	88.3	21.3	91.3	15.7	51.5	9.4	52.0	7.8
	Not employed, not looking for work	76.5	20.9	79.2	25.5	80.7	26.6	85.7	24.5	60.3	21.6	79.1	15.6	88.7	20.4	86.0	23.5	49.5	10.1	50.3	10.4
One person household	Working	80.0	18.5	82.0	21.5	85.6	22.0	90.8	20.0	64.5	20.2	83.0	14.8	92.8	16.2	88.3	18.2	52.2	9.3	51.2	8.0
	Not employed, looking for work	66.6	26.5	72.5	25.9	73.0	28.7	81.6	30.8	59.9	19.2	76.7	18.1	83.5	26.8	80.9	24.8	48.3	10.2	47.1	10.3
	Not employed, not looking for work	66.6	23.6	72.8	26.8	69.8	30.3	83.4	27.4	56.1	23.6	81.5	17.3	89.2	20.9	61.7	30.0	51.9	10.8	42.1	11.5
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

## 9.4 The Association of Labour Force Status with Mental Distress (K-10)

Overall, the highest proportion of respondents reporting low levels of mental distress was in the working population. This was consistent across age groups, by sex, ethnicity, marital status, family and household structure. Consequently the proportion of respondents reporting moderate to high level of mental distress was highest in the unemployed (looking for work) population. There was not a lot of difference in the relationship between mental distress and labour force status between males and females. Respondents who were married at Wave 1 had higher proportions of low mental distress at all levels of labour force status, compared to other marital status groups. Respondents in sole parent families had lower proportions of low mental distress across the labour force status groups compared to other family structures.

**Table 219: K-10 groups by labour force status, overall**

Labour Force Status (W1)	Kessler Groups (W3)											
	Low		Moderate		High		Very High		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA	220	72.1	60	19.7	20	6.6	10	3.3	10	3.3	305	100.0
Working	9105	81.2	1480	13.2	410	3.7	125	1.1	100	0.9	11215	100.0
Not employed, looking for work	250	62.5	90	22.5	45	11.3	10	2.5	10	2.5	400	100.0
Not employed, not looking for work	4250	70.7	1035	17.2	450	7.5	155	2.6	120	2.0	6010	100.0
Overseas	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0
Under 15	205	73.2	50	17.9	15	5.4	10	3.6	10	3.6	280	100.0
<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 220: K-10 groups by labour force status by age and sex**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Age (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	225	73.8	60	19.7	20	6.6	10	3.3	10	3.3	305	100.0
	Under 15	210	73.7	50	17.5	15	5.3	10	3.5	10	3.5	285	100.0
15-24	Working	925	72.8	245	19.3	65	5.1	20	1.6	10	0.8	1270	100.0
	Not employed, looking for work	55	55.0	20	20.0	15	15.0	10	10.0	10	10.0	100	100.0
	Not employed, not looking for work	800	69.9	220	19.2	90	7.9	20	1.7	10	0.9	1145	100.0
25-34	Working	1670	78.0	325	15.2	95	4.4	25	1.2	20	0.9	2140	100.0
	Not employed, looking for work	50	66.7	20	26.7	10	13.3	.	.	.	.	75	100.0
	Not employed, not looking for work	410	67.2	120	19.7	45	7.4	20	3.3	10	1.6	610	100.0
35-44	Working	2455	80.6	410	13.5	115	3.8	35	1.1	25	0.8	3045	100.0
	Not employed, looking for work	65	61.9	25	23.8	10	9.5	10	9.5	10	9.5	105	100.0
	Not employed, not looking for work	405	65.3	110	17.7	65	10.5	25	4.0	15	2.4	620	100.0
45-54	Working	2300	84.4	290	10.6	90	3.3	25	0.9	20	0.7	2725	100.0
	Not employed, looking for work	35	53.8	15	23.1	10	15.4	10	15.4	10	15.4	65	100.0
	Not employed, not looking for work	260	57.8	80	17.8	55	12.2	35	7.8	15	3.3	450	100.0
55-64	Working	1435	85.2	180	10.7	40	2.4	15	0.9	20	1.2	1685	100.0
	Not employed, looking for work	40	80.0	10	20.0	10	20.0	10	20.0	10	20.0	50	100.0
	Not employed, not looking for work	545	70.8	120	15.6	65	8.4	25	3.2	15	1.9	770	100.0
65+	Working	320	88.9	25	6.9	10	2.8	10	2.8	10	2.8	360	100.0
	Not employed, looking for work	10	100.0	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	Not employed, not looking for work	1820	75.4	380	15.7	130	5.4	25	1.0	60	2.5	2415	100.0
Male	NA	120	75.0	25	15.6	10	6.3	.	.	10	6.3	160	100.0
	Under 15	105	75.0	20	14.3	10	7.1	.	.	10	7.1	140	100.0
	Working	4785	82.9	710	12.3	180	3.1	40	0.7	60	1.0	5770	100.0
	Not employed, looking for work	120	61.5	45	23.1	20	10.3	10	5.1	10	5.1	195	100.0
	Not employed, not looking for work	1505	71.2	355	16.8	170	8.0	45	2.1	45	2.1	2115	100.0
Female	NA	100	66.7	35	23.3	10	6.7	10	6.7	10	6.7	150	100.0
	Under 15	105	72.4	30	20.7	10	6.9	10	6.9	10	6.9	145	100.0
	Working	4320	79.3	770	14.1	230	4.2	85	1.6	40	0.7	5445	100.0
	Not employed, looking for work	125	61.0	45	22.0	20	9.8	10	4.9	10	4.9	205	100.0
	Not employed, not looking for work	2745	70.6	680	17.5	280	7.2	110	2.8	70	1.8	3890	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

**Table 221: K-10 groups by labour force status by prioritised ethnicity**

(W1)		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Ethnicity	Labour Force Status	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	150	75.0	35	17.5	10	5.0	10	5.0	10	5.0	200	100.0
	Working	7505	82.3	1160	12.7	300	3.3	90	1.0	70	0.8	9120	100.0
	Not employed, looking for work	160	64.0	55	22.0	25	10.0	10	4.0	10	4.0	250	100.0
	Not employed, not looking for work	3420	73.0	765	16.3	315	6.7	110	2.3	75	1.6	4685	100.0
	Under 15	150	76.9	30	15.4	15	7.7	.	.	10	5.1	195	100.0
Māori	NA	45	69.2	10	15.4	10	15.4	10	15.4	10	15.4	65	100.0
	Working	920	78.3	170	14.5	60	5.1	20	1.7	10	0.9	1175	100.0
	Not employed, looking for work	50	58.8	15	17.6	15	17.6	10	11.8	10	11.8	85	100.0
	Not employed, not looking for work	410	62.1	135	20.5	70	10.6	30	4.5	20	3.0	660	100.0
	Under 15	30	54.5	15	27.3	10	18.2	10	18.2	10	18.2	55	100.0
Pacific	NA	10	40.0	10	40.0	10	40.0	.	.	10	40.0	25	100.0
	Working	320	72.7	75	17.0	30	6.8	10	2.3	10	2.3	440	100.0
	Not employed, looking for work	20	66.7	10	33.3	10	33.3	.	.	.	.	30	100.0
	Not employed, not looking for work	170	57.6	65	22.0	35	11.9	10	3.4	15	5.1	295	100.0
	Under 15	15	100.0	10	66.7	.	.	.	.	.	.	15	100.0
Asian	NA	15	75.0	10	50.0	10	50.0	.	.	.	.	20	100.0
	Working	365	76.0	75	15.6	25	5.2	10	2.1	10	2.1	480	100.0
	Not employed, looking for work	20	66.7	10	33.3	10	33.3	.	.	10	33.3	30	100.0
	Not employed, not looking for work	255	69.9	70	19.2	25	6.8	10	2.7	10	2.7	365	100.0
	Under 15	20	100.0	10	50.0	10	50.0	.	.	.	.	20	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 222: K-10 groups by labour force status by legal marital status**

(W1)		Kessler Groups (W3)										Total	
		Low		Moderate		High		Very High		NA:DK:REF			
Marital Status	Labour Force Status	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	220	71.0	60	19.4	20	6.5	10	3.2	10	3.2	310	100.0
	Working	10	100.0	.	.	.	.	.	.	.	.	10	100.0
	Under 15	210	75.0	55	19.6	15	5.4	10	3.6	10	3.6	280	100.0
	Not employed, looking for work	.	.	10	100.0	10	100.0	.	.	.	.	10	100.0
Never Married	Working	2460	76.5	525	16.3	155	4.8	45	1.4	25	0.8	3215	100.0
	Not employed, looking for work	125	64.1	40	20.5	30	15.4	10	5.1	10	5.1	195	100.0
	Not employed, not looking for work	1190	67.2	345	19.5	150	8.5	55	3.1	30	1.7	1770	100.0
Divorced	Working	1210	78.8	225	14.7	65	4.2	30	2.0	10	0.7	1535	100.0
Widowed	Not employed, looking for work	35	58.3	15	25.0	10	16.7	10	16.7	10	16.7	60	100.0
Separated	Not employed, not looking for work	965	68.9	235	16.8	125	8.9	45	3.2	30	2.1	1400	100.0
Married	Working	5435	84.1	725	11.2	190	2.9	50	0.8	60	0.9	6465	100.0
	Not employed, looking for work	90	66.7	30	22.2	10	7.4	10	7.4	10	7.4	135	100.0
	Not employed, not looking for work	2090	73.6	460	16.2	175	6.2	55	1.9	60	2.1	2840	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>



**Table 223: K-10 groups by labour force status by family structure**

(W1)		Kessler Groups (W3)										Total	
		Low		Moderate		High		Very High		NA:DK:REF			
Family Structure	Labour Force Status	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	Working	2815	83.9	395	11.8	100	3.0	25	0.7	25	0.7	3355	100.0
	Not employed, looking for work	55	68.8	15	18.8	10	12.5	10	12.5	10	12.5	80	100.0
	Not employed, not looking for work	1460	73.9	315	15.9	125	6.3	30	1.5	50	2.5	1975	100.0
Couple with children	Working	4340	81.6	680	12.8	190	3.6	55	1.0	55	1.0	5320	100.0
	Not employed, looking for work	95	63.3	35	23.3	15	10.0	10	6.7	10	6.7	150	100.0
	Not employed, not looking for work	1290	70.5	325	17.8	140	7.7	45	2.5	30	1.6	1830	100.0
	NA	175	72.9	40	16.7	20	8.3	10	4.2	10	4.2	240	100.0
	Under 15	170	77.3	35	15.9	10	4.5	.	.	10	4.5	220	100.0
Sole parent	Working	645	72.5	155	17.4	55	6.2	25	2.8	10	1.1	890	100.0
	Not employed, looking for work	45	52.9	20	23.5	15	17.6	10	11.8	.	.	85	100.0
	Not employed, not looking for work	455	62.3	145	19.9	80	11.0	35	4.8	10	1.4	730	100.0
	NA	50	76.9	15	23.1	10	15.4	10	15.4	.	.	65	100.0
	Under 15	40	61.5	15	23.1	10	15.4	10	15.4	.	.	65	100.0
Not in a family nucleus	Working	1305	79.1	245	14.8	65	3.9	25	1.5	10	0.6	1650	100.0
	Not employed, looking for work	50	58.8	20	23.5	10	11.8	10	11.8	10	11.8	85	100.0
	Not employed, not looking for work	1050	71.2	245	16.6	110	7.5	40	2.7	30	2.0	1475	100.0
	Overseas	10	100.0	.	.	.	.	.	.	.	.	10	100.0
	<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>

**Table 224: K-10 groups by labour force status by household structure**

(W1)		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Household Structure	Labour Force Status	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	215	72.9	50	16.9	20	6.8	10	3.4	10	3.4	295	100.0
	Working	7665	81.7	1200	12.8	335	3.6	95	1.0	80	0.9	9380	100.0
	Not employed, looking for work	180	62.1	65	22.4	30	10.3	10	3.4	10	3.4	290	100.0
	Not employed, not looking for work	3150	71.1	770	17.4	325	7.3	110	2.5	80	1.8	4430	100.0
	Overseas	10	100.0	.	.	10	100.0	.	.	.	.	10	100.0
	Under 15	200	72.7	50	18.2	15	5.5	10	3.6	10	3.6	275	100.0
Two or more families	NA	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	Working	250	76.9	50	15.4	15	4.6	10	3.1	10	3.1	325	100.0
	Not employed, looking for work	20	66.7	10	33.3	10	33.3	10	33.3	10	33.3	30	100.0
	Not employed, not looking for work	140	59.6	45	19.1	25	10.6	10	4.3	15	6.4	235	100.0
	Overseas	.	.	10	100.0	.	.	.	.	.	.	10	100.0
	Under 15	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
Other multi-person household	Working	440	77.9	95	16.8	20	3.5	10	1.8	10	1.8	565	100.0
	Not employed, looking for work	20	80.0	10	40.0	10	40.0	.	.	.	.	25	100.0
	Not employed, not looking for work	160	68.1	45	19.1	20	8.5	10	4.3	10	4.3	235	100.0
One person household	Working	750	78.9	130	13.7	40	4.2	20	2.1	10	1.1	950	100.0
	Not employed, looking for work	30	60.0	10	20.0	10	20.0	10	20.0	.	.	50	100.0
	Not employed, not looking for work	805	72.9	170	15.4	75	6.8	30	2.7	25	2.3	1105	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

## **9.5 The Association of Labour Force Status with Perceived Stress**

Overall, most respondents reported that they felt in control most or all of the time. However, lower proportions of respondents who were unemployed (looking for work) felt able to control of important things in life most or all of the time. Similar trends were observed for the other perceived stress questions. There were high proportions of unemployed respondents who only felt confident in handling problems or felt things were going their way some or only a little of the time. Further tables of perceived stress by labour force status by other demographic variables are not presented in this report, due to small cell counts.

**Table 225: Perceived stress by labour force status, overall**

	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	10	3.3	10	3.3	25	8.2	60	19.7	200	65.6	10	3.3	305	100.0
Working	135	1.2	295	2.6	1095	9.8	2500	22.3	7115	63.4	75	0.7	11220	100.0
Not employed, looking for work	10	2.5	20	5.1	70	17.7	100	25.3	200	50.6	10	2.5	395	100.0
Not employed, not looking for work	160	2.7	340	5.7	700	11.6	1095	18.2	3620	60.2	90	1.5	6010	100.0
Under 15	10	3.5	15	5.3	30	10.5	65	22.8	165	57.9	10	3.5	285	100.0
Total	310	1.7	685	3.8	1915	10.5	3815	20.9	11305	62.1	185	1.0	18215	100.0
	Unable to overcome difficulties (W3)													
NA	10	3.3	10	3.3	25	8.2	65	21.3	205	67.2	10	3.3	305	100.0
Working	60	0.5	165	1.5	810	7.2	1920	17.1	8190	73.0	75	0.7	11220	100.0
Not employed, looking for work	10	2.5	20	5.1	45	11.4	100	25.3	225	57.0	10	2.5	395	100.0
Not employed, not looking for work	55	0.9	140	2.3	550	9.2	1020	17.0	4160	69.2	85	1.4	6010	100.0
Under 15	10	3.5	10	3.5	35	12.3	70	24.6	170	59.6	10	3.5	285	100.0
Total	125	0.7	335	1.8	1465	8.0	3180	17.5	12950	71.1	170	0.9	18215	100.0

	Confident in handling problems (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	70	23.0	160	52.5	40	13.1	25	8.2	10	3.3	10	3.3	305	100.0
Working	4360	38.9	5385	48.0	825	7.4	380	3.4	195	1.7	75	0.7	11220	100.0
Not employed, looking for work	120	30.4	180	45.6	60	15.2	35	8.9	10	2.5	10	2.5	395	100.0
Not employed, not looking for work	2100	34.9	2650	44.1	650	10.8	350	5.8	185	3.1	75	1.2	6010	100.0
Under 15	75	26.3	145	50.9	40	14.0	15	5.3	10	3.5	10	3.5	285	100.0
<b>Total</b>	<b>6720</b>	<b>36.9</b>	<b>8515</b>	<b>46.7</b>	<b>1610</b>	<b>8.8</b>	<b>805</b>	<b>4.4</b>	<b>395</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
	Felt things were going your way (W3)													
NA	25	8.2	135	44.3	115	37.7	20	6.6	10	3.3	10	3.3	305	100.0
Working	1200	10.7	6530	58.2	2565	22.9	640	5.7	190	1.7	95	0.8	11220	100.0
Not employed, looking for work	30	7.6	180	45.6	135	34.2	40	10.1	10	2.5	10	2.5	395	100.0
Not employed, not looking for work	660	11.0	2915	48.5	1525	25.4	560	9.3	245	4.1	100	1.7	6010	100.0
Under 15	25	8.8	130	45.6	85	29.8	35	12.3	10	3.5	10	3.5	285	100.0
<b>Total</b>	<b>1935</b>	<b>10.6</b>	<b>9885</b>	<b>54.3</b>	<b>4430</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18215</b>	<b>100.0</b>

## **9.6 *The Association of Labour Force Status with Chronic Diseases***

Overall, there were higher proportions of respondents reporting chronic diseases in the not employed and not looking for work group. This may be due to the older age structure of this population. Consequently, over 17% of respondents in this group had more than two comorbid diseases. This relationship was particularly prevalent in the older age groups (ages 55+ years), as well as for the non-Māori, non-Pacific, non-Asian ethnic group. There were high proportions of respondents unemployed (looking for work) and unemployed not looking for work reporting migraine or depression or schizophrenia. There were high proportions of respondents living in single person households who were not employed and not looking for work who reported having high blood pressure and cholesterol.

**Table 226: Chronic diseases by labour force status, overall**

Labour Force Status (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	70	22.6	10	3.2	10	3.2	10	3.2	.	.	10	3.2	20	6.5	10	3.2	310	100.0
Working	2065	18.4	1965	17.5	1805	16.1	370	3.3	105	0.9	320	2.9	1465	13.1	920	8.2	11220	100.0
Not employed, looking for work	80	20.0	75	18.8	70	17.5	10	2.5	10	2.5	20	5.0	75	18.8	55	13.8	400	100.0
Not employed, not looking for work	1145	19.1	1940	32.3	1270	21.1	785	13.1	340	5.7	460	7.7	845	14.1	680	11.3	6010	100.0
Under 15	65	22.8	10	3.5	.	.	.	.	.	.	10	3.5	25	8.8	10	3.5	285	100.0
<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 227: Number of comorbid disease by labour force status, overall**

Labour Force Status (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA	220	71.0	80	25.8	10	3.2	10	3.2	310	100.0
Working	5465	48.7	4985	44.4	740	6.6	30	0.3	11220	100.0
Not employed, looking for work	180	45.0	175	43.8	40	10.0	10	2.5	400	100.0
Not employed, not looking for work	2190	36.4	2775	46.2	1020	17.0	20	0.3	6010	100.0
Under 15	195	68.4	90	31.6	10	3.5	.	.	285	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 228: Chronic diseases by labour force status by age and sex**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Age (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	70	23.0	10	3.3	10	3.3	10	3.3	.	.	10	3.3	20	6.6	10	3.3	305	100.0
	Under 15	65	23.2	10	3.6	.	.	.	.	.	.	10	3.6	25	8.9	10	3.6	280	100.0
15-24	Working	355	28.1	60	4.7	20	1.6	10	0.8	10	0.8	10	0.8	145	11.5	90	7.1	1265	100.0
	Not employed, looking for work	20	21.1	10	10.5	10	10.5	.	.	10	10.5	10	10.5	20	21.1	10	10.5	95	100.0
	Not employed, not looking for work	295	25.8	35	3.1	10	0.9	10	0.9	10	0.9	10	0.9	110	9.6	85	7.4	1145	100.0
25-34	Working	480	22.4	185	8.6	150	7.0	15	0.7	10	0.5	20	0.9	285	13.3	180	8.4	2140	100.0
	Not employed, looking for work	10	13.3	15	20.0	10	13.3	.	.	.	.	10	13.3	20	26.7	15	20.0	75	100.0
	Not employed, not looking for work	140	23.1	75	12.4	25	4.1	10	1.7	10	1.7	10	1.7	120	19.8	105	17.4	605	100.0
35-44	Working	540	17.7	395	13.0	400	13.1	40	1.3	10	0.3	60	2.0	445	14.6	285	9.4	3045	100.0
	Not employed, looking for work	25	23.8	15	14.3	15	14.3	10	9.5	10	9.5	10	9.5	15	14.3	10	9.5	105	100.0
	Not employed, not looking for work	120	19.4	100	16.1	60	9.7	20	3.2	15	2.4	25	4.0	125	20.2	115	18.5	620	100.0
45-54	Working	400	14.7	605	22.2	620	22.8	90	3.3	25	0.9	110	4.0	380	13.9	230	8.4	2725	100.0
	Not employed, looking for work	15	23.1	20	30.8	15	23.1	10	15.4	10	15.4	10	15.4	15	23.1	10	15.4	65	100.0
	Not employed, not looking for work	100	22.2	140	31.1	115	25.6	35	7.8	20	4.4	45	10.0	100	22.2	110	24.4	450	100.0
55-64	Working	240	14.2	570	33.8	500	29.7	160	9.5	45	2.7	105	6.2	185	11.0	120	7.1	1685	100.0
	Not employed, looking for work	10	20.0	20	40.0	20	40.0	10	20.0	.	.	10	20.0	10	20.0	15	30.0	50	100.0
	Not employed, not looking for work	155	20.1	335	43.5	265	34.4	115	14.9	35	4.5	115	14.9	115	14.9	110	14.3	770	100.0
65+	Working	45	12.5	160	44.4	120	33.3	60	16.7	15	4.2	30	8.3	35	9.7	15	4.2	360	100.0
	Not employed, looking for work	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	.	.	10	100.0	.	.	10	100.0



		<b>Chronic Diseases (W3)</b>																	
		<b>Asthma</b>		<b>High BP</b>		<b>High Chol</b>		<b>Heart Dis</b>		<b>Stroke</b>		<b>Diabetes</b>		<b>Migraine</b>		<b>Depr-Schiz</b>		<b>Total</b>	
<b>Age (W1)</b>	<b>Labour Force Status (W1)</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
	Not employed, not looking for work	330	13.7	1250	51.8	795	32.9	590	24.4	265	11.0	265	11.0	270	11.2	160	6.6	2415	100.0
Male	NA	40	25.0	10	6.3	10	6.3	10	6.3	.	.	10	6.3	15	9.4	.	.	160	100.0
	Under 15	35	25.0	10	7.1	.	.	.	.	.	.	.	.	10	7.1	10	7.1	140	100.0
	Working	940	16.3	1050	18.2	1110	19.2	250	4.3	60	1.0	200	3.5	445	7.7	300	5.2	5770	100.0
	Not employed, looking for work	30	15.4	35	17.9	30	15.4	10	5.1	10	5.1	10	5.1	25	12.8	15	7.7	195	100.0
	Not employed, not looking for work	335	15.8	665	31.4	480	22.6	380	17.9	155	7.3	200	9.4	155	7.3	180	8.5	2120	100.0
Female	NA	30	20.0	.	.	.	.	10	6.7	.	.	10	6.7	10	6.7	10	6.7	150	100.0
	Under 15	30	20.7	10	6.9	.	.	.	.	.	.	10	6.9	20	13.8	10	6.9	145	100.0
	Working	1120	20.6	920	16.9	690	12.7	120	2.2	45	0.8	125	2.3	1020	18.7	620	11.4	5445	100.0
	Not employed, looking for work	50	24.4	40	19.5	45	22.0	10	4.9	10	4.9	15	7.3	55	26.8	35	17.1	205	100.0
	Not employed, not looking for work	810	20.8	1275	32.8	790	20.3	400	10.3	180	4.6	260	6.7	685	17.6	500	12.9	3890	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 229: Number of comorbid disease by labour force status by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%
0-14	NA	215	70.5	85	27.9	10	3.3	10	3.3	305	100.0
	Under 15	195	69.6	90	32.1	10	3.6	.	.	280	100.0
15-24	Working	735	58.1	510	40.3	20	1.6	10	0.8	1265	100.0
	Not employed, looking for work	55	57.9	40	42.1	10	10.5	.	.	95	100.0
	Not employed, not looking for work	720	62.9	395	34.5	30	2.6	10	0.9	1145	100.0
25-34	Working	1225	57.2	820	38.3	85	4.0	10	0.5	2140	100.0
	Not employed, looking for work	30	40.0	35	46.7	10	13.3	.	.	75	100.0
	Not employed, not looking for work	295	48.8	270	44.6	40	6.6	10	1.7	605	100.0
	Overseas	.	.	.	.	10	100.0	.	.	10	100.0
35-44	Working	1620	53.2	1260	41.4	160	5.3	10	0.3	3045	100.0
	Not employed, looking for work	50	47.6	45	42.9	10	9.5	.	.	105	100.0
	Not employed, not looking for work	300	48.4	255	41.1	65	10.5	10	1.6	620	100.0
45-54	Working	1180	43.3	1325	48.6	210	7.7	10	0.4	2725	100.0
	Not employed, looking for work	20	30.8	25	38.5	10	15.4	10	15.4	65	100.0
	Not employed, not looking for work	135	30.0	220	48.9	95	21.1	10	2.2	450	100.0
55-64	Working	600	35.6	860	51.0	215	12.8	10	0.6	1685	100.0
	Not employed, looking for work	15	30.0	30	60.0	10	20.0	.	.	50	100.0
	Not employed, not looking for work	200	26.0	375	48.7	195	25.3	10	1.3	770	100.0
65+	Working	95	26.4	205	56.9	50	13.9	.	.	360	100.0
	Not employed, looking for work	10	100.0	10	100.0	10	100.0	.	.	10	100.0

		<b>Comorbidity Index (W3)</b>									
		<b>No comorbid</b>		<b>1-2 comorbid</b>		<b>&gt;2 comorbid</b>		<b>NA</b>		<b>Total</b>	
<b>Age (W1)</b>	<b>Labour Force Status (W1)</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
	Not employed, not looking for work	545	22.6	1260	52.2	595	24.6	10	0.4	2415	100.0
Male	NA	105	65.6	50	31.3	10	6.3	10	6.3	160	100.0
	Under 15	95	67.9	45	32.1	10	7.1	.	.	140	100.0
	Working	2955	51.2	2455	42.5	345	6.0	20	0.3	5770	100.0
	Not employed, looking for work	105	53.8	75	38.5	20	10.3	.	.	195	100.0
	Not employed, not looking for work	820	38.7	930	43.9	360	17.0	10	0.5	2120	100.0
Female	NA	110	73.3	40	26.7	.	.	10	6.7	150	100.0
	Under 15	100	69.0	45	31.0	10	6.9	.	.	145	100.0
	Working	2510	46.1	2530	46.5	400	7.3	10	0.2	5445	100.0
	Not employed, looking for work	75	36.6	105	51.2	30	14.6	10	4.9	205	100.0
	Not employed, not looking for work	1370	35.2	1840	47.3	665	17.1	15	0.4	3890	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 230: Chronic diseases by labour force status by prioritised ethnicity**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Ethnicity (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	50	25.0	10	5.0	.	.	10	5.0	.	.	10	5.0	15	7.5	10	5.0	200	100.0
	Working	1670	18.3	1635	17.9	1550	17.0	325	3.6	80	0.9	230	2.5	1255	13.8	825	9.0	9125	100.0
	Not employed, looking for work	50	20.0	50	20.0	50	20.0	10	4.0	10	4.0	10	4.0	60	24.0	45	18.0	250	100.0
	Not employed, not looking for work	870	18.6	1645	35.1	1090	23.3	675	14.4	300	6.4	340	7.3	690	14.7	575	12.3	4680	100.0
	Under 15	50	25.6	10	5.1	.	.	.	.	.	.	10	5.1	20	10.3	10	5.1	195	100.0
Māori	NA	20	30.8	10	15.4	10	15.4	.	.	.	.	.	.	10	15.4	.	.	65	100.0
	Working	285	24.3	225	19.1	155	13.2	25	2.1	15	1.3	50	4.3	145	12.3	70	6.0	1175	100.0
	Not employed, looking for work	25	27.8	20	22.2	15	16.7	10	11.1	10	11.1	10	11.1	15	16.7	10	11.1	90	100.0
	Not employed, not looking for work	185	28.0	180	27.3	100	15.2	60	9.1	25	3.8	55	8.3	110	16.7	75	11.4	660	100.0
	Under 15	10	18.2	.	.	.	.	.	.	.	.	.	.	10	18.2	10	18.2	55	100.0
Pacific	NA	10	40.0	10	40.0	.	.	10	40.0	.	.	.	.	10	40.0	.	.	25	100.0
	Working	55	12.5	65	14.8	45	10.2	10	2.3	10	2.3	30	6.8	30	6.8	10	2.3	440	100.0
	Not employed, looking for work	10	33.3	10	33.3	10	33.3	10	33.3	.	.	10	33.3	10	33.3	10	33.3	30	100.0
	Not employed, not looking for work	45	15.3	75	25.4	40	13.6	30	10.2	10	3.4	50	16.9	25	8.5	20	6.8	295	100.0
	Under 15	10	66.7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	15	100.0
Asian	NA	10	50.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	20	100.0
	Working	50	10.4	45	9.4	55	11.5	10	2.1	10	2.1	10	2.1	35	7.3	20	4.2	480	100.0
	Not employed, looking for work	10	33.3	10	33.3	10	33.3	10	33.3	.	.	10	33.3	.	.	.	.	30	100.0
	Not employed, not looking for work	50	13.9	40	11.1	35	9.7	15	4.2	10	2.8	20	5.6	20	5.6	10	2.8	360	100.0
	Under 15	10	50.0	.	.	.	.	.	.	.	.	.	.	10	50.0	.	.	20	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 231: Number of comorbid disease by labour force status by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Ethnicity (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	140	70.0	60	30.0	.	.	10	5.0	200	100.0
	Working	4295	47.1	4185	45.9	625	6.8	20	0.2	9125	100.0
	Not employed, looking for work	95	38.0	125	50.0	25	10.0	10	4.0	250	100.0
	Not employed, not looking for work	1545	33.0	2270	48.5	860	18.4	10	0.2	4680	100.0
	Overseas	10	100.0	.	.	10	100.0	.	.	10	100.0
Māori	Under 15	120	61.5	70	35.9	10	5.1	.	.	195	100.0
	NA	45	69.2	25	38.5	10	15.4	.	.	65	100.0
	Working	560	47.7	525	44.7	80	6.8	10	0.9	1175	100.0
	Not employed, looking for work	35	38.9	40	44.4	15	16.7	.	.	90	100.0
	Not employed, not looking for work	260	39.4	300	45.5	105	15.9	10	1.5	660	100.0
Pacific	Under 15	40	72.7	15	27.3	.	.	.	.	55	100.0
	NA	15	60.0	10	40.0	10	40.0	10	40.0	25	100.0
	Working	280	63.6	130	29.5	25	5.7	10	2.3	440	100.0
	Not employed, looking for work	20	66.7	10	33.3	10	33.3	.	.	30	100.0
	Not employed, not looking for work	140	47.5	110	37.3	35	11.9	10	3.4	295	100.0
Asian	Under 15	10	66.7	10	66.7	.	.	.	.	15	100.0
	NA	20	100.0	10	50.0	.	.	.	.	20	100.0
	Working	325	67.7	145	30.2	10	2.1	10	2.1	480	100.0
	Not employed, looking for work	25	83.3	10	33.3	10	33.3	.	.	30	100.0
	Not employed, not looking for work	240	66.7	95	26.4	25	6.9	10	2.8	360	100.0
Total	Overseas	10	100.0	.	.	.	.	.	.	10	100.0
	Under 15	15	75.0	10	50.0	.	.	.	.	20	100.0
Total	Total	8245	45.3	8110	44.5	1810	9.9	55	0.3	18215	100.0

**Table 232: Chronic diseases by labour force status by legal marital status**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Marital Status (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	70	23.0	10	3.3	10	3.3	10	3.3	.	.	10	3.3	20	6.6	10	3.3	305	100.0
	Working	10	100.0	.	.	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0
	Not employed, looking for work	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	10	100.0	10	100.0
	Under 15	65	22.8	10	3.5	.	.	.	.	.	.	10	3.5	25	8.8	10	3.5	285	100.0
Never Married	Working	775	24.1	310	9.6	240	7.5	30	0.9	15	0.5	45	1.4	395	12.3	280	8.7	3215	100.0
	Not employed, looking for work	50	25.0	25	12.5	20	10.0	.	.	10	5.0	10	5.0	40	20.0	25	12.5	200	100.0
	Not employed, not looking for work	425	24.0	185	10.5	100	5.6	40	2.3	25	1.4	50	2.8	205	11.6	220	12.4	1770	100.0
	Overseas	10	100.0	10	100.0	10	100.0	.	.	.	.	.	.	.	.	10	100.0	10	100.0
Divorced	Working	270	17.6	350	22.8	290	18.9	70	4.6	30	2.0	45	2.9	250	16.3	190	12.4	1535	100.0
Widowed	Not employed, looking for work	15	25.0	20	33.3	20	33.3	10	16.7	10	16.7	10	16.7	15	25.0	15	25.0	60	100.0
Separated	Not employed, not looking for work	280	20.0	670	47.9	400	28.6	280	20.0	125	8.9	145	10.4	220	15.7	190	13.6	1400	100.0
Married	Working	1020	15.8	1305	20.2	1275	19.7	275	4.3	65	1.0	230	3.6	820	12.7	450	7.0	6470	100.0
	Not employed, looking for work	20	14.8	25	18.5	30	22.2	10	7.4	10	7.4	10	7.4	20	14.8	15	11.1	135	100.0
	Not employed, not looking for work	445	15.7	1080	38.1	765	27.0	455	16.0	185	6.5	265	9.3	415	14.6	270	9.5	2835	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 233: Number of comorbid disease by labour force status by legal marital status**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Marital Status (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	220	72.1	85	27.9	10	3.3	10	3.3	305	100.0
	Under 15	195	68.4	90	31.6	10	3.5	.	.	285	100.0
	Working	.	.	10	100.0	.	.	.	.	10	100.0
	Not employed, looking for work	.	.	10	100.0	10	100.0	.	.	10	100.0
Never Married	Working	1765	54.9	1320	41.1	130	4.0	10	0.3	3215	100.0
	Not employed, looking for work	100	50.0	85	42.5	15	7.5	.	.	200	100.0
	Not employed, not looking for work	970	54.8	680	38.4	110	6.2	10	0.6	1770	100.0
Divorced Widowed Separated	Working	630	41.0	755	49.2	140	9.1	10	0.7	1535	100.0
	Not employed, looking for work	15	25.0	40	66.7	10	16.7	.	.	60	100.0
	Not employed, not looking for work	320	22.9	720	51.4	355	25.4	10	0.7	1400	100.0
Married	Working	3070	47.4	2905	44.9	470	7.3	25	0.4	6470	100.0
	Not employed, looking for work	70	51.9	50	37.0	15	11.1	10	7.4	135	100.0
	Not employed, not looking for work	905	31.9	1370	48.3	550	19.4	10	0.4	2835	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 234: Chronic diseases by labour force status by family structure**

(W1)		Chronic Diseases (W3)																		
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total		
Family Structure	Labour Force Status	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Couple only	Working	600	17.9	785	23.4	710	21.2	190	5.7	45	1.3	125	3.7	425	12.7	245	7.3	3355	100.0	
	Not employed, looking for work	15	18.8	20	25.0	20	25.0	10	12.5	10	12.5	10	12.5	15	18.8	15	18.8	80	100.0	
	Not employed, not looking for work	295	14.9	900	45.6	640	32.4	410	20.8	165	8.4	210	10.6	250	12.7	170	8.6	1975	100.0	
	Overseas	10	100.0	10	100.0	10	100.0	.	.	.	.	.	.	.	.	.	100.0	10	100.0	
Couple with children	Working	940	17.7	735	13.8	750	14.1	115	2.2	30	0.6	135	2.5	680	12.8	385	7.2	5325	100.0	
	Not employed, looking for work	25	16.7	25	16.7	20	13.3	10	6.7	10	6.7	10	6.7	20	13.3	15	10.0	150	100.0	
	Not employed, not looking for work	385	21.1	255	14.0	170	9.3	70	3.8	30	1.6	75	4.1	265	14.5	195	10.7	1825	100.0	
	Overseas	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
	NA	55	23.4	10	4.3	.	.	10	4.3	.	.	10	4.3	15	6.4	10	4.3	235	100.0	
	Under 15	45	20.5	10	4.5	.	.	.	.	.	.	10	4.5	20	9.1	10	4.5	220	100.0	
Sole parent	Working	190	21.3	140	15.7	100	11.2	25	2.8	10	1.1	20	2.2	160	18.0	115	12.9	890	100.0	
	Not employed, looking for work	20	23.5	15	17.6	10	11.8	10	11.8	10	11.8	10	11.8	20	23.5	15	17.6	85	100.0	
	Not employed, not looking for work	195	26.7	140	19.2	80	11.0	50	6.8	25	3.4	40	5.5	130	17.8	120	16.4	730	100.0	
	NA	20	28.6	10	14.3	10	14.3	.	.	.	.	.	.	10	14.3	10	14.3	70	100.0	
	Under 15	15	23.1	10	15.4	.	.	.	.	.	.	.	.	10	15.4	10	15.4	65	100.0	
Not in a family nucleus	Working	340	20.6	300	18.2	245	14.8	45	2.7	20	1.2	40	2.4	210	12.7	180	10.9	1650	100.0	
	Not employed, looking for work	20	23.5	15	17.6	20	23.5	10	11.8	10	11.8	10	11.8	20	23.5	15	17.6	85	100.0	
	Not employed, not looking for work	275	18.6	645	43.7	380	25.8	250	16.9	115	7.8	140	9.5	195	13.2	195	13.2	1475	100.0	
	Overseas	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>	



**Table 235: Number of comorbid disease by labour force status by family structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Family Structure (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%
Couple only	Working	1455	43.4	1595	47.5	295	8.8	10	0.3	3355	100.0
	Not employed, looking for work	35	43.8	35	43.8	15	18.8	10	12.5	80	100.0
	Not employed, not looking for work	515	26.1	1005	50.9	450	22.8	10	0.5	1975	100.0
	Overseas	.	.	.	.	10	100.0	.	.	10	100.0
Couple with children	Working	2815	52.9	2230	41.9	260	4.9	15	0.3	5325	100.0
	Not employed, looking for work	75	50.0	65	43.3	15	10.0	.	.	150	100.0
	Not employed, not looking for work	950	52.1	715	39.2	150	8.2	10	0.5	1825	100.0
	NA	170	72.3	60	25.5	10	4.3	10	4.3	235	100.0
	Overseas	10	100.0	.	.	.	.	.	.	10	100.0
Sole parent	Under 15	155	70.5	65	29.5	10	4.5	.	.	220	100.0
	Working	420	47.2	400	44.9	70	7.9	10	1.1	890	100.0
	Not employed, looking for work	35	41.2	45	52.9	10	11.8	.	.	85	100.0
	Not employed, not looking for work	310	42.5	320	43.8	100	13.7	10	1.4	730	100.0
Not in a family nucleus	NA	50	71.4	20	28.6	10	14.3	.	.	70	100.0
	Under 15	40	61.5	25	38.5	.	.	.	.	65	100.0
	Working	775	47.0	760	46.1	115	7.0	10	0.6	1650	100.0
	Not employed, looking for work	35	41.2	35	41.2	10	11.8	.	.	85	100.0
Total	Not employed, not looking for work	420	28.5	730	49.5	325	22.0	10	0.7	1475	100.0
	Overseas	10	100.0	.	.	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 236: Chronic diseases by labour force status by household structure**

		Chronic Diseases (W3)																	
Household Structure	Labour Force Status	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	70	23.7	10	3.4	10	3.4	10	3.4	.	.	10	3.4	15	5.1	10	3.4	295	100.0
	Working	1705	18.2	1615	17.2	1525	16.3	315	3.4	80	0.9	275	2.9	1240	13.2	735	7.8	9380	100.0
	Not employed, looking for work	60	20.3	60	20.3	50	16.9	10	3.4	10	3.4	15	5.1	55	18.6	40	13.6	295	100.0
	Not employed, not looking for work	840	19.0	1280	28.9	885	20.0	530	12.0	220	5.0	305	6.9	635	14.3	475	10.7	4430	100.0
	Under 15	65	23.6	10	3.6	.	.	.	.	.	.	10	3.6	30	10.9	10	3.6	275	100.0
Two or more families	NA	10	66.7	.	.	.	.	.	.	.	.	.	.	10	66.7	.	.	15	100.0
	Working	50	15.4	60	18.5	50	15.4	10	3.1	10	3.1	10	3.1	35	10.8	15	4.6	325	100.0
	Not employed, looking for work	10	33.3	10	33.3	10	33.3	.	.	.	.	10	33.3	10	33.3	10	33.3	30	100.0
	Not employed, not looking for work	55	23.4	50	21.3	35	14.9	15	6.4	10	4.3	30	12.8	30	12.8	20	8.5	235	100.0
	Under 15	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
Other multi-person household	Working	130	23.0	60	10.6	45	8.0	10	1.8	10	1.8	10	1.8	70	12.4	50	8.8	565	100.0
	Not employed, looking for work	10	40.0	10	40.0	10	40.0	.	.	.	.	.	.	10	40.0	10	40.0	25	100.0
	Not employed, not looking for work	55	23.4	35	14.9	25	10.6	10	4.3	10	4.3	10	4.3	35	14.9	35	14.9	235	100.0
One person household	Working	170	17.9	230	24.2	190	20.0	35	3.7	20	2.1	25	2.6	125	13.2	120	12.6	950	100.0
	Not employed, looking for work	10	22.2	15	33.3	10	22.2	10	22.2	.	.	10	22.2	10	22.2	10	22.2	45	100.0
	Not employed, not looking for work	195	17.6	570	51.6	325	29.4	230	20.8	110	10.0	120	10.9	145	13.1	150	13.6	1105	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 237: Number of comorbid disease by labour force status by household structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Household Structure (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%
One Family	NA	210	71.2	80	27.1	10	3.4	10	3.4	295	100.0
	Working	4570	48.7	4180	44.6	600	6.4	25	0.3	9380	100.0
	Not employed, looking for work	130	44.1	130	44.1	30	10.2	10	3.4	295	100.0
	Not employed, not looking for work	1730	39.1	1990	44.9	695	15.7	20	0.5	4430	100.0
	Under 15	185	67.3	90	32.7	10	3.6	.	.	275	100.0
Two or more families	NA	10	66.7	10	66.7	.	.	.	.	15	100.0
	Working	185	56.9	105	32.3	30	9.2	10	3.1	325	100.0
	Not employed, looking for work	20	66.7	15	50.0	10	33.3	.	.	30	100.0
	Not employed, not looking for work	100	42.6	105	44.7	25	10.6	10	4.3	235	100.0
	Under 15	10	100.0	10	100.0	.	.	.	.	10	100.0
Other multi-person household	Working	300	53.1	240	42.5	25	4.4	.	.	565	100.0
	Not employed, looking for work	15	60.0	10	40.0	10	40.0	.	.	25	100.0
	Not employed, not looking for work	105	44.7	110	46.8	15	6.4	.	.	235	100.0
One person household	Working	405	42.6	460	48.4	85	8.9	10	1.1	950	100.0
	Not employed, looking for work	20	44.4	25	55.6	10	22.2	.	.	45	100.0
	Not employed, not looking for work	250	22.6	570	51.6	285	25.8	10	0.9	1105	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

## 9.7 The Association of Labour Force Status with Smoking Status

Overall, there were higher proportions of current smokers in the not employed looking for work group, with high proportions of never smokers in the working and not employed not looking for work groups. This relationship was consistent across most age groups and by sex. The rates of current smoking in the Māori ethnic group were highest in all labour force status groups. Over 50% of never married respondents or living in sole parent families, who were not employed and looking for work were current smokers.

**Table 238: Smoking status by labour force status, overall**

Labour Force Status (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA	270	88.5	10	3.3	25	8.2	10	3.3	305	100.0
Working	6025	53.7	2815	25.1	2345	20.9	35	0.3	11215	100.0
Not employed, looking for work	145	36.3	85	21.3	170	42.5	10	2.5	400	100.0
Not employed, not looking for work	3130	52.1	1745	29.1	1105	18.4	25	0.4	6005	100.0
Overseas	10	100.0	10	100.0	10	100.0	.	.	10	100.0
Under 15	230	80.7	10	3.5	45	15.8	10	3.5	285	100.0
<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 239: Smoking status by labour force status by age and sex**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Age (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%
0-14	NA	270	87.1	10	3.2	30	9.7	10	3.2	310	100.0
	Under 15	230	82.1	10	3.6	45	16.1	10	3.6	280	100.0
15-24	Working	800	63.0	135	10.6	335	26.4	10	0.8	1270	100.0
	Not employed, looking for work	35	35.0	10	10.0	45	45.0	.	.	100	100.0
	Not employed, not looking for work	800	69.9	85	7.4	255	22.3	10	0.9	1145	100.0
25-34	Working	1170	54.7	415	19.4	550	25.7	10	0.5	2140	100.0
	Not employed, looking for work	30	40.0	10	13.3	40	53.3	.	.	75	100.0
	Not employed, not looking for work	285	47.1	125	20.7	195	32.2	10	1.7	605	100.0
35-44	Working	1650	54.2	730	24.0	655	21.5	10	0.3	3045	100.0
	Not employed, looking for work	40	38.1	25	23.8	45	42.9	.	.	105	100.0
	Not employed, not looking for work	300	48.4	125	20.2	190	30.6	10	1.6	620	100.0
45-54	Working	1420	52.1	780	28.6	510	18.7	10	0.4	2725	100.0
	Not employed, looking for work	25	41.7	15	25.0	20	33.3	10	16.7	60	100.0
	Not employed, not looking for work	210	46.2	115	25.3	125	27.5	10	2.2	455	100.0
55-64	Working	810	48.1	605	35.9	260	15.4	10	0.6	1685	100.0
	Not employed, looking for work	20	36.4	20	36.4	10	18.2	.	.	55	100.0
	Not employed, not looking for work	335	43.5	260	33.8	175	22.7	10	1.3	770	100.0
65+	Working	175	48.6	145	40.3	35	9.7	10	2.8	360	100.0
	Not employed, looking for work	10	100.0	10	100.0	.	.	.	.	10	100.0
	Not employed, not looking for work	1200	49.7	1030	42.7	170	7.0	10	0.4	2415	100.0
Male	NA	140	90.3	10	6.5	15	9.7	10	6.5	155	100.0
	Under 15	120	85.7	10	7.1	15	10.7	10	7.1	140	100.0
	Working	3015	52.3	1495	25.9	1240	21.5	20	0.3	5770	100.0
	Not employed, looking for work	65	33.3	45	23.1	85	43.6	.	.	195	100.0
Female	Not employed, not looking for work	925	43.7	800	37.8	380	18.0	10	0.5	2115	100.0
	NA	130	86.7	10	6.7	15	10.0	10	6.7	150	100.0
	Under 15	115	79.3	10	6.9	30	20.7	.	.	145	100.0
	Working	3010	55.3	1315	24.2	1110	20.4	15	0.3	5445	100.0
Total	Not employed, looking for work	80	39.0	45	22.0	75	36.6	10	4.9	205	100.0
	Not employed, not looking for work	2205	56.7	945	24.3	730	18.8	15	0.4	3890	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 240: Smoking status by labour force status by prioritised ethnicity**

		Smoking Status (W3)									
(W1)		Never smoker		Ex-smoker		Current smoker		NA		Total	
Ethnicity	Labour Force Status	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	180	90.0	10	5.0	15	7.5	10	5.0	200	100.0
	Working	4985	54.7	2405	26.4	1710	18.8	25	0.3	9120	100.0
	Not employed, looking for work	90	35.3	60	23.5	95	37.3	10	3.9	255	100.0
	Not employed, not looking for work	2430	51.9	1495	31.9	740	15.8	15	0.3	4685	100.0
	Under 15	160	84.2	10	5.3	25	13.2	10	5.3	190	100.0
	Overseas	.	.	10	100.0	10	100.0	.	.	10	100.0
Māori	NA	50	76.9	10	15.4	10	15.4	.	.	65	100.0
	Working	430	36.6	285	24.3	460	39.1	10	0.9	1175	100.0
	Not employed, looking for work	15	17.6	15	17.6	60	70.6	.	.	85	100.0
	Not employed, not looking for work	220	33.1	170	25.6	265	39.8	10	1.5	665	100.0
	Under 15	40	72.7	.	.	15	27.3	.	.	55	100.0
Pacific	NA	20	80.0	.	.	10	40.0	10	40.0	25	100.0
	Working	260	59.1	60	13.6	115	26.1	10	2.3	440	100.0
	Not employed, looking for work	15	50.0	10	33.3	10	33.3	.	.	30	100.0
	Not employed, not looking for work	160	54.2	60	20.3	70	23.7	10	3.4	295	100.0
	Under 15	10	66.7	.	.	10	66.7	.	.	15	100.0
Asian	NA	20	100.0	.	.	.	.	.	.	20	100.0
	Working	355	74.0	60	12.5	55	11.5	10	2.1	480	100.0
	Not employed, looking for work	20	80.0	10	40.0	10	40.0	.	.	25	100.0
	Not employed, not looking for work	320	88.9	15	4.2	30	8.3	10	2.8	360	100.0
	Under 15	20	100.0	.	.	.	.	.	.	20	100.0
	Overseas	10	100.0	.	.	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3695</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 241: Smoking status by labour force status by legal marital status**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Marital Status (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	270	87.1	10	3.2	30	9.7	10	3.2	310	100.0
	Not employed, looking for work	10	100.0	.	.	10	100.0	.	.	10	100.0
	Under 15 Working	230	80.7	10	3.5	45	15.8	10	3.5	285	100.0
Never Married	Not employed, looking for work	70	35.9	25	12.8	105	53.8	.	.	195	100.0
	Working	1750	54.4	535	16.6	925	28.8	10	0.3	3215	100.0
	Not employed, not looking for work	1030	58.2	240	13.6	490	27.7	10	0.6	1770	100.0
Divorced	Not employed, looking for work	20	30.8	20	30.8	25	38.5	10	15.4	65	100.0
Widowed	Working	670	43.8	430	28.1	425	27.8	10	0.7	1530	100.0
Separated	Not employed, not looking for work	650	46.4	480	34.3	265	18.9	10	0.7	1400	100.0
Married	Not employed, looking for work	60	44.4	40	29.6	35	25.9	10	7.4	135	100.0
	Working	3605	55.8	1840	28.5	995	15.4	25	0.4	6465	100.0
	Not employed, not looking for work	1450	51.1	1020	35.9	350	12.3	10	0.4	2840	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3695</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 242: Smoking status by labour force status by family structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Family Structure (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%
Couple only	Working	1755	52.3	1000	29.8	585	17.4	10	0.3	3355	100.0
	Not employed, looking for work	30	37.5	25	31.3	20	25.0	10	12.5	80	100.0
	Not employed, not looking for work	925	46.8	820	41.5	225	11.4	10	0.5	1975	100.0
Couple with children	Working	3020	56.7	1255	23.6	1030	19.3	20	0.4	5325	100.0
	Not employed, looking for work	55	36.7	30	20.0	70	46.7	.	.	150	100.0
	Not employed, not looking for work	1140	62.5	325	17.8	355	19.5	10	0.5	1825	100.0
	NA	215	91.5	10	4.3	15	6.4	10	4.3	235	100.0
	Under 15	180	81.8	10	4.5	30	13.6	10	4.5	220	100.0
Sole parent	Working	400	44.9	200	22.5	290	32.6	10	1.1	890	100.0
	Not employed, looking for work	25	29.4	10	11.8	45	52.9	.	.	85	100.0
	Not employed, not looking for work	295	40.7	150	20.7	280	38.6	10	1.4	725	100.0
	NA	55	78.6	10	14.3	10	14.3	.	.	70	100.0
	Under 15	45	69.2	10	15.4	15	23.1	.	.	65	100.0
Not in a family nucleus	Working	855	51.8	360	21.8	440	26.7	10	0.6	1650	100.0
	Not employed, looking for work	35	41.2	20	23.5	30	35.3	10	11.8	85	100.0
	Not employed, not looking for work	775	52.4	445	30.1	250	16.9	10	0.7	1480	100.0
	Overseas	10	100.0	.	.	.	.	.	.	10	100.0
	<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>



**Table 243: Smoking status by labour force status by household structure**

(W1)		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Household Structure	Labour Force Status	N	%	N	%	N	%	N	%	N	%
One Family	NA	260	89.7	10	3.4	25	8.6	10	3.4	290	100.0
	Working	5085	54.2	2405	25.6	1860	19.8	30	0.3	9380	100.0
	Not employed, looking for work	105	35.6	70	23.7	125	42.4	10	3.4	295	100.0
	Not employed, not looking for work	2325	52.4	1275	28.7	815	18.4	20	0.5	4435	100.0
	Overseas	10	100.0	10	100.0	.	.	.	.	10	100.0
	Under 15	225	81.8	10	3.6	45	16.4	10	3.6	275	100.0
Two or more families	NA	10	100.0	.	.	10	100.0	.	.	10	100.0
	Working	145	44.6	80	24.6	100	30.8	10	3.1	325	100.0
	Not employed, looking for work	10	33.3	10	33.3	15	50.0	.	.	30	100.0
	Not employed, not looking for work	110	47.8	55	23.9	70	30.4	10	4.3	230	100.0
	Overseas	.	.	.	.	10	100.0	.	.	10	100.0
	Under 15	10	100.0	.	.	10	100.0	.	.	10	100.0
Other multi-person household	Working	315	55.8	110	19.5	135	23.9	.	.	565	100.0
	Not employed, looking for work	10	33.3	10	33.3	15	50.0	.	.	30	100.0
	Not employed, not looking for work	145	60.4	35	14.6	55	22.9	.	.	240	100.0
One person household	Working	475	50.0	215	22.6	255	26.8	10	1.1	950	100.0
	Not employed, looking for work	20	44.4	15	33.3	10	22.2	10	22.2	45	100.0
	Not employed, not looking for work	550	49.5	380	34.2	170	15.3	10	0.9	1110	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

## **9.8 The Association of Labour Force Status with Alcohol Consumption**

Overall, consumption of alcohol was greater in respondents who were working at Wave 1. There were low proportions of respondents not employed not looking for work binge drinking. This relationship was relatively consistent across age groups and by sex. There is sparse data in the Pacific and Asian ethnic groups. There were high proportions of respondents living in other multi-person households who were binge drinkers at all labour force status groups.

**Table 244: Alcohol consumption by labour force status, overall**

Labour Force Status (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	130	41.9	100	32.3	60	19.4	10	3.2	10	3.2	10	3.2	20	6.5	310	100.0
Working	1275	11.4	1790	16.0	3270	29.1	1875	16.7	2955	26.3	55	0.5	2860	25.5	11220	100.0
Not employed, looking for work	85	21.3	95	23.8	110	27.5	55	13.8	45	11.3	10	2.5	105	26.3	400	100.0
Not employed, not looking for work	1685	28.1	1260	21.0	1335	22.2	555	9.2	1135	18.9	40	0.7	845	14.1	6005	100.0
Under 15	80	28.1	100	35.1	80	28.1	20	7.0	10	3.5	10	3.5	65	22.8	285	100.0
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 245: Alcohol consumption by labour force status by age and sex**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	130	42.6	100	32.8	60	19.7	10	3.3	10	3.3	10	3.3	20	6.6	305	100.0
	Under 15	85	29.8	95	33.3	80	28.1	20	7.0	10	3.5	10	3.5	65	22.8	285	100.0
15-24	Working	115	9.1	260	20.6	510	40.3	240	19.0	135	10.7	10	0.8	615	48.6	1265	100.0
	Not employed, looking for work	10	10.0	30	30.0	35	35.0	15	15.0	10	10.0	.	.	35	35.0	100	100.0
	Not employed, not looking for work	245	21.4	270	23.6	385	33.6	150	13.1	75	6.6	10	0.9	415	36.2	1145	100.0
25-34	Working	215	10.0	390	18.2	740	34.6	365	17.1	415	19.4	10	0.5	725	33.9	2140	100.0
	Not employed, looking for work	20	26.7	15	20.0	25	33.3	10	13.3	10	13.3	.	.	20	26.7	75	100.0
	Not employed, not looking for work	150	24.8	180	29.8	160	26.4	55	9.1	55	9.1	10	1.7	135	22.3	605	100.0
35-44	Working	335	11.0	485	15.9	910	29.9	545	17.9	750	24.6	15	0.5	775	25.5	3045	100.0
	Not employed, looking for work	25	25.0	25	25.0	30	30.0	15	15.0	10	10.0	.	.	25	25.0	100	100.0
	Not employed, not looking for work	180	28.8	135	21.6	145	23.2	75	12.0	90	14.4	10	1.6	105	16.8	625	100.0
45-54	Working	350	12.8	375	13.8	650	23.9	435	16.0	895	32.8	10	0.4	510	18.7	2725	100.0
	Not employed, looking for work	15	25.0	10	16.7	10	16.7	10	16.7	10	16.7	10	16.7	10	16.7	60	100.0
	Not employed, not looking for work	170	37.8	95	21.1	90	20.0	35	7.8	50	11.1	10	2.2	40	8.9	450	100.0
55-64	Working	210	12.5	230	13.6	375	22.3	250	14.8	610	36.2	10	0.6	215	12.8	1685	100.0
	Not employed, looking for work	10	18.2	10	18.2	15	27.3	10	18.2	10	18.2	10	18.2	10	18.2	55	100.0
	Not employed, not looking for work	255	33.3	155	20.3	140	18.3	55	7.2	160	20.9	10	1.3	55	7.2	765	100.0
65+	Working	50	13.9	50	13.9	80	22.2	30	8.3	145	40.3	10	2.8	20	5.6	360	100.0
	Not employed, looking for work	10	100.0	10	100.0	10	100.0	.	.	10	100.0	.	.	.	.	10	100.0

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	Not employed, not looking for work	685	28.4	420	17.4	415	17.2	175	7.2	700	29.0	15	0.6	95	3.9	2415	100.0
Male	NA	65	40.6	45	28.1	40	25.0	10	6.3	10	6.3	10	6.3	10	6.3	160	100.0
	Under 15	35	25.0	50	35.7	40	28.6	10	7.1	10	7.1	10	7.1	35	25.0	140	100.0
	Working	545	9.4	670	11.6	1615	28.0	1070	18.5	1830	31.7	35	0.6	1830	31.7	5770	100.0
	Not employed, looking for work	35	17.9	40	20.5	50	25.6	35	17.9	35	17.9	.	.	60	30.8	195	100.0
	Not employed, not looking for work	490	23.1	355	16.7	485	22.9	225	10.6	550	25.9	15	0.7	395	18.6	2120	100.0
Female	NA	65	43.3	55	36.7	20	13.3	10	6.7	.	.	10	6.7	15	10.0	150	100.0
	Under 15	50	34.5	45	31.0	45	31.0	10	6.9	10	6.9	.	.	30	20.7	145	100.0
	Working	730	13.4	1120	20.6	1655	30.4	800	14.7	1125	20.6	20	0.4	1030	18.9	5450	100.0
	Not employed, looking for work	50	24.4	60	29.3	60	29.3	20	9.8	15	7.3	10	4.9	40	19.5	205	100.0
	Not employed, not looking for work	1195	30.7	910	23.4	850	21.9	330	8.5	580	14.9	20	0.5	450	11.6	3890	100.0
<b>Total</b>	<b>Total</b>	<b>3255</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 246: Alcohol consumption by labour force status by prioritised ethnicity**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Ethnicity (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	65	32.5	75	37.5	45	22.5	10	5.0	10	5.0	10	5.0	10	5.0	200	100.0
	Working	710	7.8	1330	14.6	2645	29.0	1640	18.0	2750	30.1	45	0.5	2315	25.4	9125	100.0
	Not employed, looking for work	35	14.0	55	22.0	70	28.0	40	16.0	40	16.0	10	4.0	60	24.0	250	100.0
	Not employed, not looking for work	1065	22.7	975	20.8	1070	22.8	485	10.4	1075	22.9	25	0.5	620	13.2	4685	100.0
	Under 15	35	17.9	70	35.9	60	30.8	15	7.7	10	5.1	10	5.1	50	25.6	195	100.0
Māori	NA	35	53.8	20	30.8	15	23.1	10	15.4	.	.	.	.	10	15.4	65	100.0
	Working	185	15.7	285	24.3	395	33.6	155	13.2	155	13.2	10	0.9	420	35.7	1175	100.0
	Not employed, looking for work	15	16.7	35	38.9	25	27.8	10	11.1	10	11.1	.	.	35	38.9	90	100.0
	Not employed, not looking for work	210	31.8	170	25.8	180	27.3	50	7.6	45	6.8	10	1.5	180	27.3	660	100.0
	Under 15	20	36.4	20	36.4	15	27.3	.	.	.	.	.	.	15	27.3	55	100.0
Pacific	NA	15	75.0	10	50.0	.	.	.	.	10	50.0	10	50.0	.	.	20	100.0
	Working	195	44.8	85	19.5	100	23.0	30	6.9	20	4.6	10	2.3	90	20.7	435	100.0
	Not employed, looking for work	20	66.7	10	33.3	10	33.3	10	33.3	.	.	.	.	10	33.3	30	100.0
	Not employed, not looking for work	185	61.7	50	16.7	40	13.3	10	3.3	10	3.3	10	3.3	30	10.0	300	100.0
	Under 15	10	66.7	10	66.7	10	66.7	.	.	10	66.7	.	.	10	66.7	15	100.0
Asian	NA	15	100.0	10	66.7	10	66.7	.	.	.	.	.	.	.	.	15	100.0
	Working	190	39.6	95	19.8	120	25.0	45	9.4	30	6.3	10	2.1	30	6.3	480	100.0
	Not employed, looking for work	15	50.0	10	33.3	10	33.3	.	.	.	.	.	.	.	.	30	100.0
	Not employed, not looking for work	225	61.6	65	17.8	45	12.3	10	2.7	15	4.1	10	2.7	15	4.1	365	100.0
	Under 15	15	75.0	10	50.0	10	50.0	.	.	.	.	.	.	.	.	20	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 247: Alcohol consumption by labour force status by legal marital status**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Marital Status (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	130	41.9	100	32.3	60	19.4	10	3.2	10	3.2	10	3.2	20	6.5	310	100.0
	Not employed, looking for work	10	100.0	10	100.0	.	.	.	.	.	.	.	.	10	100.0	10	100.0
	Under 15	80	28.1	95	33.3	80	28.1	20	7.0	10	3.5	10	3.5	65	22.8	285	100.0
	Working	.	.	.	.	.	.	10	100.0	10	100.0	.	.	.	.	10	100.0
Never Married	Not employed, looking for work	30	15.0	55	27.5	65	32.5	30	15.0	15	7.5	10	5.0	70	35.0	200	100.0
	Working	290	9.0	610	19.0	1155	35.9	600	18.7	550	17.1	10	0.3	1260	39.2	3215	100.0
	Not employed, not looking for work	425	24.0	415	23.4	535	30.2	225	12.7	160	9.0	10	0.6	550	31.1	1770	100.0
	Overseas	.	.	10	100.0	10	100.0	.	.	10	100.0	.	.	10	100.0	10	100.0
Divorced Widowed Separated	Not employed, looking for work	10	15.4	15	23.1	20	30.8	10	15.4	10	15.4	10	15.4	10	15.4	65	100.0
	Working	180	11.8	240	15.7	420	27.5	260	17.0	425	27.8	10	0.7	375	24.5	1530	100.0
	Not employed, not looking for work	460	32.9	315	22.5	300	21.4	95	6.8	230	16.4	10	0.7	105	7.5	1400	100.0
Married	Not employed, looking for work	45	33.3	25	18.5	30	22.2	15	11.1	20	14.8	10	7.4	20	14.8	135	100.0
	Working	805	12.5	935	14.5	1695	26.2	1015	15.7	1975	30.5	35	0.5	1220	18.9	6465	100.0
	Not employed, not looking for work	805	28.3	535	18.8	500	17.6	240	8.5	745	26.2	10	0.4	190	6.7	2840	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2505</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 248: Alcohol consumption by labour force status by family structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Family Structure (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	Working	330	9.8	470	14.0	865	25.8	530	15.8	1145	34.1	20	0.6	720	21.5	3355	100.0
	Not employed, looking for work	10	12.5	15	18.8	20	25.0	10	12.5	20	25.0	10	12.5	20	25.0	80	100.0
	Not employed, not looking for work	465	23.5	345	17.5	350	17.7	175	8.9	630	31.9	15	0.8	115	5.8	1975	100.0
Couple with children	Working	640	12.0	865	16.2	1595	30.0	895	16.8	1305	24.5	30	0.6	1370	25.7	5325	100.0
	Not employed, looking for work	35	23.3	40	26.7	45	30.0	20	13.3	10	6.7	.	.	35	23.3	150	100.0
	Not employed, not looking for work	535	29.2	415	22.7	460	25.1	205	11.2	200	10.9	10	0.5	385	21.0	1830	100.0
	NA	100	41.7	80	33.3	45	18.8	10	4.2	10	4.2	10	4.2	10	4.2	240	100.0
	Under 15	65	29.5	70	31.8	60	27.3	20	9.1	10	4.5	10	4.5	55	25.0	220	100.0
Sole parent	Working	130	14.6	215	24.2	265	29.8	135	15.2	140	15.7	10	1.1	250	28.1	890	100.0
	Not employed, looking for work	15	18.8	25	31.3	25	31.3	10	12.5	10	12.5	.	.	35	43.8	80	100.0
	Not employed, not looking for work	210	28.8	210	28.8	200	27.4	55	7.5	50	6.8	10	1.4	175	24.0	730	100.0
	NA	30	42.9	20	28.6	15	21.4	10	14.3	.	.	.	.	10	14.3	70	100.0
	Under 15	20	33.3	25	41.7	15	25.0	10	16.7	10	16.7	.	.	10	16.7	60	100.0
Not in a family nucleus	Working	180	10.9	240	14.5	545	33.0	315	19.1	365	22.1	10	0.6	515	31.2	1650	100.0
	Not employed, looking for work	20	23.5	25	29.4	15	17.6	10	11.8	10	11.8	10	11.8	15	17.6	85	100.0
	Not employed, not looking for work	475	32.1	295	19.9	320	21.6	120	8.1	255	17.2	15	1.0	165	11.1	1480	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 249: Alcohol consumption by labour force status by household structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Household Structure (W1)	Labour Force Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	120	40.7	95	32.2	60	20.3	10	3.4	10	3.4	10	3.4	20	6.8	295	100.0
	Working	1040	11.1	1515	16.2	2675	28.5	1535	16.4	2570	27.4	50	0.5	2300	24.5	9380	100.0
	Not employed, looking for work	55	18.6	70	23.7	85	28.8	40	13.6	40	13.6	10	3.4	80	27.1	295	100.0
	Not employed, not looking for work	1160	26.2	925	20.9	1010	22.8	435	9.8	875	19.7	25	0.6	655	14.8	4435	100.0
	Under 15	75	27.3	95	34.5	80	29.1	20	7.3	10	3.6	10	3.6	65	23.6	275	100.0
Two or more families	NA	10	66.7	10	66.7	.	.	.	.	10	66.7	.	.	.	.	15	100.0
	Working	70	21.5	70	21.5	95	29.2	40	12.3	45	13.8	10	3.1	90	27.7	325	100.0
	Not employed, looking for work	10	33.3	10	33.3	10	33.3	10	33.3	.	.	.	.	10	33.3	30	100.0
	Not employed, not looking for work	105	45.7	65	28.3	30	13.0	10	4.3	20	8.7	10	4.3	45	19.6	230	100.0
	Under 15	10	100.0	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0	10	100.0
Other multi-person household	Working	50	8.8	65	11.5	205	36.3	125	22.1	115	20.4	.	.	240	42.5	565	100.0
	Not employed, looking for work	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	.	.	10	40.0	25	100.0
	Not employed, not looking for work	50	21.3	45	19.1	80	34.0	35	14.9	25	10.6	10	4.3	90	38.3	235	100.0
One person household	Working	115	12.1	140	14.7	295	31.1	170	17.9	230	24.2	10	1.1	225	23.7	950	100.0
	Not employed, looking for work	15	30.0	10	20.0	15	30.0	10	20.0	10	20.0	10	20.0	10	20.0	50	100.0
	Not employed, not looking for work	365	33.0	230	20.8	210	19.0	75	6.8	215	19.5	10	0.9	65	5.9	1105	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2505</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>



## Chapter 10 The Association of Wealth (Wave 2) with Health Measures

Wealth (otherwise known as net worth) is calculated by subtracting the total value of all liabilities from the total value of all assets. Wealth is divided into tertiles: 1. low - \$29,915; 2. \$29,195 - \$55,536; 3. \$55,536 – high.

### 10.1 The Association of Wealth with Demographics

Overall, wealth tended to increase with increasing age. There was no difference between males and females, which may be due to the equalisation of couple wealth. There were dramatic differences in wealth between the ethnic groups with Non-Māori, non-Pacific, non-Asian respondents having double the proportion in the high wealth tertile compared to Māori, Pacific and Asian respondents who had higher proportions in low quintiles. There were high proportions of married and divorced, separated or widowed had high proportions in the upper wealth tertiles. Which is different from income where, separated, divorced or widowed respondents were over-represented in the lower income quintiles. Respondents in sole parent families or living in multiple family or other multiple person households had high proportions in the lowest wealth tertile.

**Table 250: Wealth, overall and by age and sex**

	Wealth (W2)									
	NA		1		2		3		Total	
Age, Mean SD	28.8	19.8	30.1	15.8	46.1	15.7	54.0	14.0	44.0	18.2
Age (W1)	N	%	N	%	N	%	N	%	N	%
0-14	295	50.0	290	49.2	10	1.7	.	.	590	100.0
15-24	95	3.8	2080	82.9	300	12.0	30	1.2	2510	100.0
25-34	65	2.3	1000	35.5	1340	47.5	420	14.9	2820	100.0
35-44	65	1.7	645	17.1	1685	44.6	1375	36.4	3775	100.0
45-54	50	1.5	345	10.7	1115	34.5	1730	53.5	3235	100.0
55-64	50	2.0	240	9.6	775	30.9	1435	57.3	2505	100.0
65+	50	1.8	230	8.3	975	35.0	1525	54.8	2785	100.0
Male	315	3.8	2260	27.0	2815	33.6	2990	35.7	8380	100.0
Female	360	3.7	2565	26.1	3375	34.3	3540	36.0	9835	100.0
<b>Total</b>	<b>675</b>	<b>3.7</b>	<b>4830</b>	<b>26.5</b>	<b>6195</b>	<b>34.0</b>	<b>6520</b>	<b>35.8</b>	<b>18220</b>	<b>100.0</b>

**Table 251: Wealth by prioritised ethnicity**

Ethnicity (W1)	Wealth (W2)									
	NA		1		2		3		Total	
	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	435	3.0	3010	20.8	5035	34.8	5975	41.3	14455	100.0
Māori	140	6.8	930	45.5	695	34.0	280	13.7	2045	100.0
Pacific	60	7.4	490	60.5	205	25.3	50	6.2	810	100.0
Asian	40	4.4	395	43.4	260	28.6	215	23.6	910	100.0
<b>Total</b>	<b>675</b>	<b>3.7</b>	<b>4825</b>	<b>26.5</b>	<b>6195</b>	<b>34.0</b>	<b>6520</b>	<b>35.8</b>	<b>18220</b>	<b>100.0</b>

**Table 252: Wealth by legal marital status**

Marital Status (W1)	Wealth (W2)									
	NA		1		2		3		Total	
	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	300	50.4	295	49.6	10	1.7	10	1.7	595	100.0
Never Married	170	3.3	3010	58.1	1365	26.3	640	12.3	5185	100.0
Divorced Widowed Separated	60	2.0	525	17.5	1090	36.4	1320	44.1	2995	100.0
Married	145	1.5	1000	10.6	3735	39.6	4560	48.3	9440	100.0
<b>Total</b>	<b>675</b>	<b>3.7</b>	<b>4825</b>	<b>26.5</b>	<b>6195</b>	<b>34.0</b>	<b>6520</b>	<b>35.8</b>	<b>18215</b>	<b>100.0</b>

**Table 253: Wealth by family structure**

Family Structure (W1)	Wealth (W2)									
	NA		1		2		3		Total	
	N	%	N	%	N	%	N	%	N	%
Couple only	100	1.8	600	11.1	2060	38.1	2665	49.3	5410	100.0
Couple with children	370	4.8	2360	30.4	2695	34.8	2335	30.1	7755	100.0
Sole parent	125	6.8	895	48.8	530	28.9	290	15.8	1835	100.0
Not in a family nucleus	85	2.6	965	30.1	920	28.7	1240	38.6	3210	100.0
<b>Total</b>	<b>675</b>	<b>3.7</b>	<b>4825</b>	<b>26.5</b>	<b>6195</b>	<b>34.0</b>	<b>6525</b>	<b>35.8</b>	<b>18215</b>	<b>100.0</b>

**Table 254: Wealth by household structure**

Household Structure (W1)	Wealth (W2)									
	NA		1		2		3		Total	
	N	%	N	%	N	%	N	%	N	%
One Family	565	3.8	3725	25.4	5165	35.2	5220	35.6	14680	100.0
Two or more families	30	4.9	310	50.8	175	28.7	95	15.6	610	100.0
Other multi-person household	30	3.6	450	54.5	230	27.9	120	14.5	825	100.0
One person household	45	2.1	345	16.4	625	29.7	1095	52.0	2105	100.0
<b>Total</b>	<b>675</b>	<b>3.7</b>	<b>4825</b>	<b>26.5</b>	<b>6195</b>	<b>34.0</b>	<b>6525</b>	<b>35.8</b>	<b>18220</b>	<b>100.0</b>

## 10.2 The Association of Wealth with Self-Rated Health

The relationship between self-rated health and wealth tertiles is not linear, with high proportion reporting excellent health status in the upper and lower wealth tertiles. However, these numbers are not adjusted for age and there are younger respondents, who tend rate their health better in the low wealth tertiles. This relationship is consistent between males and females and across ethnic groups. There is more of a linear relationship between increasing proportions reporting excellent or very good health status and increasing wealth in the older age groups (ages >35 years), and married or divorced, separated or widowed respondents.

**Table 255: Self-rated health, by wealth, overall**

Wealth (W2)	Self Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA	295	43.7	210	31.1	120	17.8	35	5.2	10	1.5	675	100.0
1	1950	40.4	1510	31.3	950	19.7	330	6.8	95	2.0	4825	100.0
2	2140	34.5	2090	33.7	1360	22.0	475	7.7	130	2.1	6195	100.0
3	2555	39.2	2235	34.3	1285	19.7	370	5.7	75	1.1	6525	100.0
<b>Total</b>	<b>6940</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 256: Self-rated health, by wealth, by age and sex**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Age (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	155	52.5	100	33.9	35	11.9	10	3.4	10	3.4	295	100.0
	1	170	58.6	85	29.3	35	12.1	10	3.4	.	.	290	100.0
	2	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
15-24	NA	35	36.8	35	36.8	20	21.1	10	10.5	10	10.5	95	100.0
	1	1050	50.4	655	31.4	320	15.3	55	2.6	10	0.5	2085	100.0
	2	150	50.0	105	35.0	45	15.0	10	3.3	10	3.3	300	100.0
	3	15	50.0	10	33.3	10	33.3	.	.	.	.	30	100.0
25-34	NA	35	53.8	20	30.8	10	15.4	10	15.4	.	.	65	100.0
	1	400	40.0	350	35.0	180	18.0	60	6.0	10	1.0	1000	100.0
	2	690	51.5	445	33.2	160	11.9	45	3.4	10	0.7	1340	100.0
	3	240	57.1	140	33.3	30	7.1	10	2.4	.	.	420	100.0
35-44	NA	30	46.2	15	23.1	10	15.4	10	15.4	10	15.4	65	100.0
	1	190	29.2	210	32.3	160	24.6	60	9.2	25	3.8	650	100.0
	2	665	39.5	600	35.6	320	19.0	85	5.0	20	1.2	1685	100.0
	3	725	52.7	450	32.7	165	12.0	35	2.5	10	0.7	1375	100.0
45-54	NA	20	44.4	15	33.3	15	33.3	10	22.2	10	22.2	45	100.0
	1	80	23.2	90	26.1	105	30.4	40	11.6	25	7.2	345	100.0
	2	345	30.9	415	37.2	255	22.9	75	6.7	30	2.7	1115	100.0
	3	800	46.2	595	34.4	270	15.6	50	2.9	15	0.9	1730	100.0
55-64	NA	10	18.2	20	36.4	10	18.2	10	18.2	10	18.2	55	100.0
	1	35	14.3	65	26.5	75	30.6	55	22.4	10	4.1	245	100.0
	2	160	20.6	255	32.9	235	30.3	90	11.6	35	4.5	775	100.0
	3	475	33.1	550	38.3	305	21.3	85	5.9	15	1.0	1435	100.0
65+	NA	15	27.3	15	27.3	20	36.4	10	18.2	10	18.2	55	100.0
	1	25	10.9	55	23.9	75	32.6	55	23.9	15	6.5	230	100.0
	2	135	13.8	275	28.2	345	35.4	175	17.9	50	5.1	975	100.0
	3	300	19.7	490	32.1	505	33.1	190	12.5	35	2.3	1525	100.0
Male	NA	160	50.8	85	27.0	40	12.7	20	6.3	10	3.2	315	100.0
	1	955	42.3	695	30.8	430	19.0	140	6.2	40	1.8	2260	100.0
	2	965	34.3	975	34.6	615	21.8	220	7.8	50	1.8	2815	100.0
	3	1155	38.7	1035	34.7	590	19.8	170	5.7	40	1.3	2985	100.0
Female	NA	135	37.5	125	34.7	80	22.2	15	4.2	10	2.8	360	100.0
	1	1000	39.0	815	31.8	515	20.1	185	7.2	45	1.8	2565	100.0
	2	1175	34.8	1115	33.0	750	22.2	255	7.6	85	2.5	3375	100.0
	3	1405	39.7	1200	33.9	695	19.6	200	5.6	35	1.0	3540	100.0
<b>Total</b>	<b>Total</b>	<b>6940</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 257: Self-rated health, by wealth, by prioritised ethnicity**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Ethnicity (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	190	43.2	140	31.8	80	18.2	20	4.5	10	2.3	440	100.0
	1	1250	41.5	955	31.7	555	18.4	200	6.6	55	1.8	3010	100.0
	2	1755	34.9	1695	33.7	1095	21.7	385	7.6	100	2.0	5035	100.0
	3	2365	39.6	2050	34.3	1140	19.1	335	5.6	75	1.3	5975	100.0
Māori	NA	60	42.9	40	28.6	20	14.3	10	7.1	10	7.1	140	100.0
	1	295	31.7	315	33.9	225	24.2	80	8.6	15	1.6	930	100.0
	2	195	28.1	245	35.3	175	25.2	60	8.6	15	2.2	695	100.0
	3	110	39.3	100	35.7	60	21.4	15	5.4	10	3.6	280	100.0
Pacific	NA	25	41.7	15	25.0	10	16.7	10	16.7	10	16.7	60	100.0
	1	220	44.9	130	26.5	85	17.3	35	7.1	15	3.1	490	100.0
	2	75	36.6	60	29.3	40	19.5	15	7.3	10	4.9	205	100.0
	3	20	40.0	10	20.0	10	20.0	10	20.0	.	.	50	100.0
Asian	NA	15	37.5	10	25.0	10	25.0	10	25.0	10	25.0	40	100.0
	1	190	48.1	105	26.6	85	21.5	15	3.8	10	2.5	395	100.0
	2	110	42.3	85	32.7	50	19.2	15	5.8	10	3.8	260	100.0
	3	60	27.9	65	30.2	70	32.6	15	7.0	.	.	215	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

**Table 258: Self-rated health, by wealth, by legal marital status**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Marital Status (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	155	52.5	95	32.2	40	13.6	10	3.4	10	3.4	295	100.0
	1	170	58.6	85	29.3	35	12.1	10	3.4	.	.	290	100.0
	2	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
	3	.	.	10	100.0	.	.	.	.	.	.	10	100.0
Never Married	NA	70	41.2	50	29.4	30	17.6	10	5.9	10	5.9	170	100.0
	1	1335	44.3	975	32.3	540	17.9	130	4.3	40	1.3	3015	100.0
	2	570	41.8	475	34.8	230	16.8	65	4.8	15	1.1	1365	100.0
	3	285	44.2	195	30.2	120	18.6	25	3.9	10	1.6	645	100.0
Divorced Widowed Separated	NA	15	25.0	20	33.3	25	41.7	10	16.7	10	16.7	60	100.0
	1	105	20.0	140	26.7	145	27.6	100	19.0	30	5.7	525	100.0
	2	310	28.4	335	30.7	280	25.7	110	10.1	45	4.1	1090	100.0
	3	395	29.9	440	33.3	345	26.1	120	9.1	25	1.9	1320	100.0
Married	NA	55	37.9	40	27.6	30	20.7	15	10.3	10	6.9	145	100.0
	1	340	34.2	300	30.2	230	23.1	100	10.1	25	2.5	995	100.0
	2	1255	33.6	1270	34.0	845	22.7	295	7.9	75	2.0	3730	100.0
	3	1875	41.1	1600	35.1	825	18.1	225	4.9	45	1.0	4560	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 259: Self-rated health, by wealth, by family structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Family Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA	30	31.6	35	36.8	25	26.3	10	10.5	.	.	95	100.0
	1	205	34.2	200	33.3	135	22.5	45	7.5	10	1.7	600	100.0
	2	590	28.6	665	32.3	550	26.7	200	9.7	55	2.7	2060	100.0
	3	925	34.8	960	36.1	580	21.8	170	6.4	25	0.9	2660	100.0
Couple with children	NA	190	51.4	105	28.4	60	16.2	10	2.7	10	2.7	370	100.0
	1	1130	47.8	705	29.8	390	16.5	110	4.7	30	1.3	2365	100.0
	2	1085	40.3	965	35.8	475	17.6	140	5.2	30	1.1	2695	100.0
	3	1170	50.1	775	33.2	300	12.8	65	2.8	20	0.9	2335	100.0
Sole parent	NA	45	37.5	45	37.5	25	20.8	10	8.3	10	8.3	120	100.0
	1	330	36.9	285	31.8	200	22.3	65	7.3	20	2.2	895	100.0
	2	180	34.0	160	30.2	120	22.6	45	8.5	25	4.7	530	100.0
	3	110	37.9	95	32.8	60	20.7	20	6.9	10	3.4	290	100.0
Not in a family nucleus	NA	25	29.4	25	29.4	20	23.5	10	11.8	10	11.8	85	100.0
	1	295	30.6	325	33.7	220	22.8	105	10.9	30	3.1	965	100.0
	2	280	30.4	295	32.1	220	23.9	95	10.3	30	3.3	920	100.0
	3	355	28.7	405	32.8	340	27.5	115	9.3	25	2.0	1235	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3710</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

**Table 260: Self-rated health, by wealth, by household structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Household Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	260	45.6	175	30.7	95	16.7	30	5.3	10	1.8	570	100.0
	1	1615	43.4	1150	30.9	695	18.7	210	5.6	55	1.5	3725	100.0
	2	1820	35.2	1755	34.0	1115	21.6	370	7.2	100	1.9	5165	100.0
	3	2185	41.9	1805	34.6	930	17.8	255	4.9	50	1.0	5215	100.0
Two or more families	NA	15	50.0	10	33.3	10	33.3	10	33.3	10	33.3	30	100.0
	1	110	35.5	90	29.0	70	22.6	25	8.1	10	3.2	310	100.0
	2	60	35.3	50	29.4	40	23.5	15	8.8	10	5.9	170	100.0
	3	25	26.3	30	31.6	25	26.3	10	10.5	10	10.5	95	100.0
Other multi-person household	NA	15	50.0	10	33.3	10	33.3	.	.	.	.	30	100.0
	1	170	37.8	165	36.7	95	21.1	20	4.4	10	2.2	450	100.0
	2	95	40.4	80	34.0	45	19.1	10	4.3	10	4.3	235	100.0
	3	55	47.8	35	30.4	20	17.4	10	8.7	10	8.7	115	100.0
One person household	NA	10	22.2	15	33.3	15	33.3	10	22.2	10	22.2	45	100.0
	1	60	17.4	100	29.0	90	26.1	70	20.3	25	7.2	345	100.0
	2	165	26.4	200	32.0	160	25.6	75	12.0	25	4.0	625	100.0
	3	290	26.6	365	33.5	315	28.9	105	9.6	25	2.3	1090	100.0
<b>Total</b>	<b>Total</b>	<b>6940</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

### ***10.3 The Association of Wealth with Health-Related Quality of Life (SF-36)***

Overall, the relationship between mental health mean SF-36 scores (SF, MH, RE, MCS) is linear across wealth tertiles. However, the relationship is more u-shaped in the physical functioning mean SF-36 scores. These relationships were typically consistent by sex and across age groups and ethnic groups. The mean SF-36 scores for divorced, separated or widowed respondents and respondents living in single person households in the lowest wealth tertile were much lower than any other respondent mean SF-36 scores.

**Table 261: Overall mean (SD) SF-36 score, by wealth**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Wealth (W2)		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA		80.3	18.8	85.9	19.9	86.7	21.1	89.8	20.3	67.8	19.5	81.8	15.1	91.2	18.4	91.2	17.9	51.5	9.7	52.7	7.7
1		76.9	20.6	82.5	23.1	84.4	23.1	88.0	22.2	63.9	20.4	80.6	15.7	89.8	19.0	89.2	20.4	50.4	9.9	51.6	8.7
2		77.0	20.9	80.3	23.8	82.8	24.7	89.1	21.8	62.8	20.5	83.0	14.7	91.4	17.8	84.5	23.2	51.9	9.3	49.7	9.7
3		80.2	19.0	82.3	22.2	84.8	23.3	92.3	18.3	65.9	19.5	85.6	12.5	94.6	13.7	85.1	22.0	53.9	7.7	50.0	9.2
<b>Total</b>		<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 262: Mean (SD) SF-36 score by wealth by age and sex**

			SF36 (W3)																			
			GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	Wealth (W2)		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0-14	NA		83.8	15.5	89.0	16.1	90.7	16.4	93.3	16.3	72.3	17.2	83.3	12.8	94.2	15.0	97.5	7.6	52.8	8.2	54.7	4.8
	1		82.6	16.0	86.9	19.6	90.3	17.3	91.3	17.3	68.9	18.0	81.9	13.4	93.0	15.1	96.8	10.0	51.5	8.3	54.4	5.9
	2		75.7	4.0	83.3	11.0	93.8	6.3	100.0	0.0	60.4	25.3	76.7	10.4	100.0	0.0	98.3	2.9	49.8	7.3	55.1	3.8
15-24	NA		80.1	15.0	85.6	20.6	86.3	18.9	87.9	19.3	63.4	19.6	79.4	14.8	89.5	17.0	93.7	12.7	49.3	9.4	53.7	5.6
	1		80.3	17.7	85.5	20.8	88.3	19.6	89.7	19.7	65.5	18.8	81.3	14.4	92.1	16.0	94.9	12.9	50.7	9.2	53.6	6.6
	2		82.1	15.8	83.2	21.2	87.3	20.7	90.6	18.4	65.0	18.6	82.7	13.1	93.4	14.1	94.2	14.3	51.6	8.3	52.9	6.4
25-34	3		86.5	13.2	87.1	19.4	88.4	18.9	93.9	16.3	63.3	20.8	82.9	14.4	94.2	10.7	97.6	5.0	51.5	8.4	54.7	4.8
	NA		85.1	16.5	86.9	22.3	89.5	20.4	87.9	22.7	65.3	20.5	80.5	18.2	91.4	17.6	93.8	16.6	50.3	10.9	54.3	7.9
	1		79.6	18.9	84.0	21.9	85.5	21.8	88.7	20.9	63.8	20.6	80.7	15.8	89.4	18.5	92.7	13.9	50.2	10.1	52.8	7.0
35-44	2		82.6	16.4	84.6	20.9	87.7	19.9	91.2	19.1	64.2	18.7	82.5	14.3	92.6	16.3	93.4	14.1	51.4	9.2	53.1	6.8
	3		85.9	14.9	86.4	19.4	90.6	17.6	93.2	16.1	64.5	18.6	84.1	11.9	95.0	12.6	94.5	13.7	52.3	7.7	53.8	6.6
	NA		76.8	23.3	85.4	20.0	84.0	25.2	82.1	27.5	63.5	21.4	78.8	17.8	85.0	25.7	90.3	17.1	48.4	12.9	52.4	8.9
45-54	1		75.2	21.1	80.8	24.1	82.9	24.2	85.8	25.3	62.9	21.2	79.6	16.1	87.1	21.8	86.7	21.1	49.7	10.5	50.8	8.9
	2		80.0	18.6	82.2	22.4	85.8	21.7	89.1	21.0	63.6	19.9	81.8	15.0	91.4	17.4	90.6	16.5	51.1	9.5	51.9	7.9
	3		84.4	16.5	85.0	20.5	88.6	19.4	92.6	17.8	66.5	18.0	84.1	13.1	94.2	14.0	93.0	13.1	52.7	8.2	53.0	6.7
45-54	NA		79.5	21.6	84.8	21.9	81.9	26.7	91.1	18.4	67.7	18.1	82.5	14.3	91.0	18.0	85.5	23.3	52.6	9.1	50.7	9.1
	1		66.9	24.7	73.6	27.5	74.8	28.4	84.2	26.8	59.9	22.3	77.3	20.0	83.8	25.3	77.5	26.3	49.0	12.2	46.8	10.6
	2		76.0	21.7	78.5	24.6	83.1	24.3	88.6	22.5	63.4	19.9	82.5	15.2	90.6	18.3	85.0	21.6	51.7	9.6	49.6	9.4



		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	Wealth (W2)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
	3	82.9	17.2	84.2	21.4	88.4	20.3	93.9	16.0	68.4	18.1	85.6	12.2	95.3	12.7	90.3	16.8	54.0	7.4	51.9	7.9
55-64	NA	69.3	25.0	79.7	22.4	82.5	23.6	88.0	21.6	66.2	22.1	80.9	18.8	88.0	20.5	79.0	24.5	51.7	11.6	48.1	9.9
	1	63.2	23.6	71.9	27.8	72.1	29.2	84.4	26.6	59.1	22.7	78.5	18.2	85.1	23.5	71.6	28.7	50.0	10.6	44.8	11.3
	2	72.7	23.3	77.9	24.7	80.7	26.2	89.8	22.0	63.7	21.2	84.7	14.3	91.2	18.5	79.0	23.9	53.2	8.9	47.3	10.2
	3	79.3	19.3	81.5	22.3	85.5	22.6	93.1	17.8	68.5	18.0	86.7	11.9	95.2	12.6	85.5	19.4	54.8	7.2	49.7	8.7
65+	NA	71.2	21.1	75.1	25.4	73.5	27.8	85.6	26.0	60.1	21.1	83.2	15.7	88.2	23.4	67.1	27.3	52.7	9.1	44.0	9.9
	1	59.7	26.1	71.6	26.8	68.6	30.0	81.4	29.2	57.4	24.7	81.7	17.3	88.1	22.9	54.3	32.0	52.3	10.9	39.7	12.0
	2	67.1	24.0	74.3	27.1	70.6	31.0	85.7	25.9	57.5	23.6	84.8	14.7	90.1	20.3	62.5	30.1	53.4	9.2	42.1	11.9
	3	72.4	21.4	77.2	24.2	75.1	28.5	89.3	21.5	60.6	22.6	86.2	12.6	93.3	15.5	68.7	28.3	54.5	7.8	44.3	11.0
Male	NA	82.5	17.8	87.7	19.0	87.8	20.7	91.7	17.8	71.3	18.1	83.7	13.8	93.9	15.1	93.4	16.1	53.0	8.7	53.2	7.1
	1	78.0	20.1	83.0	23.1	85.6	23.0	89.7	21.0	66.6	19.8	81.9	15.0	91.3	18.0	90.5	19.8	51.5	9.4	51.8	8.6
	2	77.3	20.8	81.8	23.2	84.6	24.3	90.9	20.4	65.6	19.9	84.5	13.6	93.1	16.2	86.9	21.5	52.9	8.6	50.3	9.3
	3	80.0	18.9	83.8	21.0	86.5	22.3	93.5	16.7	68.1	19.0	86.7	11.8	95.4	12.4	87.6	19.7	54.5	7.2	50.7	8.5
Female	NA	78.4	19.4	84.3	20.6	85.7	21.4	88.1	22.2	64.7	20.1	80.1	16.0	88.9	20.6	89.3	19.2	50.2	10.3	52.2	8.1
	1	75.9	21.0	82.0	23.1	83.4	23.2	86.5	23.1	61.6	20.6	79.4	16.2	88.5	19.8	88.0	20.9	49.5	10.3	51.4	8.7
	2	76.8	21.0	79.1	24.2	81.2	25.0	87.6	22.8	60.5	20.7	81.7	15.4	89.9	19.0	82.5	24.3	51.1	9.8	49.2	10.0
	3	80.3	19.1	81.0	23.0	83.4	24.1	91.3	19.5	64.1	19.8	84.7	12.9	93.8	14.6	82.9	23.5	53.4	8.0	49.4	9.8
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 263: Mean (SD) SF-36 score by wealth by prioritised ethnicity**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Ethnicity (W1)	Wealth (W2)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
nM,nP,nA	NA	81.6	17.3	84.9	19.8	87.6	20.2	90.0	20.4	67.4	19.3	82.4	14.5	92.5	17.1	91.1	18.1	51.9	9.4	52.6	7.7
	1	76.7	20.9	81.4	23.4	84.5	23.2	88.1	22.1	62.3	20.6	80.2	15.9	90.4	18.6	89.2	20.7	50.2	10.0	51.5	8.9
	2	77.2	20.9	79.8	24.0	82.4	25.1	89.0	21.9	62.1	20.7	83.0	14.7	91.7	17.6	84.0	23.6	51.9	9.3	49.5	9.9
	3	80.3	19.0	82.2	22.2	84.7	23.5	92.4	18.1	65.7	19.6	85.6	12.3	94.6	13.5	84.8	22.2	53.9	7.6	49.9	9.3
Māori	NA	78.8	21.6	86.8	20.7	85.1	23.4	88.9	21.0	66.1	20.1	79.6	17.2	87.9	22.3	90.8	18.8	50.0	10.8	52.9	8.1
	1	77.3	19.7	83.3	22.9	83.3	23.7	86.9	23.8	65.5	20.0	81.5	16.0	88.6	20.0	89.0	20.2	50.8	10.3	51.4	8.5
	2	76.7	20.9	81.9	22.9	84.6	23.1	89.0	22.5	65.1	19.7	83.1	14.8	90.5	18.9	86.5	21.5	51.8	9.7	50.6	8.7
	3	80.4	20.3	83.2	22.6	86.4	21.9	92.0	19.9	67.8	19.3	86.6	13.4	94.0	16.3	87.1	21.3	54.1	8.9	50.6	9.1
Pacific	NA	75.8	22.1	87.5	18.9	82.8	24.1	88.7	19.7	72.5	18.5	82.6	14.6	89.8	18.3	90.0	19.4	52.3	9.1	51.5	8.2
	1	75.4	21.8	82.4	24.5	82.4	24.5	86.1	23.1	67.5	20.5	80.5	14.8	86.8	21.8	87.3	22.2	50.6	9.6	50.8	8.9
	2	72.2	22.8	81.9	22.3	79.5	24.9	88.2	21.6	65.8	19.5	82.9	14.4	85.5	22.6	84.2	21.6	51.5	9.3	49.2	9.5
	3	78.2	21.6	84.8	18.9	84.6	22.8	90.9	20.4	68.8	18.0	81.9	12.9	90.1	18.2	87.3	22.6	52.1	7.9	51.3	8.3
Asian	NA	78.5	17.6	90.8	19.1	89.1	16.1	92.1	18.5	70.7	20.1	81.3	14.2	90.6	15.0	96.4	7.2	51.2	9.1	54.6	4.7
	1	78.7	18.8	88.9	18.6	88.9	18.2	92.3	16.6	67.9	18.0	81.5	14.2	91.7	15.6	92.0	15.9	51.4	8.3	53.5	7.0
	2	78.6	18.1	84.8	22.0	88.3	18.5	91.5	17.9	68.4	18.3	82.6	14.2	92.4	14.9	89.7	18.1	52.3	8.3	52.1	7.8
	3	76.5	17.9	84.8	20.8	88.0	19.3	91.4	19.1	67.9	16.5	83.8	14.1	94.2	12.8	89.7	16.0	52.6	8.4	51.6	6.9
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 264: Mean (SD) SF-36 score by wealth by legal marital status**

		SF36 (W3)																			
Marital Status (W1)	Wealth (W2)	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	NA	83.8	15.5	89.0	16.1	90.7	16.4	93.3	16.3	72.3	17.2	83.3	12.8	94.2	15.0	97.5	7.6	52.8	8.2	54.7	4.8
	1	82.6	15.9	87.0	19.6	90.4	17.2	91.2	17.4	68.9	17.9	81.8	13.5	93.0	15.1	96.9	9.9	51.5	8.3	54.5	5.9
	2	75.7	4.0	83.3	11.0	93.8	6.3	100.0	0.0	60.4	25.3	76.7	10.4	100.0	0.0	98.3	2.9	49.8	7.3	55.1	3.8
	3	82.0	.	84.0	.	37.5	.	100.0	.	25.0	.	90.0	.	100.0	.	65.0	.	53.8	.	41.0	.
Never Married	NA	80.5	17.9	87.2	20.5	86.1	22.2	88.2	19.9	64.6	19.2	80.5	16.0	90.0	17.3	91.0	18.1	50.3	9.8	53.1	7.8
	1	78.9	18.8	84.2	21.6	86.6	21.2	88.7	21.2	64.7	19.7	80.9	15.1	90.7	17.8	92.9	15.8	50.4	9.7	52.8	7.3
	2	80.1	18.6	82.7	22.2	86.0	21.9	89.3	20.6	64.2	19.4	82.2	14.3	91.3	17.2	91.1	17.0	51.2	9.4	52.1	7.9
	3	81.4	18.4	84.7	19.6	87.1	20.9	92.6	17.2	66.1	18.1	83.6	13.8	93.8	14.5	89.5	19.6	52.7	8.2	51.9	7.9
Divorced Widowed Separated	NA	71.5	22.2	77.0	24.9	79.1	26.9	81.3	29.5	61.0	22.9	77.2	17.2	86.6	23.8	75.2	27.7	49.2	12.1	47.5	10.8
	1	66.2	25.8	73.1	28.1	73.6	29.2	81.8	28.6	57.2	23.7	77.7	19.5	83.8	25.2	72.2	30.1	49.0	12.3	45.6	11.8
	2	72.9	22.6	76.1	25.5	77.2	27.9	85.2	25.5	59.0	22.3	81.0	16.8	88.7	21.0	76.8	27.5	50.8	10.7	47.1	11.0
	3	76.2	21.2	78.9	24.3	79.2	26.8	89.1	22.2	62.2	22.1	84.6	13.8	93.1	15.9	76.8	26.9	53.3	8.7	47.1	10.8
Married	NA	76.7	22.3	81.7	22.0	82.6	23.8	88.1	22.1	65.2	20.7	82.2	16.8	88.5	22.1	85.6	21.1	51.5	10.8	50.2	8.9
	1	74.5	22.0	81.0	24.3	81.9	24.6	88.4	22.2	63.6	20.6	81.0	15.6	89.3	19.3	84.8	22.9	50.9	9.5	50.0	9.6
	2	77.1	21.0	80.7	23.7	83.2	24.5	90.1	20.9	63.4	20.2	83.8	14.1	92.2	17.0	84.3	23.0	52.5	8.8	49.6	9.6
	3	81.2	18.3	83.0	21.8	86.2	22.3	93.2	17.0	67.0	18.7	86.1	11.8	95.1	12.8	86.8	20.0	54.2	7.2	50.6	8.7
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 265: Mean (SD) SF-36 score by wealth by family structure**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Family Structure (W1)	Wealth (W2)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Couple only	NA	75.5	21.3	80.1	23.0	83.0	21.5	88.0	20.4	64.1	20.1	82.8	16.2	87.7	21.7	81.8	23.5	51.7	9.7	49.1	9.1
	1	75.4	22.0	80.2	24.1	82.0	24.5	88.0	22.4	63.2	20.6	81.2	15.1	89.6	19.1	85.5	23.0	50.9	9.5	50.0	9.7
	2	74.9	22.3	78.7	24.8	80.6	26.6	89.1	21.9	63.2	21.2	84.4	14.0	91.9	17.4	80.1	25.8	52.9	8.7	47.9	10.5
	3	79.5	19.3	81.2	22.6	83.8	24.2	92.8	17.7	66.8	19.5	86.7	12.1	94.7	13.7	83.4	22.3	54.6	7.3	49.1	9.5
Couple with children	NA	83.3	16.5	88.4	17.4	88.9	19.5	91.7	18.3	69.8	18.0	82.2	13.9	93.3	15.8	95.6	11.2	52.0	8.6	54.3	6.2
	1	79.3	19.0	85.1	21.3	87.3	20.9	89.9	19.8	65.8	19.7	81.8	14.6	91.5	17.0	92.7	16.1	51.1	9.2	52.9	7.4
	2	79.9	18.8	82.9	22.1	86.3	21.3	90.9	19.5	64.0	19.1	82.8	14.4	92.3	16.4	90.4	17.0	51.7	9.0	51.8	7.9
	3	83.9	16.4	85.4	20.1	89.4	18.7	93.7	16.2	67.6	17.8	85.3	11.9	95.3	12.0	91.9	14.7	53.6	7.3	52.6	7.0
Sole parent	NA	78.7	20.4	86.0	19.0	86.0	21.4	88.9	22.5	67.6	21.8	80.2	16.8	88.5	22.1	94.0	14.0	50.3	11.9	53.4	6.0
	1	75.1	20.9	82.0	23.8	82.9	24.2	85.4	24.5	62.6	20.7	78.6	16.9	87.2	21.3	88.2	21.1	49.1	10.9	51.4	9.1
	2	75.0	22.0	78.7	24.9	81.5	24.9	83.8	26.3	58.9	21.6	79.6	16.7	86.8	22.3	84.6	23.2	49.1	11.1	50.0	9.7
	3	77.6	21.1	80.2	25.1	80.4	26.3	87.7	22.5	62.7	19.9	82.1	14.2	91.9	16.8	82.6	24.4	51.8	9.1	49.2	10.5
Not in a family nucleus	NA	75.2	20.4	81.3	24.9	82.4	25.6	84.4	24.3	63.6	20.5	81.1	16.3	90.2	18.1	79.2	27.6	51.2	10.3	48.7	10.7
	1	73.5	22.5	77.9	25.1	80.4	25.5	85.9	24.9	61.0	21.3	79.1	17.1	88.1	21.1	83.7	25.2	49.8	10.8	49.5	9.9
	2	74.7	21.9	77.5	25.1	78.2	28.0	86.8	24.2	60.8	21.7	82.2	15.6	90.3	19.5	77.2	27.8	51.8	9.9	47.3	11.0
	3	75.3	21.2	79.4	23.6	79.6	26.6	89.9	21.5	61.8	21.7	84.5	13.5	93.3	15.6	76.3	27.5	53.3	8.4	47.1	10.8
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 266: Mean (SD) SF-36 score by wealth by household structure**

		SF36 (W3)																			
Household Structure (W1)	Wealth (W2)	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
One Family	NA	81.3	18.3	86.2	19.5	87.2	20.7	90.5	19.7	68.3	19.0	82.1	14.7	91.7	17.9	92.7	16.2	51.7	9.3	53.1	7.3
	1	77.6	20.2	83.6	22.4	85.5	22.4	88.6	21.5	64.6	20.2	81.0	15.3	90.3	18.4	90.6	18.9	50.6	9.7	52.1	8.3
	2	77.4	20.7	80.7	23.5	83.4	24.1	89.5	21.3	63.1	20.2	83.1	14.5	91.7	17.4	85.7	22.1	51.9	9.2	50.1	9.4
	3	81.3	18.3	82.9	21.8	86.0	22.4	92.9	17.4	66.8	18.8	85.8	12.2	94.8	13.2	87.0	20.1	54.0	7.5	50.6	8.8
Two or more families	NA	75.4	21.6	89.4	19.1	85.0	19.4	87.1	22.0	66.1	24.0	78.3	18.4	83.6	25.4	91.5	15.0	48.7	12.5	53.5	5.5
	1	77.1	20.3	82.1	24.0	83.0	23.8	88.7	21.9	66.5	19.3	81.5	14.8	88.8	19.3	87.3	21.6	51.2	9.2	50.9	9.1
	2	74.8	23.2	81.8	24.3	84.1	23.9	87.8	23.4	63.4	20.2	83.1	15.4	88.4	21.7	83.7	24.0	51.4	10.3	49.9	9.6
	3	77.7	21.6	84.2	22.0	87.4	22.7	91.6	19.2	70.0	20.3	87.7	10.5	93.9	12.8	85.5	21.3	54.6	6.9	50.5	8.7
Other multi-person household	NA	78.4	19.7	79.9	26.8	85.1	25.5	81.0	24.5	63.6	20.0	79.5	14.0	88.8	18.4	88.1	24.2	49.3	9.1	51.3	10.7
	1	79.5	17.4	81.8	22.3	85.9	20.4	89.4	19.8	63.5	18.5	80.9	13.7	90.8	17.4	93.0	13.8	50.5	9.1	52.5	7.2
	2	80.6	17.9	82.3	23.4	85.7	23.7	90.7	20.1	65.1	19.9	83.0	14.1	92.7	16.1	87.8	21.2	52.2	9.0	51.2	9.5
	3	84.2	16.3	83.4	22.2	86.9	22.8	93.2	15.9	65.0	20.1	84.9	12.0	94.6	14.4	86.7	23.0	53.5	7.2	51.2	9.1
One person household	NA	73.3	20.2	82.7	20.4	82.8	24.2	87.8	23.2	64.6	20.7	82.0	17.8	93.1	17.5	74.8	26.5	52.7	11.4	47.6	9.8
	1	65.3	25.5	71.7	27.5	72.0	29.7	79.6	30.4	55.4	23.8	75.2	20.9	83.9	25.4	71.0	30.8	47.9	12.9	45.3	11.5
	2	73.1	22.4	75.8	25.5	75.8	29.0	85.3	25.5	59.3	22.4	81.7	16.4	89.5	20.5	73.5	28.9	51.6	10.3	46.1	11.1
	3	74.6	21.2	79.0	23.6	79.1	26.6	89.7	21.7	61.6	21.7	84.4	13.7	93.4	15.4	75.5	27.4	53.4	8.5	46.8	10.7
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

### 10.4 The Association of Wealth with Mental Distress (K-10)

Overall, the proportion of respondents reporting low levels of mental distress increased with increasing wealth tertile. This was consistent across age groups, by sex, ethnicity, marital status, family and household structure. This was consequently reflected in declines in the proportion reporting moderate to high level of mental distress with increasing wealth. There was on average a 10-15% difference in the proportion of respondents reporting low mental distress between tertiles 1 and 3.

**Table 267: K-10 groups by wealth, overall**

Wealth (W2)	Kessler Groups (W3)											
	Low		Moderate		High		Very High		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA	475	70.4	115	17.0	50	7.4	15	2.2	10	1.5	675	100.0
1	3350	69.4	905	18.8	375	7.8	120	2.5	70	1.5	4825	100.0
2	4715	76.1	940	15.2	330	5.3	125	2.0	80	1.3	6195	100.0
3	5495	84.3	740	11.3	175	2.7	35	0.5	70	1.1	6520	100.0
<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 268: K-10 groups by wealth by age and sex**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Age (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	215	71.7	55	18.3	20	6.7	10	3.3	10	3.3	300	100.0
	1	210	72.4	50	17.2	15	5.2	10	3.4	10	3.4	290	100.0
	2	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
15-24	NA	60	66.7	20	22.2	10	11.1	10	11.1	.	.	90	100.0
	1	1475	70.7	410	19.7	145	7.0	40	1.9	20	1.0	2085	100.0
	2	225	73.8	60	19.7	15	4.9	10	3.3	.	.	305	100.0
	3	20	57.1	10	28.6	10	28.6	.	.	.	.	35	100.0
25-34	NA	45	69.2	10	15.4	10	15.4	10	15.4	.	.	65	100.0
	1	700	70.4	185	18.6	80	8.0	20	2.0	10	1.0	995	100.0
	2	1035	77.0	215	16.0	55	4.1	25	1.9	10	0.7	1345	100.0
	3	350	83.3	55	13.1	10	2.4	10	2.4	10	2.4	420	100.0
35-44	NA	40	61.5	10	15.4	10	15.4	10	15.4	10	15.4	65	100.0
	1	425	65.9	130	20.2	65	10.1	15	2.3	15	2.3	645	100.0
	2	1305	77.4	235	13.9	90	5.3	40	2.4	15	0.9	1685	100.0
	3	1150	83.6	165	12.0	30	2.2	10	0.7	15	1.1	1375	100.0
45-54	NA	40	80.0	10	20.0	10	20.0	.	.	10	20.0	50	100.0
	1	220	64.7	60	17.6	35	10.3	25	7.4	10	2.9	340	100.0
	2	840	75.3	160	14.3	70	6.3	30	2.7	10	0.9	1115	100.0
	3	1495	86.2	160	9.2	50	2.9	10	0.6	15	0.9	1735	100.0
55-64	NA	40	72.7	10	18.2	10	18.2	10	18.2	.	.	55	100.0
	1	150	61.2	45	18.4	25	10.2	15	6.1	15	6.1	245	100.0
	2	605	78.6	100	13.0	40	5.2	15	1.9	10	1.3	770	100.0
	3	1230	85.4	150	10.4	35	2.4	10	0.7	15	1.0	1440	100.0
65+	NA	35	70.0	10	20.0	10	20.0	10	20.0	10	20.0	50	100.0
	1	160	71.1	35	15.6	20	8.9	10	4.4	10	4.4	225	100.0
	2	705	72.3	160	16.4	65	6.7	10	1.0	30	3.1	975	100.0
	3	1245	81.6	200	13.1	50	3.3	10	0.7	25	1.6	1525	100.0
Male	NA	240	76.2	45	14.3	25	7.9	10	3.2	10	3.2	315	100.0
	1	1630	72.1	405	17.9	160	7.1	30	1.3	30	1.3	2260	100.0
	2	2225	79.0	375	13.3	130	4.6	35	1.2	45	1.6	2815	100.0
	3	2545	85.1	320	10.7	75	2.5	15	0.5	35	1.2	2990	100.0
Female	NA	240	66.7	70	19.4	30	8.3	10	2.8	10	2.8	360	100.0
	1	1720	67.1	500	19.5	220	8.6	90	3.5	40	1.6	2565	100.0
	2	2490	73.7	560	16.6	205	6.1	90	2.7	35	1.0	3380	100.0
	3	2945	83.3	425	12.0	105	3.0	25	0.7	35	1.0	3535	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 269: K-10 groups by wealth by prioritised ethnicity**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Ethnicity (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	325	73.9	65	14.8	35	8.0	10	2.3	10	2.3	440	100.0
	1	2125	70.6	555	18.4	220	7.3	75	2.5	35	1.2	3010	100.0
	2	3880	77.1	750	14.9	260	5.2	95	1.9	55	1.1	5035	100.0
	3	5050	84.5	675	11.3	150	2.5	30	0.5	65	1.1	5975	100.0
Māori	NA	85	60.7	35	25.0	10	7.1	10	7.1	10	7.1	140	100.0
	1	615	66.1	180	19.4	95	10.2	25	2.7	10	1.1	930	100.0
	2	515	73.6	105	15.0	40	5.7	20	2.9	10	1.4	700	100.0
	3	240	85.7	25	8.9	10	3.6	10	3.6	10	3.6	280	100.0
Pacific	NA	40	66.7	15	25.0	10	16.7	10	16.7	10	16.7	60	100.0
	1	310	62.6	105	21.2	45	9.1	10	2.0	20	4.0	495	100.0
	2	140	68.3	35	17.1	15	7.3	10	4.9	10	4.9	205	100.0
	3	35	70.0	10	20.0	10	20.0	.	.	10	20.0	50	100.0
Asian	NA	30	75.0	10	25.0	10	25.0	.	.	.	.	40	100.0
	1	295	74.7	70	17.7	15	3.8	10	2.5	10	2.5	395	100.0
	2	180	69.2	50	19.2	15	5.8	10	3.8	10	3.8	260	100.0
	3	165	75.0	30	13.6	10	4.5	10	4.5	10	4.5	220	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 270: K-10 groups by wealth by legal marital status**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Marital Status (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	220	73.3	55	18.3	20	6.7	10	3.3	10	3.3	300	100.0
	1	215	72.9	55	18.6	15	5.1	10	3.4	10	3.4	295	100.0
	2	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
	3	10	100.0	.	.	.	.	.	.	.	.	10	100.0
Never Married	NA	115	69.7	35	21.2	20	12.1	10	6.1	10	6.1	165	100.0
	1	2110	70.0	570	18.9	225	7.5	75	2.5	40	1.3	3015	100.0
	2	1030	75.5	225	16.5	75	5.5	30	2.2	10	0.7	1365	100.0
	3	520	81.3	85	13.3	25	3.9	10	1.6	10	1.6	640	100.0
Divorced Widowed Separated	NA	40	66.7	10	16.7	10	16.7	10	16.7	10	16.7	60	100.0
	1	330	62.9	95	18.1	60	11.4	30	5.7	15	2.9	525	100.0
	2	765	70.2	205	18.8	75	6.9	30	2.8	15	1.4	1090	100.0
	3	1075	81.4	165	12.5	50	3.8	15	1.1	10	0.8	1320	100.0
Married	NA	110	75.9	20	13.8	10	6.9	10	6.9	10	6.9	145	100.0
	1	690	69.0	190	19.0	80	8.0	15	1.5	20	2.0	1000	100.0
	2	2920	78.3	510	13.7	180	4.8	65	1.7	55	1.5	3730	100.0
	3	3895	85.3	495	10.8	105	2.3	15	0.3	55	1.2	4565	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>



**Table 271: K-10 groups by wealth by family structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Family Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA	70	73.7	10	10.5	10	10.5	10	10.5	.	.	95	100.0
	1	435	73.1	110	18.5	40	6.7	10	1.7	10	1.7	595	100.0
	2	1570	76.4	315	15.3	105	5.1	30	1.5	35	1.7	2055	100.0
	3	2255	84.8	290	10.9	80	3.0	15	0.6	35	1.3	2660	100.0
Couple with children	NA	265	71.6	70	18.9	25	6.8	10	2.7	10	2.7	370	100.0
	1	1685	71.2	435	18.4	175	7.4	35	1.5	35	1.5	2365	100.0
	2	2105	78.3	370	13.8	130	4.8	50	1.9	30	1.1	2690	100.0
	3	2010	86.1	245	10.5	40	1.7	15	0.6	25	1.1	2335	100.0
Sole parent	NA	80	66.7	25	20.8	15	12.5	10	8.3	10	8.3	120	100.0
	1	565	62.8	180	20.0	95	10.6	40	4.4	10	1.1	900	100.0
	2	360	67.9	105	19.8	40	7.5	20	3.8	10	1.9	530	100.0
	3	230	79.3	45	15.5	10	3.4	10	3.4	.	.	290	100.0
Not in a family nucleus	NA	60	70.6	10	11.8	10	11.8	10	11.8	10	11.8	85	100.0
	1	660	68.0	180	18.6	70	7.2	35	3.6	15	1.5	970	100.0
	2	685	74.5	150	16.3	55	6.0	25	2.7	10	1.1	920	100.0
	3	1000	81.0	165	13.4	50	4.0	10	0.8	15	1.2	1235	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 272: K-10 groups by wealth by household structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Household Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	410	72.6	95	16.8	40	7.1	10	1.8	10	1.8	565	100.0
	1	2610	70.0	695	18.6	290	7.8	80	2.1	45	1.2	3730	100.0
	2	3955	76.6	775	15.0	270	5.2	100	1.9	70	1.4	5165	100.0
	3	4435	85.0	565	10.8	125	2.4	30	0.6	55	1.1	5220	100.0
Two or more families	NA	20	57.1	10	28.6	10	28.6	10	28.6	.	.	35	100.0
	1	205	66.1	55	17.7	25	8.1	10	3.2	10	3.2	310	100.0
	2	130	76.5	20	11.8	10	5.9	10	5.9	10	5.9	170	100.0
	3	70	73.7	15	15.8	10	10.5	.	.	10	10.5	95	100.0
Other multi-person household	NA	20	66.7	10	33.3	10	33.3	.	.	.	.	30	100.0
	1	330	73.3	90	20.0	25	5.6	10	2.2	10	2.2	450	100.0
	2	180	78.3	35	15.2	10	4.3	10	4.3	10	4.3	230	100.0
	3	95	79.2	15	12.5	10	8.3	10	8.3	.	.	120	100.0
One person household	NA	35	77.8	10	22.2	10	22.2	10	22.2	10	22.2	45	100.0
	1	200	58.8	60	17.6	40	11.8	25	7.4	10	2.9	340	100.0
	2	455	72.2	100	15.9	45	7.1	20	3.2	10	1.6	630	100.0
	3	890	81.7	145	13.3	40	3.7	10	0.9	15	1.4	1090	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

### ***10.5 The Association of Wealth with Perceived Stress***

Overall the proportion of respondents reporting that they felt in control most or all of the time increased with increasing wealth tertile. Similar trends were observed for the other perceived stress questions. Further tables of perceived stress by wealth by other demographic variables are not presented in this report.

**Table 273: Perceived stress by wealth, overall**

Wealth (W2)	Unable to control important things (W3)												Total	
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	20	3.0	30	4.4	85	12.6	130	19.3	395	58.5	10	1.5	675	100.0
1	85	1.8	270	5.6	645	13.4	1160	24.0	2595	53.8	70	1.5	4825	100.0
2	110	1.8	245	4.0	655	10.6	1325	21.4	3805	61.4	50	0.8	6195	100.0
3	95	1.5	140	2.1	530	8.1	1200	18.4	4510	69.1	45	0.7	6525	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1915</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.1</b>	<b>180</b>	<b>1.0</b>	<b>18215</b>	<b>100.0</b>
Unable to overcome difficulties (W3)														
NA	10	1.5	15	2.2	75	11.1	135	20.0	435	64.4	10	1.5	675	100.0
1	40	0.8	155	3.2	560	11.6	1095	22.7	2910	60.3	65	1.3	4825	100.0
2	50	0.8	110	1.8	505	8.2	1065	17.2	4410	71.2	55	0.9	6195	100.0
3	30	0.5	55	0.8	325	5.0	885	13.6	5190	79.5	35	0.5	6525	100.0
<b>Total</b>	<b>125</b>	<b>0.7</b>	<b>335</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3175</b>	<b>17.4</b>	<b>12955</b>	<b>71.1</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Confident in handling problems (W3)														
NA	200	29.6	320	47.4	80	11.9	50	7.4	15	2.2	10	1.5	675	100.0
1	1385	28.7	2340	48.5	625	13.0	310	6.4	105	2.2	65	1.3	4825	100.0
2	2275	36.7	2950	47.6	535	8.6	240	3.9	140	2.3	50	0.8	6195	100.0
3	2860	43.8	2910	44.6	375	5.7	205	3.1	130	2.0	40	0.6	6525	100.0
<b>Total</b>	<b>6720</b>	<b>36.9</b>	<b>8520</b>	<b>46.8</b>	<b>1615</b>	<b>8.9</b>	<b>805</b>	<b>4.4</b>	<b>395</b>	<b>2.2</b>	<b>165</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
Felt things were going your way (W3)														
NA	70	10.4	305	45.2	220	32.6	50	7.4	20	3.0	10	1.5	675	100.0
1	435	9.0	2300	47.7	1415	29.3	455	9.4	155	3.2	70	1.5	4825	100.0
2	650	10.5	3380	54.6	1475	23.8	460	7.4	160	2.6	70	1.1	6195	100.0
3	785	12.0	3900	59.8	1315	20.2	330	5.1	135	2.1	65	1.0	6525	100.0
<b>Total</b>	<b>1940</b>	<b>10.7</b>	<b>9890</b>	<b>54.3</b>	<b>4430</b>	<b>24.3</b>	<b>1290</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18215</b>	<b>100.0</b>

## ***10.6 The Association of Wealth with Chronic Diseases***

There were linear trends in the proportion of respondents reporting chronic diseases with increase in wealth tertiles for high blood pressure, high cholesterol and heart disease. However, these numbers are not age adjusted. Consequently, over there were more respondents in wealth tertiles 2 and 3 who had one or more comorbid diseases. There were high proportions of respondents in the low wealth tertile reporting asthma. These relationships were not consistent across age groups. Divorced, widowed or separated respondents had higher proportions reporting high blood pressure, high cholesterol, heart disease, and stroke, than the overall population at all wealth levels. This group also had high proportions of respondents with more than two comorbid diseases. This may be due to the older age structure of this population.

**Table 274: Chronic diseases by wealth, overall**

Wealth (W2)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	145	21.5	75	11.1	55	8.1	25	3.7	10	1.5	20	3.0	70	10.4	45	6.7	675	100.0
1	1145	23.7	575	11.9	385	8.0	155	3.2	75	1.6	160	3.3	595	12.3	485	10.1	4825	100.0
2	1175	19.0	1510	24.4	1130	18.2	450	7.3	190	3.1	330	5.3	940	15.2	660	10.7	6195	100.0
3	965	14.8	1835	28.1	1575	24.1	535	8.2	175	2.7	295	4.5	830	12.7	480	7.4	6525	100.0
<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 275: Number of comorbid disease by wealth, overall**

Wealth (W2)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA	395	58.5	230	34.1	40	5.9	10	1.5	675	100.0
1	2600	53.9	1885	39.1	330	6.8	15	0.3	4825	100.0
2	2645	42.7	2800	45.2	735	11.9	15	0.2	6195	100.0
3	2605	39.9	3195	49.0	700	10.7	25	0.4	6525	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 276: Chronic diseases by wealth by age and sex**

		Chronic Diseases (W3)																	
Age (W1)	Wealth (W2)	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	65	21.7	10	3.3	10	3.3	10	3.3	.	.	10	3.3	15	5.0	10	3.3	300	100.0
	1	65	22.8	10	3.5	.	.	.	.	.	.	10	3.5	30	10.5	10	3.5	285	100.0
	2	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10
15-24	NA	25	27.8	10	11.1	10	11.1	.	.	.	.	10	11.1	10	11.1	10	11.1	90	100.0
	1	555	26.6	75	3.6	30	1.4	10	0.5	10	0.5	10	0.5	220	10.6	155	7.4	2085	100.0
	2	80	26.2	20	6.6	10	3.3	.	.	.	.	10	3.3	40	13.1	20	6.6	305	100.0
	3	15	50.0	10	33.3	.	.	.	.	.	.	.	.	10	33.3	10	33.3	30	100.0
25-34	NA	10	16.7	10	16.7	10	16.7	.	.	.	.	.	.	10	16.7	10	16.7	60	100.0
	1	225	22.6	100	10.1	60	6.0	10	1.0	10	1.0	10	1.0	155	15.6	130	13.1	995	100.0
	2	310	23.1	130	9.7	85	6.3	15	1.1	10	0.7	15	1.1	205	15.3	130	9.7	1340	100.0
	3	90	21.4	40	9.5	35	8.3	10	2.4	.	.	10	2.4	55	13.1	25	6.0	420	100.0
35-44	NA	10	15.4	10	15.4	10	15.4	10	15.4	10	15.4	10	15.4	10	15.4	10	15.4	65	100.0
	1	125	19.4	105	16.3	85	13.2	20	3.1	15	2.3	25	3.9	95	14.7	90	14.0	645	100.0
	2	330	19.6	240	14.2	220	13.1	25	1.5	10	0.6	45	2.7	275	16.3	200	11.9	1685	100.0
	3	215	15.6	160	11.6	165	12.0	15	1.1	10	0.7	15	1.1	205	14.9	120	8.7	1375	100.0
45-54	NA	10	20.0	10	20.0	10	20.0	10	20.0	10	20.0	10	20.0	10	20.0	10	20.0	50	100.0
	1	80	23.2	90	26.1	80	23.2	25	7.2	20	5.8	30	8.7	50	14.5	45	13.0	345	100.0
	2	175	15.8	295	26.6	260	23.4	45	4.1	15	1.4	65	5.9	190	17.1	140	12.6	1110	100.0
	3	260	15.0	365	21.1	405	23.4	50	2.9	15	0.9	55	3.2	240	13.9	155	9.0	1730	100.0
55-64	NA	15	27.3	20	36.4	20	36.4	10	18.2	10	18.2	10	18.2	10	18.2	10	18.2	55	100.0
	1	40	16.7	95	39.6	70	29.2	35	14.6	15	6.3	40	16.7	30	12.5	40	16.7	240	100.0
	2	145	18.7	320	41.3	245	31.6	110	14.2	40	5.2	90	11.6	110	14.2	90	11.6	775	100.0
	3	195	13.6	490	34.1	445	31.0	130	9.1	20	1.4	85	5.9	160	11.1	100	7.0	1435	100.0
65+	NA	10	18.2	30	54.5	15	27.3	10	18.2	10	18.2	10	18.2	10	18.2	10	18.2	55	100.0
	1	45	20.0	100	44.4	65	28.9	50	22.2	30	13.3	40	17.8	25	11.1	15	6.7	225	100.0
	2	130	13.3	505	51.8	310	31.8	255	26.2	115	11.8	110	11.3	120	12.3	75	7.7	975	100.0
	3	185	12.1	780	51.0	525	34.3	330	21.6	135	8.8	135	8.8	160	10.5	80	5.2	1530	100.0
Male	NA	65	20.6	35	11.1	30	9.5	15	4.8	10	3.2	10	3.2	20	6.3	10	3.2	315	100.0
	1	495	21.9	245	10.8	200	8.8	80	3.5	45	2.0	75	3.3	180	8.0	160	7.1	2260	100.0
	2	445	15.8	665	23.6	595	21.1	245	8.7	90	3.2	165	5.9	235	8.3	175	6.2	2815	100.0
	3	380	12.7	820	27.4	805	26.9	300	10.0	80	2.7	155	5.2	205	6.9	160	5.4	2990	100.0

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Age (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Female	NA	85	23.6	40	11.1	30	8.3	10	2.8	10	2.8	10	2.8	50	13.9	35	9.7	360	100.0
	1	650	25.4	330	12.9	190	7.4	75	2.9	30	1.2	85	3.3	415	16.2	320	12.5	2560	100.0
	2	730	21.6	840	24.9	530	15.7	200	5.9	105	3.1	165	4.9	705	20.9	485	14.4	3375	100.0
	3	580	16.4	1010	28.5	770	21.8	240	6.8	95	2.7	140	4.0	625	17.7	320	9.0	3540	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 277: Number of comorbid disease by wealth by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
0-14	NA	210	70.0	80	26.7	10	3.3	10	3.3	300	100.0
	1	200	70.2	90	31.6	10	3.5	.	.	285	100.0
	2	10	100.0	10	100.0	.	.	.	.	10	100.0
15-24	NA	55	61.1	35	38.9	10	11.1	.	.	90	100.0
	1	1265	60.7	770	36.9	40	1.9	10	0.5	2085	100.0
	2	170	55.7	125	41.0	10	3.3	.	.	305	100.0
	3	20	66.7	15	50.0	10	33.3	.	.	30	100.0
25-34	NA	45	75.0	20	33.3	10	16.7	.	.	60	100.0
	1	540	54.3	395	39.7	60	6.0	10	1.0	995	100.0
	2	725	54.1	550	41.0	65	4.9	10	0.7	1340	100.0
	3	240	57.1	160	38.1	15	3.6	10	2.4	420	100.0
35-44	NA	35	53.8	20	30.8	10	15.4	.	.	65	100.0
	1	330	51.2	255	39.5	55	8.5	10	1.6	645	100.0
	2	855	50.7	700	41.5	120	7.1	10	0.6	1685	100.0
	3	740	53.8	580	42.2	50	3.6	10	0.7	1375	100.0
45-54	NA	25	50.0	15	30.0	10	20.0	.	.	50	100.0
	1	130	37.7	160	46.4	55	15.9	10	2.9	345	100.0
	2	445	40.1	535	48.2	130	11.7	10	0.9	1110	100.0
	3	740	42.8	865	50.0	120	6.9	10	0.6	1730	100.0
55-64	NA	15	27.3	30	54.5	10	18.2	.	.	55	100.0
	1	70	29.2	110	45.8	60	25.0	10	4.2	240	100.0

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
	2	225	29.0	380	49.0	170	21.9	10	1.3	775	100.0
	3	510	35.5	735	51.2	180	12.5	10	0.7	1435	100.0
65+	NA	10	18.2	30	54.5	15	27.3	.	.	55	100.0
	1	65	28.9	100	44.4	55	24.4	10	4.4	225	100.0
	2	220	22.6	500	51.3	250	25.6	10	1.0	975	100.0
	3	355	23.2	835	54.6	330	21.6	10	0.7	1530	100.0
Male	NA	195	61.9	105	33.3	20	6.3	10	3.2	315	100.0
	1	1300	57.5	835	36.9	120	5.3	10	0.4	2260	100.0
	2	1325	47.1	1185	42.1	290	10.3	10	0.4	2815	100.0
	3	1260	42.1	1430	47.8	285	9.5	15	0.5	2990	100.0
Female	NA	205	56.9	130	36.1	20	5.6	10	2.8	360	100.0
	1	1295	50.6	1050	41.0	205	8.0	10	0.4	2560	100.0
	2	1315	39.0	1615	47.9	445	13.2	10	0.3	3375	100.0
	3	1345	38.0	1765	49.9	415	11.7	10	0.3	3540	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>



**Table 278: Chronic diseases by wealth by prioritised ethnicity**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Ethnicity (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	100	22.7	55	12.5	35	8.0	15	3.4	10	2.3	10	2.3	45	10.2	35	8.0	440	100.0
	1	765	25.4	330	11.0	245	8.1	95	3.2	50	1.7	70	2.3	410	13.6	390	13.0	3010	100.0
	2	930	18.5	1240	24.7	935	18.6	395	7.9	165	3.3	230	4.6	810	16.1	585	11.6	5030	100.0
	3	900	15.1	1705	28.5	1465	24.5	505	8.5	170	2.8	265	4.4	775	13.0	455	7.6	5975	100.0
Māori	NA	40	28.6	15	10.7	15	10.7	10	7.1	10	7.1	10	7.1	10	7.1	10	7.1	140	100.0
	1	255	27.4	150	16.1	75	8.1	25	2.7	15	1.6	35	3.8	130	14.0	65	7.0	930	100.0
	2	185	26.6	190	27.3	120	17.3	40	5.8	20	2.9	55	7.9	105	15.1	65	9.4	695	100.0
	3	45	15.8	75	26.3	60	21.1	20	7.0	10	3.5	20	7.0	30	10.5	15	5.3	285	100.0
Pacific	NA	10	16.7	10	16.7	10	16.7	10	16.7	.	.	10	16.7	10	16.7	10	16.7	60	100.0
	1	70	14.3	70	14.3	35	7.1	25	5.1	10	2.0	45	9.2	30	6.1	20	4.1	490	100.0
	2	35	17.5	55	27.5	40	20.0	15	7.5	10	5.0	25	12.5	15	7.5	10	5.0	200	100.0
	3	10	20.0	15	30.0	15	30.0	10	20.0	10	20.0	10	20.0	10	20.0	10	20.0	50	100.0
Asian	NA	10	25.0	10	25.0	10	25.0	10	25.0	.	.	10	25.0	10	25.0	10	25.0	40	100.0
	1	55	13.9	25	6.3	30	7.6	15	3.8	10	2.5	10	2.5	25	6.3	10	2.5	395	100.0
	2	25	9.4	30	11.3	35	13.2	10	3.8	10	3.8	20	7.5	10	3.8	10	3.8	265	100.0
	3	20	9.1	35	15.9	30	13.6	10	4.5	.	.	10	4.5	15	6.8	10	4.5	220	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 279: Number of comorbid disease by wealth by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Ethnicity (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	245	55.7	170	38.6	20	4.5	10	2.3	440	100.0
	1	1540	51.2	1245	41.4	215	7.1	10	0.3	3010	100.0
	2	2080	41.4	2335	46.4	610	12.1	10	0.2	5030	100.0
	3	2335	39.1	2955	49.5	660	11.0	20	0.3	5975	100.0
Māori	NA	75	53.6	50	35.7	10	7.1	.	.	140	100.0
	1	460	49.5	395	42.5	70	7.5	10	1.1	930	100.0
	2	280	40.3	320	46.0	90	12.9	10	1.4	695	100.0
	3	120	42.1	135	47.4	30	10.5	.	.	285	100.0
Pacific	NA	45	75.0	10	16.7	10	16.7	10	16.7	60	100.0
	1	305	62.2	145	29.6	30	6.1	10	2.0	490	100.0
	2	105	52.5	80	40.0	20	10.0	.	.	200	100.0
	3	20	40.0	25	50.0	10	20.0	10	20.0	50	100.0
Asian	NA	30	75.0	10	25.0	10	25.0	.	.	40	100.0
	1	285	72.2	100	25.3	15	3.8	10	2.5	395	100.0
	2	180	67.9	65	24.5	15	5.7	10	3.8	265	100.0
	3	135	61.4	75	34.1	10	4.5	.	.	220	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 280: Chronic diseases by wealth by legal marital status**

		Chronic Diseases (W3)																	
Marital Status (W1)	Wealth (W2)	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	65	22.0	10	3.4	10	3.4	10	3.4	.	.	10	3.4	15	5.1	10	3.4	295	100.0
	1	70	24.1	10	3.4	.	.	.	.	.	.	10	3.4	30	10.3	15	5.2	290	100.0
	2	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
	3	.	.	.	.	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0
Never Married	NA	40	23.5	15	8.8	10	5.9	10	5.9	10	5.9	10	5.9	15	8.8	15	8.8	170	100.0
	1	760	25.2	215	7.1	120	4.0	25	0.8	20	0.7	40	1.3	355	11.8	300	10.0	3010	100.0
	2	315	23.1	175	12.8	120	8.8	25	1.8	10	0.7	35	2.6	205	15.0	145	10.6	1365	100.0
	3	125	19.5	120	18.8	105	16.4	15	2.3	10	1.6	25	3.9	65	10.2	65	10.2	640	100.0
Divorced Widowed Separated	NA	15	25.0	25	41.7	15	25.0	10	16.7	10	16.7	10	16.7	15	25.0	10	16.7	60	100.0
	1	135	25.7	175	33.3	110	21.0	60	11.4	30	5.7	50	9.5	85	16.2	90	17.1	525	100.0
	2	210	19.3	340	31.2	230	21.1	110	10.1	55	5.0	55	5.0	200	18.3	180	16.5	1090	100.0
	3	200	15.2	500	37.9	360	27.3	180	13.6	70	5.3	85	6.4	185	14.0	115	8.7	1320	100.0
Married	NA	25	17.2	35	24.1	30	20.7	10	6.9	10	6.9	10	6.9	25	17.2	15	10.3	145	100.0
	1	170	17.0	180	18.0	155	15.5	65	6.5	30	3.0	75	7.5	125	12.5	85	8.5	1000	100.0
	2	645	17.3	990	26.5	785	21.0	320	8.6	125	3.3	240	6.4	535	14.3	340	9.1	3735	100.0
	3	635	13.9	1210	26.5	1105	24.2	335	7.3	95	2.1	190	4.2	575	12.6	300	6.6	4565	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 281: Number of comorbid disease by wealth by legal marital status**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Marital Status (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	215	72.9	80	27.1	10	3.4	10	3.4	295	100.0
	1	200	69.0	90	31.0	10	3.4	.	.	290	100.0
	2	10	100.0	10	100.0	.	.	.	.	10	100.0
	3	.	.	10	100.0	.	.	.	.	10	100.0
Never Married	NA	100	58.8	55	32.4	10	5.9	.	.	170	100.0
	1	1720	57.1	1165	38.7	120	4.0	10	0.3	3010	100.0
	2	710	52.0	575	42.1	85	6.2	10	0.7	1365	100.0
	3	300	46.9	290	45.3	45	7.0	10	1.6	640	100.0
Divorced Widowed Separated	NA	20	33.3	30	50.0	15	25.0	.	.	60	100.0
	1	165	31.4	255	48.6	105	20.0	10	1.9	525	100.0
	2	365	33.5	555	50.9	165	15.1	10	0.9	1090	100.0
	3	415	31.4	680	51.5	220	16.7	10	0.8	1320	100.0
Married	NA	65	44.8	65	44.8	15	10.3	.	.	145	100.0
	1	520	52.0	375	37.5	105	10.5	.	.	1000	100.0
	2	1570	42.0	1665	44.6	485	13.0	15	0.4	3735	100.0
	3	1890	41.4	2225	48.7	430	9.4	20	0.4	4565	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 282: Chronic diseases by wealth by family structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Family Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA	20	21.1	30	31.6	25	26.3	10	10.5	10	10.5	10	10.5	15	15.8	10	10.5	95	100.0
	1	140	23.3	105	17.5	85	14.2	35	5.8	20	3.3	30	5.0	80	13.3	60	10.0	600	100.0
	2	360	17.5	655	31.9	510	24.8	265	12.9	110	5.4	165	8.0	280	13.6	185	9.0	2055	100.0
	3	380	14.3	915	34.3	755	28.3	285	10.7	85	3.2	135	5.1	315	11.8	180	6.8	2665	100.0
Couple with children	NA	75	20.3	20	5.4	10	2.7	10	2.7	.	.	10	2.7	35	9.5	10	2.7	370	100.0
	1	530	22.4	185	7.8	135	5.7	40	1.7	20	0.8	55	2.3	245	10.4	180	7.6	2365	100.0
	2	500	18.6	465	17.3	375	13.9	80	3.0	30	1.1	105	3.9	405	15.0	255	9.5	2695	100.0
	3	340	14.6	355	15.2	420	18.0	65	2.8	10	0.4	60	2.6	320	13.7	165	7.1	2330	100.0
Sole parent	NA	35	29.2	10	8.3	10	8.3	10	8.3	10	8.3	10	8.3	15	12.5	10	8.3	120	100.0
	1	220	24.6	105	11.7	60	6.7	25	2.8	10	1.1	20	2.2	135	15.1	100	11.2	895	100.0
	2	125	23.6	110	20.8	65	12.3	25	4.7	15	2.8	25	4.7	120	22.6	100	18.9	530	100.0
	3	50	17.5	65	22.8	60	21.1	20	7.0	10	3.5	15	5.3	45	15.8	40	14.0	285	100.0
Not in a family nucleus	NA	15	17.6	20	23.5	15	17.6	10	11.8	10	11.8	10	11.8	10	11.8	15	17.6	85	100.0
	1	245	25.4	175	18.1	110	11.4	50	5.2	30	3.1	50	5.2	135	14.0	145	15.0	965	100.0
	2	185	20.1	280	30.4	175	19.0	75	8.2	45	4.9	40	4.3	135	14.7	130	14.1	920	100.0
	3	185	14.9	495	39.9	340	27.4	160	12.9	70	5.6	85	6.9	150	12.1	100	8.1	1240	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 283: Number of comorbid disease by wealth by family structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Family Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
Couple only	NA	30	31.6	50	52.6	15	15.8	.	.	95	100.0
	1	280	46.7	255	42.5	65	10.8	10	1.7	600	100.0
	2	760	37.0	950	46.2	340	16.5	10	0.5	2055	100.0
	3	930	34.9	1380	51.8	340	12.8	10	0.4	2665	100.0
Couple with children	NA	250	67.6	110	29.7	10	2.7	10	2.7	370	100.0
	1	1415	59.8	840	35.5	95	4.0	10	0.4	2365	100.0
	2	1340	49.7	1135	42.1	205	7.6	10	0.4	2695	100.0
	3	1155	49.6	1050	45.1	115	4.9	10	0.4	2330	100.0
Sole parent	NA	70	58.3	45	37.5	10	8.3	.	.	120	100.0
	1	460	51.4	375	41.9	60	6.7	10	1.1	895	100.0
	2	205	38.7	250	47.2	70	13.2	.	.	530	100.0
	3	120	42.1	135	47.4	35	12.3	.	.	285	100.0
Not in a family nucleus	NA	45	52.9	35	41.2	10	11.8	.	.	85	100.0
	1	445	46.1	410	42.5	110	11.4	10	1.0	965	100.0
	2	345	37.5	455	49.5	120	13.0	10	1.1	920	100.0
	3	395	31.9	635	51.2	210	16.9	10	0.8	1240	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 284: Chronic diseases by wealth by household structure**

		Chronic Diseases (W3)																	
Household Structure (W1)	Wealth (W2)	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	125	22.1	55	9.7	40	7.1	20	3.5	10	1.8	15	2.7	55	9.7	35	6.2	565	100.0
	1	875	23.5	390	10.5	270	7.2	105	2.8	50	1.3	100	2.7	445	11.9	335	9.0	3725	100.0
	2	970	18.8	1205	23.3	935	18.1	365	7.1	145	2.8	275	5.3	790	15.3	525	10.2	5165	100.0
	3	765	14.7	1320	25.3	1220	23.4	370	7.1	105	2.0	205	3.9	680	13.0	370	7.1	5220	100.0
Two or more families	NA	10	28.6	10	28.6	10	28.6	10	28.6	.	.	.	.	10	28.6	10	28.6	35	100.0
	1	55	17.7	40	12.9	30	9.7	10	3.2	10	3.2	20	6.5	35	11.3	20	6.5	310	100.0
	2	30	17.1	40	22.9	30	17.1	10	5.7	10	5.7	20	11.4	25	14.3	10	5.7	175	100.0
	3	15	15.0	30	30.0	25	25.0	10	10.0	10	10.0	10	10.0	10	10.0	10	10.0	100	100.0
Other multi-person household	NA	10	40.0	10	40.0	10	40.0	.	.	10	40.0	.	.	10	40.0	10	40.0	25	100.0
	1	115	25.8	35	7.9	20	4.5	10	2.2	10	2.2	10	2.2	65	14.6	55	12.4	445	100.0
	2	45	19.6	40	17.4	35	15.2	10	4.3	10	4.3	10	4.3	35	15.2	25	10.9	230	100.0
	3	25	21.7	20	17.4	15	13.0	10	8.7	10	8.7	10	8.7	10	8.7	10	8.7	115	100.0
One person household	NA	10	22.2	20	44.4	15	33.3	10	22.2	10	22.2	10	22.2	10	22.2	10	22.2	45	100.0
	1	95	27.9	105	30.9	70	20.6	40	11.8	25	7.4	35	10.3	55	16.2	80	23.5	340	100.0
	2	115	18.4	225	36.0	130	20.8	65	10.4	35	5.6	30	4.8	85	13.6	100	16.0	625	100.0
	3	160	14.6	465	42.5	315	28.8	150	13.7	60	5.5	80	7.3	130	11.9	90	8.2	1095	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 285: Number of comorbid disease by wealth by household structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Household Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
One Family	NA	345	61.1	185	32.7	30	5.3	10	1.8	565	100.0
	1	2065	55.4	1435	38.5	215	5.8	10	0.3	3725	100.0
	2	2250	43.6	2300	44.5	605	11.7	15	0.3	5165	100.0
	3	2175	41.7	2540	48.7	485	9.3	20	0.4	5220	100.0
Two or more families	NA	20	57.1	15	42.9	10	28.6	.	.	35	100.0
	1	180	58.1	110	35.5	20	6.5	10	3.2	310	100.0
	2	80	45.7	75	42.9	15	8.6	10	5.7	175	100.0
	3	45	45.0	35	35.0	15	15.0	10	10.0	100	100.0
Other multi-person household	NA	20	80.0	10	40.0	.	.	.	.	25	100.0
	1	235	52.8	195	43.8	15	3.4	.	.	445	100.0
	2	115	50.0	100	43.5	15	6.5	.	.	230	100.0
	3	55	47.8	55	47.8	10	8.7	.	.	115	100.0
One person household	NA	15	33.3	20	44.4	10	22.2	.	.	45	100.0
	1	115	33.8	145	42.6	80	23.5	10	2.9	340	100.0
	2	210	33.6	320	51.2	100	16.0	10	1.6	625	100.0
	3	330	30.1	565	51.6	195	17.8	10	0.9	1095	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>



## 10.7 The Association of Wealth with Smoking Status

Overall, there were higher proportions of current smokers in the lowest wealth tertile, with high proportions of never smokers in the highest wealth tertile. This linear decline in the proportion of current smokers with increasing wealth is consistent across all age groups and by sex and ethnicity. The highest proportion of current smokers were aged 25-54 at Wave 1 and in the lowest wealth tertile. The rates of current smoking in the Māori ethnic group were highest across all wealth tertiles. Over 30% of never married respondents, divorced, separated or widowed or living in sole parent families, in income tertiles 1 and 2 were current smokers.

**Table 286: Smoking status by wealth, overall**

Wealth (W2)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA	445	65.9	85	12.6	140	20.7	10	1.5	675	100.0
1	2665	55.2	745	15.4	1390	28.8	20	0.4	4830	100.0
2	2955	47.7	1780	28.7	1435	23.2	25	0.4	6195	100.0
3	3735	57.2	2045	31.3	725	11.1	20	0.3	6525	100.0
<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 287: Smoking status by wealth by age and sex**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Age (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
0-14	NA	260	86.7	10	3.3	25	8.3	10	3.3	300	100.0
	1	235	81.0	10	3.4	45	15.5	10	3.4	290	100.0
	2	10	100.0	.	.	.	.	.	.	10	100.0
15-24	NA	40	42.1	10	10.5	40	42.1	.	.	95	100.0
	1	1375	65.9	180	8.6	520	24.9	10	0.5	2085	100.0
	2	195	63.9	35	11.5	70	23.0	.	.	305	100.0
	3	25	71.4	10	28.6	10	28.6	.	.	35	100.0
25-34	NA	30	50.0	15	25.0	20	33.3	.	.	60	100.0
	1	445	44.7	185	18.6	365	36.7	10	1.0	995	100.0
	2	715	53.4	270	20.1	345	25.7	10	0.7	1340	100.0
	3	285	67.9	80	19.0	50	11.9	10	2.4	420	100.0
35-44	NA	30	46.2	10	15.4	25	38.5	.	.	65	100.0
	1	285	43.8	120	18.5	235	36.2	10	1.5	650	100.0
	2	795	47.2	430	25.5	455	27.0	10	0.6	1685	100.0
	3	875	63.6	320	23.3	180	13.1	10	0.7	1375	100.0
45-54	NA	30	66.7	10	22.2	15	33.3	.	.	45	100.0
	1	125	36.2	75	21.7	135	39.1	10	2.9	345	100.0
	2	515	46.2	310	27.8	290	26.0	10	0.9	1115	100.0
	3	985	56.9	525	30.3	215	12.4	10	0.6	1730	100.0
55-64	NA	25	50.0	20	40.0	10	20.0	10	20.0	50	100.0
	1	90	37.5	80	33.3	75	31.3	10	4.2	240	100.0
	2	280	36.1	300	38.7	190	24.5	10	1.3	775	100.0
	3	775	53.8	490	34.0	170	11.8	10	0.7	1440	100.0
65+	NA	30	60.0	20	40.0	10	20.0	.	.	50	100.0
	1	110	48.9	95	42.2	20	8.9	10	4.4	225	100.0
	2	450	45.9	440	44.9	80	8.2	10	1.0	980	100.0
	3	795	52.0	630	41.2	100	6.5	10	0.7	1530	100.0
Male	NA	220	69.8	40	12.7	55	17.5	10	3.2	315	100.0
	1	1240	54.9	340	15.0	675	29.9	10	0.4	2260	100.0
	2	1260	44.7	890	31.6	650	23.0	15	0.5	2820	100.0
	3	1540	51.5	1085	36.3	350	11.7	10	0.3	2990	100.0
Female	NA	230	63.9	45	12.5	90	25.0	10	2.8	360	100.0
	1	1425	55.6	410	16.0	720	28.1	10	0.4	2565	100.0
	2	1695	50.1	895	26.5	780	23.1	10	0.3	3380	100.0
	3	2195	62.1	965	27.3	370	10.5	10	0.3	3535	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 288: Smoking status by wealth by prioritised ethnicity**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Ethnicity (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	300	69.0	55	12.6	80	18.4	10	2.3	435	100.0
	1	1725	57.3	485	16.1	790	26.2	10	0.3	3010	100.0
	2	2425	48.2	1510	30.0	1090	21.6	15	0.3	5035	100.0
	3	3405	57.0	1920	32.2	625	10.5	15	0.3	5970	100.0
Māori	NA	70	51.9	20	14.8	45	33.3	.	.	135	100.0
	1	325	34.9	170	18.3	430	46.2	10	1.1	930	100.0
	2	230	32.9	195	27.9	265	37.9	10	1.4	700	100.0
	3	130	46.4	85	30.4	70	25.0	.	.	280	100.0
Pacific	NA	45	75.0	10	16.7	10	16.7	10	16.7	60	100.0
	1	290	58.6	65	13.1	130	26.3	10	2.0	495	100.0
	2	105	52.5	40	20.0	50	25.0	10	5.0	200	100.0
	3	35	70.0	10	20.0	10	20.0	10	20.0	50	100.0
Asian	NA	30	75.0	10	25.0	10	25.0	.	.	40	100.0
	1	330	83.5	20	5.1	40	10.1	10	2.5	395	100.0
	2	195	73.6	30	11.3	25	9.4	10	3.8	265	100.0
	3	170	77.3	25	11.4	25	11.4	.	.	220	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 289: Smoking status by wealth by legal marital status**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Marital Status (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	260	86.7	10	3.3	25	8.3	10	3.3	300	100.0
	1	235	81.0	10	3.4	45	15.5	10	3.4	290	100.0
	2	10	100.0	.	.	.	.	.	.	10	100.0
	3	.	.	.	.	10	100.0	.	.	10	100.0
Never Married	NA	80	47.1	20	11.8	65	38.2	.	.	170	100.0
	1	1710	56.8	365	12.1	930	30.9	10	0.3	3010	100.0
	2	665	48.7	265	19.4	435	31.9	10	0.7	1365	100.0
	3	400	62.5	145	22.7	95	14.8	10	1.6	640	100.0
Divorced Widowed Separated	NA	30	50.0	10	16.7	15	25.0	10	16.7	60	100.0
	1	180	34.3	145	27.6	195	37.1	10	1.9	525	100.0
	2	430	39.4	335	30.7	320	29.4	10	0.9	1090	100.0
	3	695	52.9	440	33.5	180	13.7	10	0.8	1315	100.0
Married	NA	70	50.0	40	28.6	30	21.4	.	.	140	100.0
	1	545	54.5	230	23.0	225	22.5	.	.	1000	100.0
	2	1860	49.8	1175	31.5	680	18.2	20	0.5	3735	100.0
	3	2640	57.9	1460	32.0	445	9.8	20	0.4	4560	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 290: Smoking status by wealth by family structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Family Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
Couple only	NA	45	47.4	30	31.6	20	21.1	.	.	95	100.0
	1	290	48.3	145	24.2	165	27.5	10	1.7	600	100.0
	2	960	46.7	695	33.8	390	19.0	10	0.5	2055	100.0
	3	1420	53.3	975	36.6	255	9.6	15	0.6	2665	100.0
Couple with children	NA	280	75.7	25	6.8	65	17.6	10	2.7	370	100.0
	1	1505	63.6	280	11.8	565	23.9	10	0.4	2365	100.0
	2	1350	50.2	700	26.0	630	23.4	15	0.6	2690	100.0
	3	1475	63.2	605	25.9	240	10.3	10	0.4	2335	100.0
Sole parent	NA	75	62.5	10	8.3	35	29.2	.	.	120	100.0
	1	405	45.3	145	16.2	345	38.5	10	1.1	895	100.0
	2	190	36.2	125	23.8	210	40.0	.	.	525	100.0
	3	150	52.6	90	31.6	50	17.5	.	.	285	100.0
Not in a family nucleus	NA	50	58.8	20	23.5	20	23.5	10	11.8	85	100.0
	1	465	47.9	175	18.0	320	33.0	10	1.0	970	100.0
	2	460	50.0	255	27.7	205	22.3	10	1.1	920	100.0
	3	690	55.9	370	30.0	175	14.2	10	0.8	1235	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3695</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 291: Smoking status by wealth by household structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Household Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%
One Family	NA	390	69.0	70	12.4	105	18.6	10	1.8	565	100.0
	1	2140	57.4	545	14.6	1025	27.5	15	0.4	3730	100.0
	2	2450	47.4	1490	28.8	1200	23.2	20	0.4	5165	100.0
	3	3015	57.8	1650	31.6	530	10.2	20	0.4	5220	100.0
Two or more families	NA	10	28.6	10	28.6	20	57.1	.	.	35	100.0
	1	150	48.4	50	16.1	105	33.9	10	3.2	310	100.0
	2	75	42.9	50	28.6	45	25.7	10	5.7	175	100.0
	3	45	47.4	35	36.8	20	21.1	10	10.5	95	100.0
Other multi-person household	NA	15	50.0	10	33.3	10	33.3	.	.	30	100.0
	1	260	57.8	70	15.6	120	26.7	.	.	450	100.0
	2	130	56.5	50	21.7	50	21.7	.	.	230	100.0
	3	70	58.3	25	20.8	25	20.8	.	.	120	100.0
One person household	NA	25	55.6	10	22.2	10	22.2	10	22.2	45	100.0
	1	120	34.8	75	21.7	140	40.6	10	2.9	345	100.0
	2	300	48.0	190	30.4	135	21.6	10	1.6	625	100.0
	3	605	55.5	335	30.7	150	13.8	10	0.9	1090	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

## 10.8 The Association of Wealth with Alcohol Consumption

Overall, consumption of alcohol increased with increasing wealth. Consequently, there were larger proportions of never drinkers in the lowest income tertile. This relationship was relatively consistent across age groups and by sex. However, there were linear trends with the increasing proportions of respondents reporting that they binge drank with decreasing wealth tertiles. This seems more prevalent in younger age groups and in non-Maori, non-Pacific, non-Asian and Maori ethnic groups. There were high proportions (~40%) of married respondents or living in couple only families or single family households in the highest wealth tertile drank four or more times a week.

**Table 292: Alcohol consumption by wealth, overall**

Wealth (W2)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	210	31.1	165	24.4	180	26.7	50	7.4	55	8.1	10	1.5	115	17.0	675	100.0
1	1165	24.1	1085	22.5	1480	30.6	600	12.4	460	9.5	30	0.6	1505	31.2	4830	100.0
2	1065	17.2	1240	20.0	1705	27.5	870	14.0	1285	20.7	30	0.5	1300	21.0	6195	100.0
3	815	12.5	860	13.2	1490	22.8	985	15.1	2340	35.9	35	0.5	975	14.9	6525	100.0
<b>Total</b>	<b>3255</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2505</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 293: Alcohol consumption by wealth by age and sex**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	125	41.7	95	31.7	60	20.0	10	3.3	10	3.3	10	3.3	20	6.7	300	100.0
	1	85	29.3	100	34.5	80	27.6	20	6.9	10	3.4	10	3.4	65	22.4	290	100.0
	2	10	100.0	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0
15-24	NA	10	11.1	20	22.2	35	38.9	20	22.2	10	11.1	.	.	50	55.6	90	100.0
	1	325	15.6	465	22.4	765	36.8	335	16.1	175	8.4	10	0.5	885	42.5	2080	100.0
	2	35	11.7	70	23.3	120	40.0	50	16.7	30	10.0	.	.	130	43.3	300	100.0
25-34	NA	10	28.6	10	28.6	10	28.6	10	28.6	10	28.6	.	.	15	42.9	35	100.0
	1	195	19.6	225	22.6	330	33.2	115	11.6	130	13.1	10	1.0	330	33.2	995	100.0
	2	140	10.4	285	21.3	430	32.1	240	17.9	240	17.9	10	0.7	430	32.1	1340	100.0
35-44	NA	20	30.8	10	15.4	15	23.1	10	15.4	10	15.4	.	.	15	23.1	65	100.0
	1	195	30.2	150	23.3	165	25.6	70	10.9	55	8.5	10	1.6	135	20.9	645	100.0
	2	215	12.8	315	18.7	525	31.2	280	16.6	345	20.5	10	0.6	420	24.9	1685	100.0
45-54	NA	10	22.2	10	22.2	15	33.3	10	22.2	10	22.2	.	.	10	22.2	45	100.0
	1	140	41.2	65	19.1	55	16.2	30	8.8	50	14.7	10	2.9	60	17.6	340	100.0
	2	215	19.4	220	19.8	285	25.7	140	12.6	240	21.6	10	0.9	195	17.6	1110	100.0
55-64	NA	20	36.4	10	18.2	15	27.3	10	18.2	10	18.2	10	18.2	10	18.2	55	100.0
	1	110	44.9	40	16.3	45	18.4	20	8.2	20	8.2	10	4.1	30	12.2	245	100.0
	2	175	22.6	175	22.6	165	21.3	85	11.0	175	22.6	10	1.3	85	11.0	775	100.0
65+	NA	165	11.5	180	12.5	310	21.6	205	14.3	570	39.7	10	0.7	155	10.8	1435	100.0
	1	20	36.4	10	18.2	10	18.2	10	18.2	10	18.2	.	.	10	18.2	55	100.0
	2	110	48.9	45	20.0	30	13.3	10	4.4	30	13.3	10	4.4	10	4.4	225	100.0
Male	NA	90	28.6	65	20.6	100	31.7	30	9.5	30	9.5	10	3.2	60	19.0	315	100.0
	1	455	20.1	405	17.9	715	31.6	355	15.7	315	13.9	15	0.7	860	38.1	2260	100.0

		<b>Alcohol drinking frequency (W3)</b>															
		<b>Never</b>		<b>&lt; monthly</b>		<b>2-4 times month</b>		<b>2-3 times week</b>		<b>4+ times week</b>		<b>NA</b>		<b>Binge Drinkers</b>		<b>Total</b>	
<b>Age (W1)</b>	<b>Wealth (W2)</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
	2	355	12.6	420	14.9	775	27.5	470	16.7	780	27.7	20	0.7	785	27.9	2815	100.0
	3	270	9.0	270	9.0	640	21.4	495	16.6	1290	43.2	15	0.5	625	20.9	2985	100.0
Female	NA	120	33.3	100	27.8	85	23.6	25	6.9	25	6.9	10	2.8	55	15.3	360	100.0
	1	715	27.9	680	26.6	765	29.9	240	9.4	150	5.9	15	0.6	645	25.2	2560	100.0
	2	715	21.2	820	24.3	930	27.6	395	11.7	500	14.8	10	0.3	510	15.1	3375	100.0
	3	550	15.5	590	16.7	845	23.9	495	14.0	1050	29.7	20	0.6	355	10.0	3540	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 294: Alcohol consumption by wealth by prioritised ethnicity**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Ethnicity (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	95	21.6	110	25.0	135	30.7	40	9.1	50	11.4	10	2.3	75	17.0	440	100.0
	1	475	15.8	665	22.1	990	32.9	465	15.4	395	13.1	15	0.5	1045	34.7	3010	100.0
	2	685	13.6	955	19.0	1425	28.3	765	15.2	1180	23.4	20	0.4	1055	21.0	5035	100.0
	3	650	10.9	775	13.0	1340	22.4	930	15.6	2250	37.7	30	0.5	890	14.9	5970	100.0
Māori	NA	55	40.7	40	29.6	30	22.2	10	7.4	10	7.4	.	.	30	22.2	135	100.0
	1	210	22.6	250	26.9	330	35.5	95	10.2	45	4.8	10	1.1	360	38.7	930	100.0
	2	155	22.3	195	28.1	200	28.8	70	10.1	80	11.5	10	1.4	200	28.8	695	100.0
	3	50	17.5	50	17.5	75	26.3	40	14.0	70	24.6	10	3.5	70	24.6	285	100.0
Pacific	NA	40	66.7	10	16.7	10	16.7	10	16.7	10	16.7	10	16.7	10	16.7	60	100.0
	1	260	52.5	100	20.2	90	18.2	25	5.1	10	2.0	10	2.0	85	17.2	495	100.0
	2	105	52.5	35	17.5	35	17.5	10	5.0	15	7.5	10	5.0	30	15.0	200	100.0
	3	20	40.0	10	20.0	20	40.0	10	20.0	10	20.0	10	20.0	10	20.0	50	100.0
Asian	NA	25	62.5	10	25.0	10	25.0	10	25.0	.	.	.	.	10	25.0	40	100.0
	1	220	55.7	70	17.7	75	19.0	15	3.8	10	2.5	10	2.5	20	5.1	395	100.0
	2	120	45.3	55	20.8	45	17.0	25	9.4	15	5.7	10	3.8	15	5.7	265	100.0
	3	95	44.2	35	16.3	50	23.3	15	7.0	15	7.0	.	.	10	4.7	215	100.0
<b>Total</b>	<b>Total</b>	<b>3255</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>



**Table 295: Alcohol consumption by wealth by legal marital status**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Marital Status (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	125	41.7	95	31.7	60	20.0	10	3.3	10	3.3	10	3.3	20	6.7	300	100.0
	1	85	29.3	100	34.5	80	27.6	15	5.2	10	3.4	10	3.4	70	24.1	290	100.0
	2	10	100.0	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0
	3	.	.	.	.	.	.	.	.	10	100.0	.	.	.	.	10	100.0
Never Married	NA	30	18.2	30	18.2	65	39.4	25	15.2	20	12.1	.	.	65	39.4	165	100.0
	1	505	16.7	670	22.2	1070	35.5	465	15.4	290	9.6	15	0.5	1195	39.6	3015	100.0
	2	140	10.3	280	20.5	455	33.3	240	17.6	245	17.9	10	0.7	480	35.2	1365	100.0
	3	70	10.9	105	16.4	165	25.8	125	19.5	180	28.1	10	1.6	150	23.4	640	100.0
Divorced Widowed Separated	NA	15	25.0	15	25.0	20	33.3	10	16.7	10	16.7	10	16.7	10	16.7	60	100.0
	1	170	32.4	125	23.8	110	21.0	50	9.5	60	11.4	10	1.9	100	19.0	525	100.0
	2	215	19.7	210	19.3	300	27.5	145	13.3	210	19.3	10	0.9	220	20.2	1090	100.0
	3	245	18.6	220	16.7	305	23.1	160	12.1	385	29.2	10	0.8	160	12.1	1320	100.0
Married	NA	40	27.6	20	13.8	40	27.6	15	10.3	35	24.1	.	.	15	10.3	145	100.0
	1	405	40.5	195	19.5	220	22.0	65	6.5	110	11.0	10	1.0	145	14.5	1000	100.0
	2	710	19.0	745	19.9	945	25.3	480	12.9	830	22.2	20	0.5	600	16.1	3735	100.0
	3	505	11.1	535	11.7	1015	22.3	710	15.6	1775	38.9	25	0.5	665	14.6	4560	100.0
<b>Total</b>	<b>Total</b>	<b>3255</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 296: Smoking status by wealth by family structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Family Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA	20	21.1	15	15.8	25	26.3	10	10.5	25	26.3	.	.	15	15.8	95	100.0
	1	140	23.3	105	17.5	170	28.3	80	13.3	100	16.7	10	1.7	170	28.3	600	100.0
	2	355	17.3	380	18.5	515	25.1	270	13.1	525	25.5	10	0.5	365	17.8	2055	100.0
	3	295	11.1	330	12.4	525	19.7	360	13.5	1140	42.9	15	0.6	315	11.8	2660	100.0
Couple with children	NA	125	33.3	95	25.3	100	26.7	25	6.7	20	5.3	10	2.7	45	12.0	375	100.0
	1	585	24.7	545	23.0	750	31.7	290	12.3	195	8.2	15	0.6	730	30.9	2365	100.0
	2	430	16.0	560	20.8	765	28.4	405	15.0	515	19.1	20	0.7	610	22.6	2695	100.0
	3	235	10.1	270	11.6	600	25.8	430	18.5	795	34.1	10	0.4	460	19.7	2330	100.0
Sole parent	NA	40	32.0	40	32.0	30	24.0	10	8.0	10	8.0	.	.	35	28.0	125	100.0
	1	220	24.4	260	28.9	260	28.9	95	10.6	60	6.7	10	1.1	265	29.4	900	100.0
	2	100	18.9	135	25.5	165	31.1	65	12.3	65	12.3	.	.	130	24.5	530	100.0
	3	50	17.5	60	21.1	70	24.6	40	14.0	75	26.3	.	.	50	17.5	285	100.0
Not in a family nucleus	NA	20	23.5	15	17.6	30	35.3	15	17.6	10	11.8	10	11.8	20	23.5	85	100.0
	1	225	23.2	175	18.0	310	32.0	140	14.4	110	11.3	10	1.0	335	34.5	970	100.0
	2	185	20.1	165	17.9	255	27.7	125	13.6	180	19.6	10	1.1	195	21.2	920	100.0
	3	245	19.8	205	16.5	295	23.8	165	13.3	330	26.6	10	0.8	150	12.1	1240	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 297: Alcohol consumption by wealth by household structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Household Structure (W1)	Wealth (W2)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	180	31.9	150	26.5	145	25.7	45	8.0	40	7.1	10	1.8	85	15.0	565	100.0
	1	865	23.2	865	23.2	1160	31.1	460	12.3	355	9.5	20	0.5	1140	30.6	3730	100.0
	2	850	16.5	1040	20.1	1425	27.6	725	14.0	1100	21.3	25	0.5	1085	21.0	5165	100.0
	3	560	10.7	645	12.4	1175	22.5	820	15.7	1985	38.0	25	0.5	815	15.6	5220	100.0
Two or more families	NA	10	28.6	10	28.6	10	28.6	10	28.6	10	28.6	.	.	10	28.6	35	100.0
	1	120	38.7	80	25.8	70	22.6	20	6.5	15	4.8	10	3.2	75	24.2	310	100.0
	2	50	28.6	45	25.7	40	22.9	20	11.4	15	8.6	10	5.7	30	17.1	175	100.0
	3	20	21.1	15	15.8	20	21.1	10	10.5	30	31.6	10	10.5	20	21.1	95	100.0
Other multi-person household	NA	10	33.3	10	33.3	10	33.3	10	33.3	10	33.3	.	.	10	33.3	30	100.0
	1	60	13.5	65	14.6	170	38.2	95	21.3	55	12.4	10	2.2	215	48.3	445	100.0
	2	30	13.0	35	15.2	75	32.6	45	19.6	50	21.7	.	.	85	37.0	230	100.0
	3	15	13.0	10	8.7	30	26.1	20	17.4	35	30.4	.	.	30	26.1	115	100.0
One person household	NA	15	33.3	10	22.2	15	33.3	10	22.2	10	22.2	10	22.2	10	22.2	45	100.0
	1	115	33.8	70	20.6	80	23.5	30	8.8	45	13.2	10	2.9	70	20.6	340	100.0
	2	140	22.4	115	18.4	170	27.2	75	12.0	120	19.2	10	1.6	95	15.2	625	100.0
	3	220	20.2	185	17.0	260	23.9	140	12.8	285	26.1	10	0.9	120	11.0	1090	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

## **Chapter 11 The Association of NZ Deprivation Index (Wave 1) with Health Measures**

The NZDep2001 scale of deprivation from 1 to 10 divides New Zealand into tenths of the distribution of the first principal component scores, where 1 represents the areas with the least deprived scores and 10 the areas with the most deprived scores. (Salmond & Crampton, 2002) These were grouped into five groups: 1. NZDep1,2 (least deprived area); 2. NZDep 3,4; 3. NZDep5,6; 4. NZDep7,8; 5. NZDep9,10 (most deprived area).

### ***11.1 The Association of NZDep with Demographics***

Overall, the population was divided into quintiles (approximately 20% in each group). There was a slight difference in the distribution between the sexes, with the proportion of males living in the least deprived areas being slightly higher than females and females having a small proportion higher living in more deprived areas. There were higher proportions of non-Māori, non-Pacific, non-Asian respondents living in less deprived areas, with higher proportions of Māori and Pacific respondents living in more deprived areas. There were higher proportions of married respondents or living in a couple with children living in less deprived areas. Consequently, there were higher proportions of respondents never married, divorced, widowed or separated, sole parents or not living in a family nucleus living in more deprived areas. Respondents who were living in households with two or more families, multiple people, or single person households were more likely to live in more deprived areas.

#### **11.1.1 NZDep (Wave 1) by baseline demographics**

**Table 298: NZDep, overall and by age and sex**

	NZDep Index (W1)											
	NZDepQ1 (least)		NZDepQ2		NZDepQ3		NZDepQ4		NZDepQ5 (most)		Total	
Age, mean SD	44.8	17.3	44.4	18.0	44.6	18.5	44.3	18.7	42.2	18.3	<b>44.0</b>	<b>18.2</b>
Age (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	115	19.5	125	21.2	95	16.1	125	21.2	130	22.0	590	100.0
15-24	440	17.5	465	18.5	450	17.9	525	20.9	630	25.1	2510	100.0
25-34	380	13.5	555	19.6	490	17.3	730	25.8	665	23.5	2825	100.0
35-44	800	21.2	820	21.8	645	17.1	820	21.8	690	18.3	3770	100.0
45-54	785	24.3	700	21.6	550	17.0	595	18.4	610	18.9	3235	100.0
55-64	570	22.8	510	20.4	430	17.2	500	20.0	490	19.6	2505	100.0
65+	475	17.1	570	20.5	535	19.2	715	25.7	495	17.8	2780	100.0
<b>Male</b>	<b>1705</b>	<b>20.3</b>	<b>1755</b>	<b>20.9</b>	<b>1490</b>	<b>17.8</b>	<b>1825</b>	<b>21.8</b>	<b>1600</b>	<b>19.1</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>1860</b>	<b>18.9</b>	<b>1990</b>	<b>20.2</b>	<b>1695</b>	<b>17.2</b>	<b>2175</b>	<b>22.1</b>	<b>2115</b>	<b>21.5</b>	<b>9840</b>	<b>100.0</b>
<b>Total</b>	<b>3565</b>	<b>19.6</b>	<b>3745</b>	<b>20.6</b>	<b>3190</b>	<b>17.5</b>	<b>4005</b>	<b>22.0</b>	<b>3715</b>	<b>20.4</b>	<b>18220</b>	<b>100.0</b>

**Table 299: NZDep by prioritised ethnicity**

	NZDep Index (W1)											
	NZDepQ1 (least)		NZDepQ2		NZDepQ3		NZDepQ4		NZDepQ5 (most)		Total	
Ethnicity (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	3280	22.7	3310	22.9	2640	18.3	3155	21.8	2075	14.4	14455	100.0
Māori	135	6.6	235	11.5	260	12.7	460	22.4	960	46.8	2050	100.0
Pacific	15	1.9	45	5.6	90	11.2	170	21.1	490	60.9	805	100.0
Asian	135	14.8	160	17.5	205	22.4	225	24.6	195	21.3	915	100.0
<b>Total</b>	<b>3565</b>	<b>19.6</b>	<b>3745</b>	<b>20.6</b>	<b>3185</b>	<b>17.5</b>	<b>4005</b>	<b>22.0</b>	<b>3715</b>	<b>20.4</b>	<b>18220</b>	<b>100.0</b>

**Table 300: NZDep by legal marital status**

	NZDep Index (W1)											
	NZDepQ1 (least)		NZDepQ2		NZDepQ3		NZDepQ4		NZDepQ5 (most)		Total	
Marital Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	115	19.3	125	21.0	90	15.1	125	21.0	140	23.5	595	100.0
Never Married	760	14.6	940	18.1	910	17.5	1195	23.0	1375	26.5	5190	100.0
Divorced Widowed Separated	365	12.2	540	18.0	555	18.5	775	25.8	760	25.3	3000	100.0
Married	2325	24.6	2135	22.6	1625	17.2	1910	20.2	1440	15.3	9440	100.0
<b>Total</b>	<b>3565</b>	<b>19.6</b>	<b>3745</b>	<b>20.6</b>	<b>3190</b>	<b>17.5</b>	<b>4005</b>	<b>22.0</b>	<b>3720</b>	<b>20.4</b>	<b>18215</b>	<b>100.0</b>

**Table 301: NZDep by family structure**

Family Structure (W1)	NZDep Index (W1)											
	NZDepQ1 (least)		NZDepQ2		NZDepQ3		NZDepQ4		NZDepQ5 (most)		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	1180	21.8	1275	23.5	990	18.3	1180	21.8	790	14.6	5415	100.0
Couple with children	1840	23.7	1690	21.8	1325	17.1	1525	19.7	1370	17.7	7760	100.0
Sole parent	175	9.5	245	13.4	280	15.3	435	23.7	695	37.9	1835	100.0
Not in a family nucleus	360	11.2	535	16.7	595	18.5	870	27.1	855	26.6	3210	100.0
<b>Total</b>	<b>3560</b>	<b>19.5</b>	<b>3745</b>	<b>20.6</b>	<b>3190</b>	<b>17.5</b>	<b>4005</b>	<b>22.0</b>	<b>3715</b>	<b>20.4</b>	<b>18215</b>	<b>100.0</b>

**Table 302: NZDep by household structure**

Household Structure (W1)	NZDep Index (W1)											
	NZDepQ1 (least)		NZDepQ2		NZDepQ3		NZDepQ4		NZDepQ5 (most)		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
One Family	3180	21.7	3195	21.8	2550	17.4	3085	21.0	2670	18.2	14675	100.0
Two or more families	45	7.4	60	9.8	95	15.6	115	18.9	295	48.4	610	100.0
Other multi-person household	95	11.5	125	15.2	140	17.0	230	27.9	235	28.5	825	100.0
One person household	240	11.4	360	17.1	410	19.5	570	27.1	515	24.5	2105	100.0
<b>Total</b>	<b>3565</b>	<b>19.6</b>	<b>3745</b>	<b>20.6</b>	<b>3185</b>	<b>17.5</b>	<b>4005</b>	<b>22.0</b>	<b>3715</b>	<b>20.4</b>	<b>18215</b>	<b>100.0</b>

## **11.2 The Association of NZDep with Self-Rated Health**

Overall, the proportion of respondents reporting excellent health status increased with increasing improving area deprivation. This relationship was consistent across every age group, as well as by sex and for non-Māori, non-Pacific, non-Asian and Māori ethnic groups. However, the pattern for Pacific and Asian ethnic groups was random, with small numbers in these groups. The linear relationship of increasing proportions reporting excellent health status with decreasing area deprivation was consistent across all marital status and family structure groups, as well as for single family households. There were high proportions of divorced, widowed or separated respondents or not living in a family nucleus living in the more deprived areas, reporting fair or poor health.

**Table 303: Self-rated health, by NZDep, overall**

NZDep Index (W1)	Self Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	P	N	P	N	P	N	P	N	P	N	P
Q1(least)	1745	48.9	1125	31.6	530	14.9	135	3.8	25	0.7	3565	100.0
Q2	1525	40.7	1245	33.2	720	19.2	205	5.5	45	1.2	3745	100.0
Q3	1195	37.5	1100	34.5	650	20.4	195	6.1	50	1.6	3190	100.0
Q4	1320	33.0	1400	35.0	895	22.4	310	7.8	80	2.0	4000	100.0
Q5(most)	1155	31.1	1175	31.6	925	24.9	355	9.6	110	3.0	3715	100.0
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 304: Self-rated health, by NZDep, by age and sex**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Poor		Fair		Total	
Age (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	Q1(least)	75	62.5	30	25.0	15	12.5	10	8.3	.	.	120	100.0
	Q2	60	48.0	50	40.0	10	8.0	.	.	10	8.0	125	100.0
	Q3	55	57.9	30	31.6	10	10.5	.	.	10	10.5	95	100.0
	Q4	65	54.2	40	33.3	15	12.5	.	.	10	8.3	120	100.0
	Q5(most)	75	55.6	30	22.2	20	14.8	10	7.4	10	7.4	135	100.0
15-24	Q1(least)	275	62.5	105	23.9	50	11.4	10	2.3	10	2.3	440	100.0
	Q2	235	50.5	160	34.4	60	12.9	10	2.2	10	2.2	465	100.0
	Q3	225	50.6	150	33.7	60	13.5	10	2.2	15	3.4	445	100.0
	Q4	230	43.8	180	34.3	95	18.1	10	1.9	25	4.8	525	100.0
	Q5(most)	280	44.4	205	32.5	125	19.8	10	1.6	15	2.4	630	100.0
25-34	Q1(least)	230	60.5	120	31.6	25	6.6	10	2.6	10	2.6	380	100.0
	Q2	285	51.4	190	34.2	70	12.6	.	.	15	2.7	555	100.0
	Q3	240	49.0	165	33.7	65	13.3	10	2.0	15	3.1	490	100.0
	Q4	345	47.3	250	34.2	95	13.0	10	1.4	35	4.8	730	100.0
	Q5(most)	265	39.8	220	33.1	130	19.5	10	1.5	40	6.0	665	100.0
35-44	Q1(least)	450	56.3	235	29.4	95	11.9	10	1.3	15	1.9	800	100.0
	Q2	390	47.6	265	32.3	125	15.2	10	1.2	30	3.7	820	100.0
	Q3	270	42.2	240	37.5	95	14.8	10	1.6	30	4.7	640	100.0
	Q4	295	36.2	290	35.6	180	22.1	10	1.2	35	4.3	815	100.0
	Q5(most)	215	31.2	235	34.1	160	23.2	20	2.9	65	9.4	690	100.0
45-54	Q1(least)	405	51.6	265	33.8	90	11.5	10	1.3	20	2.5	785	100.0
	Q2	295	42.1	235	33.6	135	19.3	10	1.4	20	2.9	700	100.0
	Q3	205	37.3	190	34.5	115	20.9	10	1.8	25	4.5	550	100.0
	Q4	185	31.1	230	38.7	120	20.2	15	2.5	35	5.9	595	100.0
	Q5(most)	145	23.8	195	32.0	175	28.7	30	4.9	65	10.7	610	100.0
55-64	Q1(least)	200	35.1	220	38.6	105	18.4	10	1.8	35	6.1	570	100.0
	Q2	160	31.1	175	34.0	130	25.2	10	1.9	45	8.7	515	100.0
	Q3	115	26.7	155	36.0	115	26.7	10	2.3	35	8.1	430	100.0
	Q4	105	21.0	185	37.0	135	27.0	15	3.0	55	11.0	500	100.0
	Q5(most)	95	19.4	150	30.6	145	29.6	20	4.1	75	15.3	490	100.0
65+	Q1(least)	110	23.4	150	31.9	150	31.9	10	2.1	50	10.6	470	100.0
	Q2	105	18.4	175	30.7	195	34.2	20	3.5	85	14.9	570	100.0
	Q3	80	15.0	170	31.8	185	34.6	15	2.8	80	15.0	535	100.0
	Q4	95	13.4	210	29.6	250	35.2	30	4.2	125	17.6	710	100.0
	Q5(most)	80	16.2	130	26.3	170	34.3	30	6.1	90	18.2	495	100.0
Male	Q1(least)	815	47.8	540	31.7	270	15.8	15	0.9	60	3.5	1705	100.0
	Q2	715	40.7	585	33.3	340	19.4	20	1.1	100	5.7	1755	100.0
	Q3	570	38.3	520	34.9	285	19.1	25	1.7	95	6.4	1490	100.0
	Q4	610	33.4	645	35.3	390	21.4	35	1.9	145	7.9	1825	100.0
	Q5(most)	520	32.5	510	31.9	390	24.4	35	2.2	145	9.1	1600	100.0
Female	Q1(least)	935	50.3	585	31.5	260	14.0	10	0.5	70	3.8	1860	100.0
	Q2	810	40.7	665	33.4	380	19.1	30	1.5	110	5.5	1990	100.0
	Q3	625	36.9	585	34.5	365	21.5	25	1.5	105	6.2	1695	100.0
	Q4	715	32.9	760	34.9	500	23.0	35	1.6	165	7.6	2175	100.0
	Q5(most)	630	29.9	660	31.3	530	25.1	75	3.6	210	10.0	2110	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>315</b>	<b>1.7</b>	<b>1210</b>	<b>6.6</b>	<b>18215</b>	<b>100.0</b>



**Table 305: Self-rated health, by NZDep, by prioritised ethnicity**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Ethnicity (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	Q1(least)	1615	49.2	1040	31.7	470	14.3	125	3.8	30	0.9	3280	100.0
	Q2	1360	41.1	1095	33.1	625	18.9	185	5.6	45	1.4	3310	100.0
	Q3	990	37.6	915	34.7	530	20.1	160	6.1	45	1.7	2635	100.0
	Q4	1010	32.0	1130	35.8	705	22.3	260	8.2	55	1.7	3155	100.0
	Q5(most)	595	28.7	665	32.0	535	25.8	210	10.1	70	3.4	2075	100.0
Māori	Q1(least)	60	44.4	50	37.0	20	14.8	10	7.4	.	.	135	100.0
	Q2	85	36.2	85	36.2	50	21.3	10	4.3	10	4.3	235	100.0
	Q3	90	34.6	90	34.6	65	25.0	15	5.8	10	3.8	260	100.0
	Q4	155	33.7	155	33.7	105	22.8	40	8.7	10	2.2	460	100.0
	Q5(most)	270	28.1	325	33.9	250	26.0	100	10.4	20	2.1	960	100.0
Pacific	Q1(least)	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	Q2	20	50.0	15	37.5	10	25.0	10	25.0	.	.	40	100.0
	Q3	40	44.4	25	27.8	10	11.1	10	11.1	10	11.1	90	100.0
	Q4	60	35.3	50	29.4	40	23.5	10	5.9	10	5.9	170	100.0
	Q5(most)	215	43.9	125	25.5	95	19.4	40	8.2	15	3.1	490	100.0
Asian	Q1(least)	65	50.0	30	23.1	40	30.8	10	7.7	10	7.7	130	100.0
	Q2	65	40.6	55	34.4	35	21.9	10	6.3	10	6.3	160	100.0
	Q3	70	35.0	70	35.0	45	22.5	10	5.0	.	.	200	100.0
	Q4	100	44.4	65	28.9	50	22.2	10	4.4	10	4.4	225	100.0
	Q5(most)	75	38.5	55	28.2	45	23.1	15	7.7	10	5.1	195	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 306: Self-rated health, by NZDep, by legal marital status**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Poor		Fair		Total	
Marital Status (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	Q1(least)	75	62.5	30	25.0	10	8.3	10	8.3	.	.	120	100.0
	Q2	60	46.2	50	38.5	15	11.5	.	.	10	7.7	130	100.0
	Q3	50	52.6	30	31.6	10	10.5	.	.	10	10.5	95	100.0
	Q4	70	56.0	45	36.0	15	12.0	.	.	10	8.0	125	100.0
	Q5(most)	75	53.6	35	25.0	20	14.3	10	7.1	10	7.1	140	100.0
Never Married	Q1(least)	420	55.3	215	28.3	100	13.2	10	1.3	20	2.6	760	100.0
	Q2	455	48.1	305	32.3	150	15.9	10	1.1	30	3.2	945	100.0
	Q3	410	45.1	315	34.6	140	15.4	15	1.6	40	4.4	910	100.0
	Q4	490	41.0	405	33.9	220	18.4	15	1.3	60	5.0	1195	100.0
	Q5(most)	490	35.6	465	33.8	310	22.5	25	1.8	90	6.5	1375	100.0
Divorced Widowed Separated	Q1(least)	145	40.3	120	33.3	65	18.1	10	2.8	25	6.9	360	100.0
	Q2	170	31.5	175	32.4	130	24.1	10	1.9	55	10.2	540	100.0
	Q3	150	26.8	185	33.0	160	28.6	15	2.7	45	8.0	560	100.0
	Q4	185	23.9	240	31.0	220	28.4	30	3.9	100	12.9	775	100.0
	Q5(most)	170	22.4	215	28.3	230	30.3	45	5.9	110	14.5	760	100.0
Married	Q1(least)	1110	47.7	760	32.7	355	15.3	15	0.6	90	3.9	2325	100.0
	Q2	840	39.3	715	33.5	430	20.1	25	1.2	125	5.9	2135	100.0
	Q3	575	35.4	570	35.1	340	20.9	25	1.5	110	6.8	1625	100.0
	Q4	580	30.3	710	37.1	435	22.7	35	1.8	150	7.8	1915	100.0
	Q5(most)	420	29.2	460	31.9	365	25.3	45	3.1	155	10.8	1440	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>315</b>	<b>1.7</b>	<b>1210</b>	<b>6.6</b>	<b>18215</b>	<b>100.0</b>

**Table 307: Self-rated health, by NZDep, by family structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Family Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	Q1(least)	455	38.6	420	35.6	230	19.5	65	5.5	10	0.8	1180	100.0
	Q2	440	34.5	425	33.3	305	23.9	85	6.7	20	1.6	1275	100.0
	Q3	320	32.5	355	36.0	225	22.8	70	7.1	20	2.0	985	100.0
	Q4	345	29.4	405	34.5	285	24.3	110	9.4	30	2.6	1175	100.0
	Q5(most)	190	24.1	250	31.6	240	30.4	90	11.4	25	3.2	790	100.0
Couple with children	Q1(least)	1065	57.7	525	28.5	210	11.4	30	1.6	10	0.5	1845	100.0
	Q2	805	47.6	570	33.7	240	14.2	60	3.6	15	0.9	1690	100.0
	Q3	580	43.6	460	34.6	210	15.8	60	4.5	15	1.1	1330	100.0
	Q4	605	39.8	545	35.9	285	18.8	75	4.9	20	1.3	1520	100.0
	Q5(most)	520	37.8	445	32.4	270	19.6	100	7.3	25	1.8	1375	100.0
Sole parent	Q1(least)	80	45.7	65	37.1	20	11.4	15	8.6	.	.	175	100.0
	Q2	110	44.0	70	28.0	50	20.0	15	6.0	10	4.0	250	100.0
	Q3	115	41.8	90	32.7	55	20.0	10	3.6	10	3.6	275	100.0
	Q4	145	33.0	155	35.2	105	23.9	25	5.7	10	2.3	440	100.0
	Q5(most)	220	31.4	200	28.6	175	25.0	70	10.0	30	4.3	700	100.0
Not in a family nucleus	Q1(least)	150	41.7	110	30.6	65	18.1	25	6.9	10	2.8	360	100.0
	Q2	175	33.0	180	34.0	125	23.6	40	7.5	10	1.9	530	100.0
	Q3	180	30.3	195	32.8	160	26.9	50	8.4	15	2.5	595	100.0
	Q4	230	26.6	290	33.5	215	24.9	105	12.1	25	2.9	865	100.0
	Q5(most)	220	25.7	275	32.2	240	28.1	95	11.1	30	3.5	855	100.0
Total	Total	6945	38.1	6040	33.2	3715	20.4	1210	6.6	310	1.7	18220	100.0

**Table 308: Self-rated health, by NZDep, by household structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Household Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	Q1(least)	1600	50.2	1000	31.4	455	14.3	110	3.5	20	0.6	3185	100.0
	Q2	1340	42.0	1060	33.2	585	18.3	165	5.2	40	1.3	3190	100.0
	Q3	1015	39.8	880	34.5	480	18.8	140	5.5	30	1.2	2550	100.0
	Q4	1075	34.8	1105	35.8	660	21.4	205	6.6	45	1.5	3085	100.0
	Q5(most)	855	32.1	845	31.7	650	24.4	245	9.2	75	2.8	2665	100.0
Two or more families	Q1(least)	20	44.4	15	33.3	15	33.3	10	22.2	.	.	45	100.0
	Q2	25	38.5	20	30.8	10	15.4	10	15.4	.	.	65	100.0
	Q3	20	21.1	35	36.8	25	26.3	10	10.5	10	10.5	95	100.0
	Q4	40	34.8	30	26.1	30	26.1	15	13.0	10	8.7	115	100.0
	Q5(most)	110	36.7	80	26.7	60	20.0	25	8.3	10	3.3	300	100.0
Other multi-person household	Q1(least)	45	47.4	30	31.6	10	10.5	10	10.5	10	10.5	95	100.0
	Q2	55	42.3	40	30.8	20	15.4	10	7.7	10	7.7	130	100.0
	Q3	50	35.7	55	39.3	25	17.9	10	7.1	10	7.1	140	100.0
	Q4	95	40.4	85	36.2	40	17.0	10	4.3	10	4.3	235	100.0
	Q5(most)	80	34.0	80	34.0	60	25.5	10	4.3	10	4.3	235	100.0
One person household	Q1(least)	90	36.7	80	32.7	50	20.4	25	10.2	10	4.1	245	100.0
	Q2	105	28.8	120	32.9	100	27.4	30	8.2	10	2.7	365	100.0
	Q3	105	25.6	130	31.7	120	29.3	40	9.8	15	3.7	410	100.0
	Q4	115	20.0	180	31.3	160	27.8	85	14.8	25	4.3	575	100.0
	Q5(most)	105	20.2	160	30.8	150	28.8	75	14.4	20	3.8	520	100.0
<b>Total</b>	<b>Total</b>	<b>6940</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

### **11.3 The Association of NZDep with Health-Related Quality of Life (SF-36)**

Overall, mean SF-36 scores increased with improving area deprivation. This was typically consistent across age groups and by sex and ethnicity. The relationship in respondents aged 0-14 years (at Wave 1) was not linear. However, the relationship for the younger age groups (<25 years) and for the Asian ethnic group was not linear, this may be due to small numbers in these groups split across the five NZ Deprivation groups. The linear relationship can be seen across the marital status groups. However, it appears that the relationship is not consistent across family or household structures.

**Table 309: Overall mean (SD) SF-36 score, by NZDep**

NZDep Index (W1)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Q1(least)	82.4	17.5	84.3	21.2	87.3	20.9	92.7	17.3	67.3	18.4	85.2	12.2	94.8	13.0	89.8	18.3	53.5	7.6	51.7	8.1
Q2	79.9	18.9	82.7	22.0	85.8	22.4	91.3	19.0	64.9	19.7	83.8	13.9	93.4	15.2	87.6	20.5	52.6	8.7	51.0	8.8
Q3	78.3	19.9	81.7	22.9	84.0	24.0	90.1	20.5	63.6	20.2	83.3	14.3	92.6	16.2	86.6	21.2	52.2	9.0	50.4	9.2
Q4	76.5	20.7	80.7	23.5	82.5	24.7	89.0	21.6	62.8	20.6	82.6	14.8	91.1	18.0	84.3	23.5	51.7	9.3	49.7	9.7
Q5(most)	74.4	22.3	79.9	24.6	81.1	25.6	87.1	23.9	63.6	21.3	81.4	16.0	88.8	20.5	83.0	24.7	51.1	10.2	49.3	10.0
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 310: Mean (SD) SF-36 score by NZDep by age and sex**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	NZDep Index (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0-14	Q1(least)	83.2	13.6	88.6	15.2	92.5	13.3	93.3	14.5	69.6	16.1	83.1	11.8	94.4	13.6	97.9	6.2	52.2	7.5	55.0	4.8
	Q2	84.7	13.3	86.9	18.0	92.5	13.2	94.9	13.6	70.2	16.4	83.4	11.6	96.3	9.8	98.7	4.0	52.8	6.8	55.0	4.3
	Q3	82.8	18.3	90.3	15.9	91.8	17.3	91.6	17.9	68.6	19.5	82.6	14.4	94.2	15.2	97.6	6.9	51.6	9.3	55.1	5.3
	Q4	82.6	16.0	87.5	20.0	88.4	18.2	90.4	18.4	69.8	17.0	81.2	13.4	91.9	16.5	94.1	15.4	51.6	8.3	53.9	6.9
	Q5(most)	82.6	17.3	87.2	19.3	88.0	20.3	91.3	18.8	73.9	19.2	82.5	14.3	91.7	18.2	97.7	6.0	52.4	9.1	54.2	5.1
15-24	Q1(least)	82.9	16.4	86.5	20.0	89.7	18.3	91.0	17.9	66.0	19.0	82.7	13.7	93.0	14.4	96.2	12.0	51.4	8.8	54.1	6.2
	Q2	81.4	15.7	85.5	20.5	88.9	19.2	89.4	19.8	63.9	18.4	81.2	14.4	91.8	15.9	95.7	12.1	50.3	9.3	54.0	6.2
	Q3	80.9	17.6	83.2	22.6	87.4	21.3	89.6	20.0	64.8	19.2	81.3	14.2	92.6	15.5	95.0	12.6	50.8	9.0	53.3	6.9
	Q4	78.5	18.4	85.5	19.8	88.5	18.8	89.7	20.1	64.4	19.0	80.7	14.6	92.3	15.6	94.5	13.4	50.3	9.1	53.5	6.3
	Q5(most)	80.1	17.8	85.5	21.0	86.5	20.4	89.6	19.4	67.2	18.5	81.5	14.1	91.5	16.8	93.5	14.0	51.2	9.3	53.0	6.7
25-34	Q1(least)	85.3	15.3	87.7	19.8	90.3	18.2	93.4	16.3	65.6	17.6	84.5	11.5	95.6	11.0	95.1	12.3	52.6	7.2	54.0	6.5
	Q2	84.3	15.4	85.6	20.6	87.8	19.6	90.6	19.1	64.8	18.5	82.8	14.1	92.8	14.9	93.8	13.6	51.6	9.1	53.4	6.9
	Q3	82.1	17.1	84.2	20.8	86.5	21.0	90.6	18.8	62.4	19.1	81.4	14.8	92.0	16.2	93.8	13.1	50.7	9.4	53.2	7.0
	Q4	81.3	17.5	83.9	21.6	87.1	20.9	90.3	19.7	63.6	19.9	81.8	15.4	91.6	17.8	92.8	14.7	50.9	9.7	52.9	6.9
	Q5(most)	79.3	19.1	83.6	21.7	86.4	21.0	88.9	21.6	64.6	20.7	80.8	15.7	88.9	19.6	92.1	15.0	50.3	10.3	52.7	7.0
35-44	Q1(least)	84.8	15.9	86.7	18.8	90.2	17.2	93.4	16.0	67.6	17.4	84.4	12.2	94.9	12.6	94.1	11.5	52.9	7.6	53.6	6.0
	Q2	82.4	17.3	83.8	21.4	88.5	19.7	91.8	18.0	65.3	18.8	83.0	13.9	93.5	15.4	92.3	14.1	52.0	8.8	52.7	7.2
	Q3	81.4	17.8	83.1	21.7	87.0	20.5	90.1	20.6	63.7	19.5	82.3	14.9	91.3	17.6	91.8	14.1	51.2	9.4	52.5	7.2
	Q4	79.1	19.2	81.3	23.0	83.7	23.2	86.9	23.3	63.1	20.4	80.7	15.3	89.5	19.4	89.7	17.2	50.3	10.2	51.5	8.3
	Q5(most)	75.4	21.7	79.8	24.7	81.3	25.4	85.9	25.5	62.6	21.1	80.4	16.7	88.1	20.8	85.6	22.5	50.2	10.5	50.0	9.2
45-54	Q1(least)	84.6	15.8	84.5	21.1	88.6	19.1	94.3	15.1	69.7	16.7	86.0	11.7	95.4	12.2	91.6	14.7	54.3	6.9	52.3	7.2
	Q2	80.8	18.7	82.5	21.8	87.6	21.8	92.4	18.5	66.3	19.6	84.1	13.9	93.8	14.7	89.0	17.7	52.9	8.6	51.5	8.3
	Q3	78.1	20.6	80.8	24.0	84.3	24.1	91.2	20.0	64.5	20.0	83.6	13.9	93.4	15.7	87.7	19.7	52.5	8.6	50.5	9.0
	Q4	77.2	21.3	80.2	24.2	84.6	23.6	90.3	20.5	64.6	19.2	83.2	15.3	91.3	17.9	85.1	21.9	52.3	9.3	50.0	9.3
	Q5(most)	71.2	23.9	76.4	26.3	78.8	26.7	85.7	25.3	62.4	21.4	80.5	17.5	87.1	22.5	80.2	25.3	50.6	11.0	47.9	10.3
55-64	Q1(least)	80.4	18.7	81.2	22.4	85.7	22.6	93.8	17.2	69.2	18.1	86.9	11.7	95.5	12.0	86.5	18.9	55.1	6.9	50.0	8.6
	Q2	77.7	21.3	81.4	22.0	85.3	23.0	92.8	18.0	67.2	19.6	86.1	12.5	94.7	14.1	83.6	21.3	54.4	7.6	49.4	9.2
	Q3	76.2	20.9	80.6	24.0	83.0	25.5	91.8	19.9	66.4	20.0	85.9	13.1	94.2	14.1	83.7	21.1	54.1	8.0	48.9	9.6
	Q4	73.5	21.4	77.5	24.4	80.6	25.3	90.5	20.7	63.9	19.5	85.1	13.4	91.8	17.6	80.2	22.6	53.5	8.2	47.5	9.7
	Q5(most)	69.1	24.7	76.2	25.9	78.2	27.0	86.5	24.9	63.3	21.7	82.0	17.1	87.9	21.6	75.7	26.4	51.8	10.3	46.5	10.7

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	NZDep Index (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
65+	Q1(least)	73.6	21.3	77.6	24.9	75.7	28.0	88.3	22.6	62.3	22.1	86.5	11.9	94.0	15.7	71.4	27.9	54.6	8.0	44.9	10.9
	Q2	70.6	22.3	76.4	25.2	74.5	28.7	89.1	21.7	60.4	22.8	85.6	14.3	92.7	16.6	67.6	28.7	54.2	8.4	43.9	11.0
	Q3	70.2	22.8	76.9	24.2	74.5	29.0	87.7	23.5	59.5	22.6	85.6	13.9	92.4	17.3	66.0	28.3	54.0	8.5	43.5	11.0
	Q4	67.8	23.5	74.5	26.1	70.5	30.5	87.0	24.3	56.8	24.0	84.9	14.0	90.6	18.6	62.2	30.4	53.6	8.6	42.1	11.8
	Q5(most)	66.0	24.5	73.7	27.0	70.5	31.1	84.4	27.8	58.1	23.6	84.1	15.0	88.8	22.0	60.6	30.8	53.1	9.6	41.7	12.2
Male	Q1(least)	82.5	17.3	85.5	20.5	88.5	20.3	94.0	15.7	69.5	18.0	86.2	11.7	95.7	11.8	91.1	17.2	54.3	7.2	52.1	7.9
	Q2	79.9	18.9	83.5	21.8	87.3	21.7	92.3	18.0	67.1	18.9	84.8	13.0	94.2	14.4	90.0	18.0	53.2	8.1	51.6	8.2
	Q3	78.7	19.6	83.4	22.0	85.9	23.2	91.6	19.3	65.7	20.0	84.6	13.7	94.0	14.6	88.6	19.8	52.9	8.4	51.0	8.7
	Q4	77.0	20.6	81.8	23.4	84.2	24.7	90.7	20.4	65.8	19.6	84.1	13.8	93.0	16.3	86.8	21.8	52.8	8.6	50.3	9.3
	Q5(most)	75.1	22.0	81.1	23.5	82.5	24.9	89.1	22.2	66.8	20.9	83.1	15.1	90.3	19.3	85.2	23.5	52.3	9.6	49.7	9.6
Female	Q1(least)	82.2	17.6	83.2	21.7	86.1	21.3	91.5	18.7	65.3	18.5	84.2	12.5	94.0	13.9	88.6	19.1	52.9	7.9	51.4	8.3
	Q2	79.9	19.0	81.9	22.3	84.6	23.0	90.4	19.8	63.0	20.1	82.9	14.5	92.6	15.7	85.4	22.2	52.1	9.1	50.5	9.3
	Q3	78.0	20.3	80.3	23.5	82.4	24.5	88.9	21.5	61.8	20.2	82.1	14.7	91.4	17.4	84.8	22.3	51.5	9.4	49.9	9.5
	Q4	76.1	20.8	79.7	23.6	81.1	24.6	87.5	22.5	60.3	21.2	81.3	15.5	89.5	19.1	82.2	24.7	50.8	9.9	49.3	10.0
	Q5(most)	73.8	22.6	78.9	25.3	80.0	26.1	85.6	25.0	61.2	21.2	80.2	16.6	87.7	21.3	81.3	25.4	50.2	10.5	48.9	10.3
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 311: Mean (SD) SF-36 score by NZDep by prioritised ethnicity**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Ethnicity (W1)	NZDep Index (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
nM,nP,nA	Q1(least)	82.5	17.5	84.1	21.3	87.1	21.1	92.7	17.5	67.3	18.4	85.2	12.1	94.9	13.0	89.6	18.5	53.6	7.6	51.6	8.2
	Q2	79.9	19.1	82.1	22.3	85.5	22.7	91.3	19.0	64.6	19.9	83.8	13.9	93.3	15.3	87.1	21.0	52.6	8.7	50.8	9.0
	Q3	78.5	20.0	81.2	22.9	83.7	24.2	90.4	20.2	63.3	20.5	83.7	14.0	92.8	16.1	85.8	21.9	52.4	8.8	50.1	9.3
	Q4	76.4	20.9	80.0	23.6	82.1	25.1	89.2	21.6	62.0	20.8	82.9	14.6	91.8	17.3	83.2	24.3	52.0	9.2	49.3	10.0
	Q5(most)	73.4	22.8	77.4	25.4	79.4	26.8	86.3	24.8	60.6	21.6	80.7	16.8	89.2	20.3	80.6	26.0	50.7	10.5	48.3	10.7
Māori	Q1(least)	82.3	18.4	84.1	21.2	86.8	19.8	92.2	16.5	66.9	18.9	85.6	12.3	93.3	14.1	92.4	15.3	53.2	8.0	52.1	7.0
	Q2	80.7	17.0	85.7	20.1	87.1	21.4	90.6	21.7	67.5	19.0	84.2	14.4	93.3	15.5	90.8	17.0	52.6	9.7	52.3	7.5
	Q3	79.2	20.2	84.2	22.2	85.2	22.8	88.5	22.4	63.2	18.7	80.7	17.2	91.3	17.3	91.0	17.0	50.4	10.6	52.4	8.4
	Q4	77.4	20.0	82.7	23.5	84.2	23.5	87.0	23.6	65.2	20.0	82.0	15.6	88.7	21.1	88.1	20.7	50.9	10.4	51.2	8.8
	Q5(most)	75.8	21.4	82.1	23.3	83.0	24.1	88.1	23.4	66.1	20.3	82.6	15.4	88.9	20.5	85.8	22.8	51.7	10.0	50.3	9.0
Pacific	Q1(least)	85.7	8.3	84.5	25.8	87.1	17.6	97.5	7.0	66.7	14.7	82.0	11.6	98.3	6.5	92.0	18.3	53.3	5.3	53.0	7.1
	Q2	79.3	20.0	84.2	18.2	86.8	21.3	92.3	16.6	67.4	14.3	82.1	10.7	94.8	13.8	93.0	14.9	52.1	7.0	52.4	6.8
	Q3	75.3	20.7	85.6	22.4	84.6	24.9	91.3	18.0	67.5	19.7	83.9	12.7	92.5	16.5	90.2	17.0	52.3	8.0	51.8	8.0
	Q4	73.1	20.5	79.6	24.0	79.0	25.0	85.0	23.0	63.1	20.3	79.2	15.8	84.6	21.7	85.9	22.1	49.4	10.0	49.9	9.1
	Q5(most)	74.6	23.2	83.2	23.5	81.7	24.5	86.3	23.4	69.1	20.3	81.6	14.8	85.6	22.8	85.7	23.1	51.3	9.6	50.2	9.3
Asian	Q1(least)	79.3	16.3	89.9	15.6	91.1	15.0	93.4	14.9	67.9	18.0	83.6	12.7	93.6	12.3	93.3	13.4	52.3	7.7	53.7	6.0
	Q2	78.4	17.6	89.0	18.4	91.3	15.6	92.8	15.5	67.7	15.9	82.8	13.5	94.7	10.9	92.2	14.1	52.1	7.7	53.5	6.3
	Q3	76.6	18.4	84.1	22.8	86.2	21.2	88.3	22.7	66.7	18.3	81.2	14.9	91.7	15.8	90.1	17.5	51.2	8.7	51.9	8.3
	Q4	79.1	18.8	86.3	20.7	87.2	19.0	92.6	15.9	68.1	18.2	81.7	15.4	91.1	16.6	91.2	16.1	51.8	8.9	52.8	7.1
	Q5(most)	77.6	19.6	86.5	20.8	88.4	18.6	92.8	16.5	70.2	18.2	82.9	13.4	92.2	15.6	88.9	18.9	52.6	8.3	52.1	7.4
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>



**Table 312: Mean (SD) SF-36 score by NZDep by legal marital status**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Marital Status (W1)	NZDep Index (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	Q1(least)	83.2	13.6	88.6	15.2	92.5	13.3	93.3	14.5	69.6	16.1	83.1	11.8	94.4	13.6	97.9	6.2	52.2	7.5	55.0	4.8
	Q2	84.7	13.3	86.9	18.0	92.5	13.2	94.9	13.6	70.2	16.4	83.4	11.6	96.3	9.8	98.7	4.0	52.8	6.8	55.0	4.3
	Q3	82.8	18.3	90.3	15.9	91.8	17.3	91.6	17.9	68.6	19.5	82.6	14.4	94.2	15.2	97.6	6.9	51.6	9.3	55.1	5.3
	Q4	82.7	15.9	87.7	19.9	88.6	18.1	90.5	18.3	69.7	16.8	81.4	13.4	92.1	16.4	94.2	15.3	51.6	8.3	53.9	6.9
	Q5(most)	82.5	17.2	87.3	19.2	87.7	20.7	91.0	19.0	73.4	19.5	82.3	14.6	91.7	18.1	97.4	6.6	52.3	9.3	54.2	5.2
Never Married	Q1(least)	82.8	17.1	85.8	20.5	88.9	19.2	91.8	17.4	66.6	18.6	83.3	13.2	93.8	13.5	94.3	14.0	52.1	8.4	53.4	6.9
	Q2	81.3	17.0	84.8	20.9	87.9	20.0	89.8	19.8	64.9	18.7	82.0	14.3	92.0	16.6	93.2	15.2	51.1	9.3	53.1	7.1
	Q3	80.0	18.6	82.9	22.1	85.7	22.4	89.4	20.4	63.3	19.8	81.1	15.0	91.5	16.6	92.3	15.9	50.6	9.5	52.5	7.7
	Q4	78.6	18.8	84.8	20.3	87.2	20.7	89.0	20.8	64.1	19.5	81.3	14.8	91.1	17.4	92.3	15.6	50.5	9.5	52.8	7.1
	Q5(most)	77.3	20.1	82.3	22.9	83.9	23.1	87.9	22.4	65.2	19.8	80.9	15.8	89.2	19.5	89.1	20.1	50.7	10.1	51.4	8.4
Divorced Widowed Separated	Q1(least)	80.6	19.1	82.1	23.1	84.4	24.2	89.5	21.6	63.7	20.1	83.9	13.4	93.1	15.2	83.8	23.9	52.7	8.7	50.0	9.9
	Q2	76.0	21.2	79.2	24.1	81.1	25.6	90.4	20.5	62.5	22.6	83.7	15.0	91.9	17.9	79.6	25.5	52.8	9.7	48.3	10.1
	Q3	74.4	22.2	77.7	24.9	78.6	27.0	88.1	23.2	60.6	22.4	82.4	16.0	91.0	18.7	77.5	26.5	52.0	10.0	47.3	10.5
	Q4	71.1	23.3	74.6	26.1	74.5	28.7	85.0	24.8	57.7	22.5	81.5	16.6	89.1	20.6	73.3	28.4	51.2	10.3	45.6	11.5
	Q5(most)	68.7	24.4	74.3	26.8	73.9	29.2	81.7	29.6	58.8	23.4	79.8	17.9	86.4	23.4	71.3	29.9	50.2	11.6	45.3	11.8
Married	Q1(least)	82.4	17.5	83.9	21.3	86.9	21.1	93.4	16.6	67.9	18.1	86.1	11.5	95.5	12.4	88.9	18.5	54.2	7.0	51.3	8.2
	Q2	80.0	19.3	82.4	22.1	85.7	22.8	92.0	18.5	65.2	19.4	84.6	13.4	94.2	13.9	86.4	20.8	53.2	8.2	50.6	9.0
	Q3	78.5	19.8	81.9	22.7	84.5	23.7	91.2	19.7	64.5	19.6	84.9	13.1	93.7	15.0	85.9	21.1	53.1	8.2	50.1	9.2
	Q4	77.1	20.5	80.1	23.9	82.4	24.8	90.4	20.7	63.5	20.4	84.0	14.0	91.9	17.2	83.1	23.9	52.7	8.8	49.2	9.8
	Q5(most)	73.9	22.9	79.8	24.7	81.6	25.5	88.9	21.9	63.7	21.0	82.8	15.2	89.5	19.8	82.1	24.0	51.9	9.5	48.8	9.9
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 313: Mean (SD) SF-36 score by NZDep by family structure**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Family Structure (W1)	NZDep Index (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Couple only	Q1(least)	80.1	19.1	81.4	22.7	84.0	23.6	92.6	17.8	67.3	19.1	86.5	11.8	94.6	13.9	85.2	21.2	54.5	7.3	49.6	9.1
	Q2	78.4	20.3	80.6	23.1	82.9	24.7	91.3	19.0	65.7	20.0	85.4	13.2	93.5	15.1	83.0	23.3	53.8	7.9	49.1	9.6
	Q3	77.7	20.2	80.8	23.5	82.6	25.4	91.2	19.8	64.9	20.0	85.7	12.9	93.7	15.3	83.2	23.3	53.8	8.0	48.9	9.9
	Q4	75.4	21.7	79.3	23.8	80.8	25.8	89.9	21.2	62.8	20.9	84.4	13.5	92.0	17.1	80.2	25.5	53.0	8.6	48.1	10.3
	Q5(most)	73.2	23.2	78.2	25.3	80.9	26.7	88.1	23.0	63.6	21.9	82.9	15.6	90.1	19.3	79.3	26.0	52.2	9.7	47.9	10.8
Couple with children	Q1(least)	84.5	15.5	86.8	18.9	90.1	17.5	93.6	15.8	68.0	17.4	84.8	11.8	95.4	11.7	94.0	12.9	53.2	7.4	53.5	6.3
	Q2	82.3	16.8	85.0	20.4	89.1	19.3	92.2	17.9	65.9	18.6	83.4	13.5	94.2	13.5	93.0	13.9	52.2	8.5	53.0	7.0
	Q3	80.3	18.9	84.2	21.3	87.1	20.9	90.8	19.5	64.3	19.6	82.7	14.4	92.7	15.9	91.8	15.5	51.5	9.2	52.5	7.6
	Q4	80.0	18.2	83.7	22.1	86.4	21.4	90.4	19.8	64.9	19.4	82.5	14.6	91.8	16.9	90.4	17.6	51.6	9.1	52.0	7.9
	Q5(most)	76.9	21.1	82.5	23.0	84.2	22.9	89.7	20.6	65.6	19.9	82.4	15.0	90.0	18.9	88.9	19.1	51.6	9.3	51.1	8.3
Sole parent	Q1(least)	79.9	18.7	84.2	22.0	87.9	19.9	89.3	21.2	63.7	18.3	80.8	14.2	91.1	18.1	91.7	15.7	50.5	9.3	52.8	7.6
	Q2	78.5	19.4	83.1	21.5	85.6	20.9	88.8	20.5	62.3	19.8	81.1	15.5	91.1	17.7	88.8	20.7	50.6	10.2	51.7	9.2
	Q3	79.0	19.8	81.0	24.9	84.2	24.3	87.8	22.3	62.9	18.4	81.3	14.4	91.4	17.1	89.5	17.9	50.8	8.9	51.4	9.1
	Q4	74.6	21.1	79.8	24.8	81.6	24.2	84.2	25.1	60.4	21.1	79.0	17.6	86.7	21.7	86.9	21.5	48.9	11.5	50.6	9.0
	Q5(most)	73.0	22.7	80.3	24.7	79.4	26.8	83.4	27.0	61.9	23.0	78.4	17.2	85.3	23.3	83.4	25.1	49.0	11.5	49.8	10.1
Not in a family nucleus	Q1(least)	80.0	19.3	81.3	24.6	83.0	25.4	90.1	20.5	65.2	20.8	84.9	13.2	94.5	12.9	82.6	25.3	53.6	8.2	49.2	10.4
	Q2	76.5	20.8	80.3	23.8	82.6	25.1	89.6	21.4	61.0	21.5	82.4	15.4	91.5	18.3	81.0	25.7	51.8	10.0	49.1	10.0
	Q3	74.7	21.3	78.2	23.7	79.3	26.7	88.1	22.7	60.2	22.3	81.7	15.7	91.3	17.9	79.3	26.3	51.6	9.8	48.0	10.1
	Q4	73.1	22.3	77.8	24.3	78.4	27.6	87.6	22.9	60.2	21.8	82.1	15.0	90.8	18.6	77.8	27.7	51.7	9.3	47.4	11.0
	Q5(most)	72.6	22.8	76.9	25.7	77.5	27.0	85.1	26.5	61.7	21.0	81.0	16.6	88.6	21.2	76.7	28.5	51.2	10.6	47.1	11.0
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 314: Mean (SD) SF-36 score by NZDep by household structure**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Household Structure (W1)	NZDep Index (W1)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
One Family	Q1(least)	82.6	17.2	84.7	20.7	87.7	20.3	93.0	16.8	67.6	18.1	85.2	12.0	94.9	13.0	90.6	17.1	53.5	7.5	52.0	7.8
	Q2	80.3	18.7	82.9	21.9	86.3	22.0	91.5	18.7	65.5	19.3	84.0	13.6	93.6	14.6	88.5	19.5	52.7	8.5	51.3	8.6
	Q3	79.2	19.6	82.4	22.5	85.0	23.2	90.6	19.8	64.4	19.6	83.6	14.0	92.9	16.0	88.2	19.6	52.3	8.8	51.0	8.9
	Q4	77.5	20.2	81.5	23.2	83.7	23.8	89.5	21.1	63.6	20.2	82.9	14.5	91.4	17.5	86.1	22.0	51.8	9.2	50.3	9.3
	Q5(most)	74.5	22.2	80.4	24.3	81.8	25.3	87.4	23.4	63.6	21.5	81.4	16.0	88.8	20.4	84.5	23.6	51.0	10.2	49.7	9.7
Two or more families	Q1(least)	82.4	13.1	82.2	24.5	87.2	20.3	89.8	19.3	63.7	20.6	83.4	13.8	90.2	15.0	90.3	16.3	51.6	8.4	52.0	7.3
	Q2	81.1	18.4	86.3	18.9	89.7	15.8	91.3	15.4	67.8	18.4	84.1	13.6	94.5	12.8	90.3	16.5	52.8	8.4	52.5	6.3
	Q3	74.3	20.4	81.9	26.6	82.7	26.7	87.6	25.0	61.0	20.7	81.8	14.8	91.8	16.8	88.1	21.2	50.4	9.2	50.9	10.5
	Q4	72.2	22.3	80.4	24.7	81.3	24.1	84.4	25.3	60.5	21.3	80.2	18.3	83.6	23.9	81.4	26.6	49.3	11.9	49.7	9.0
	Q5(most)	76.9	22.6	83.3	22.9	84.1	23.6	90.2	20.8	69.8	18.8	83.6	13.6	89.3	20.0	86.1	21.8	52.7	8.7	50.4	9.3
Other multi-person household	Q1(least)	85.9	15.9	86.5	22.0	90.6	20.4	94.3	13.0	69.5	18.6	85.8	10.9	95.9	10.2	92.3	17.5	54.1	7.0	53.0	8.5
	Q2	82.1	15.7	81.9	23.2	85.8	21.8	88.5	21.4	61.7	18.0	81.5	13.6	90.4	17.7	89.9	20.0	50.6	9.5	52.0	8.6
	Q3	79.6	16.3	81.4	21.8	87.3	19.5	89.5	19.3	64.3	19.0	81.3	13.6	90.7	16.9	91.7	13.5	50.9	9.1	52.4	6.9
	Q4	80.1	17.5	82.5	21.6	86.1	22.4	90.4	19.9	63.1	19.4	82.7	13.4	93.3	16.1	91.0	17.7	51.5	8.4	51.9	8.4
	Q5(most)	78.1	19.3	80.6	24.3	83.3	23.0	88.9	20.6	64.3	19.5	80.5	14.8	90.1	18.3	88.8	20.2	50.8	9.4	51.2	8.8
One person household	Q1(least)	77.4	20.6	79.0	25.3	79.6	26.7	88.2	23.1	63.3	21.3	84.7	13.7	94.1	13.9	78.1	27.1	53.5	8.6	47.4	10.9
	Q2	75.2	21.6	80.4	23.3	81.5	26.2	90.3	20.9	60.8	22.6	82.7	16.0	91.9	18.7	78.0	26.8	52.2	10.1	48.2	10.2
	Q3	73.1	22.2	77.5	24.1	77.1	28.0	88.0	23.6	58.9	23.3	82.1	16.2	92.1	17.5	74.7	28.0	52.1	10.0	46.5	10.5
	Q4	70.6	22.8	75.5	25.0	75.0	28.7	86.2	24.1	58.8	22.7	81.7	16.0	89.7	19.4	72.3	28.8	51.7	9.8	45.5	11.2
	Q5(most)	70.5	23.4	74.8	26.1	74.8	28.4	83.1	28.8	60.0	21.5	80.8	17.7	88.2	22.3	71.2	29.6	51.1	11.2	45.3	11.3
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

### 11.4 The Association of NZDep with Mental Distress (K-10)

Overall, the proportion of respondents reporting low levels of mental distress increased with improving area deprivation. Typically, this was consistent across age groups, by sex, ethnicity, marital status, family and household structure. This was consequently reflected in declines in the proportion reporting moderate to high level of mental distress with increasing level of area deprivation. There was on average a 10-20% difference in the proportion of respondents reporting low mental distress between the least and most deprived areas. Males had higher proportions of low mental distress compared to females at all deprivation levels. Sole parents had the lowest proportion of low mental distress at all deprivation levels.

**Table 315: K-10 groups by NZDep, overall**

NZDep Index (W1)	Kessler Groups (W3)											
	Low		Moderate		High		Very High		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Q1(least)	3030	85.0	390	10.9	80	2.2	30	0.8	35	1.0	3565	100.0
Q2	2990	79.8	500	13.4	180	4.8	35	0.9	40	1.1	3745	100.0
Q3	2490	78.1	445	13.9	165	5.2	50	1.6	40	1.3	3190	100.0
Q4	2945	73.5	695	17.4	235	5.9	80	2.0	55	1.4	4005	100.0
Q5(most)	2580	69.4	685	18.4	280	7.5	110	3.0	55	1.5	3720	100.0
<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

**Table 316: K-10 groups by NZDep by age and sex**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Age (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	Q1(least)	85	73.9	25	21.7	10	8.7	.	.	10	8.7	115	100.0
	Q2	105	84.0	15	12.0	10	8.0	10	8.0	10	8.0	125	100.0
	Q3	70	77.8	10	11.1	10	11.1	.	.	10	11.1	90	100.0
	Q4	90	75.0	20	16.7	10	8.3	10	8.3	10	8.3	120	100.0
	Q5(most)	85	63.0	30	22.2	10	7.4	10	7.4	10	7.4	135	100.0
15-24	Q1(least)	335	77.0	70	16.1	20	4.6	10	2.3	10	2.3	435	100.0
	Q2	330	71.0	95	20.4	35	7.5	10	2.2	10	2.2	465	100.0
	Q3	330	73.3	75	16.7	30	6.7	10	2.2	10	2.2	450	100.0
	Q4	365	68.9	105	19.8	45	8.5	10	1.9	10	1.9	530	100.0
	Q5(most)	425	66.9	140	22.0	45	7.1	15	2.4	10	1.6	635	100.0
25-34	Q1(least)	325	85.5	40	10.5	10	2.6	10	2.6	10	2.6	380	100.0
	Q2	430	77.5	85	15.3	25	4.5	10	1.8	10	1.8	555	100.0
	Q3	375	76.5	70	14.3	30	6.1	10	2.0	10	2.0	490	100.0
	Q4	535	73.3	125	17.1	45	6.2	20	2.7	10	1.4	730	100.0
	Q5(most)	465	69.9	135	20.3	40	6.0	15	2.3	10	1.5	665	100.0
35-44	Q1(least)	695	86.9	80	10.0	10	1.3	10	1.3	10	1.3	800	100.0
	Q2	670	81.7	100	12.2	35	4.3	10	1.2	10	1.2	820	100.0
	Q3	500	78.1	95	14.8	30	4.7	10	1.6	10	1.6	640	100.0
	Q4	605	73.8	140	17.1	55	6.7	15	1.8	10	1.2	820	100.0
	Q5(most)	465	67.4	135	19.6	60	8.7	25	3.6	10	1.4	690	100.0
45-54	Q1(least)	695	88.5	60	7.6	15	1.9	10	1.3	10	1.3	785	100.0
	Q2	565	81.3	80	11.5	35	5.0	10	1.4	10	1.4	695	100.0
	Q3	445	80.9	65	11.8	30	5.5	10	1.8	10	1.8	550	100.0
	Q4	455	76.5	90	15.1	25	4.2	15	2.5	10	1.7	595	100.0
	Q5(most)	430	70.5	90	14.8	50	8.2	25	4.1	10	1.6	610	100.0
55-64	Q1(least)	490	86.7	60	10.6	10	1.8	10	1.8	10	1.8	565	100.0
	Q2	435	84.5	55	10.7	15	2.9	10	1.9	10	1.9	515	100.0
	Q3	360	82.8	45	10.3	15	3.4	10	2.3	10	2.3	435	100.0
	Q4	380	76.0	75	15.0	25	5.0	10	2.0	10	2.0	500	100.0
	Q5(most)	355	72.4	70	14.3	40	8.2	20	4.1	10	2.0	490	100.0
65+	Q1(least)	405	86.2	45	9.6	15	3.2	10	2.1	10	2.1	470	100.0
	Q2	460	80.7	75	13.2	30	5.3	10	1.8	10	1.8	570	100.0
	Q3	415	78.3	80	15.1	20	3.8	10	1.9	15	2.8	530	100.0
	Q4	520	73.2	130	18.3	45	6.3	10	1.4	15	2.1	710	100.0
	Q5(most)	355	71.7	80	16.2	30	6.1	10	2.0	15	3.0	495	100.0
Male	Q1(least)	1465	86.2	170	10.0	35	2.1	10	0.6	20	1.2	1700	100.0
	Q2	1430	81.5	220	12.5	75	4.3	10	0.6	20	1.1	1755	100.0
	Q3	1190	79.6	195	13.0	65	4.3	20	1.3	25	1.7	1495	100.0
	Q4	1400	76.7	280	15.3	100	5.5	20	1.1	20	1.1	1825	100.0
	Q5(most)	1155	72.0	280	17.4	110	6.9	35	2.2	25	1.6	1605	100.0
Female	Q1(least)	1565	84.1	215	11.6	45	2.4	20	1.1	10	0.5	1860	100.0
	Q2	1555	78.1	280	14.1	105	5.3	25	1.3	25	1.3	1990	100.0
	Q3	1295	76.4	245	14.5	105	6.2	30	1.8	15	0.9	1695	100.0
	Q4	1545	71.0	410	18.9	135	6.2	55	2.5	30	1.4	2175	100.0
	Q5(most)	1425	67.4	400	18.9	170	8.0	80	3.8	30	1.4	2115	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

**Table 317: K-10 groups by NZDep by prioritised ethnicity**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Ethnicity (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	Q1(least)	2810	85.7	345	10.5	70	2.1	25	0.8	30	0.9	3280	100.0
	Q2	2655	80.2	435	13.1	160	4.8	30	0.9	35	1.1	3310	100.0
	Q3	2085	79.0	360	13.6	125	4.7	35	1.3	25	0.9	2640	100.0
	Q4	2365	75.0	535	17.0	165	5.2	55	1.7	35	1.1	3155	100.0
	Q5(most)	1460	70.5	375	18.1	145	7.0	60	2.9	25	1.2	2070	100.0
Māori	Q1(least)	105	75.0	25	17.9	10	7.1	10	7.1	.	.	140	100.0
	Q2	185	78.7	35	14.9	10	4.3	10	4.3	10	4.3	235	100.0
	Q3	185	71.2	40	15.4	20	7.7	10	3.8	10	3.8	260	100.0
	Q4	320	70.3	80	17.6	40	8.8	15	3.3	10	2.2	455	100.0
	Q5(most)	650	67.7	180	18.8	80	8.3	30	3.1	15	1.6	960	100.0
Pacific	Q1(least)	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	Q2	25	62.5	10	25.0	10	25.0	.	.	10	25.0	40	100.0
	Q3	75	83.3	10	11.1	10	11.1	10	11.1	10	11.1	90	100.0
	Q4	100	58.8	40	23.5	25	14.7	10	5.9	10	5.9	170	100.0
	Q5(most)	315	64.3	100	20.4	40	8.2	15	3.1	15	3.1	490	100.0
Asian	Q1(least)	105	80.8	20	15.4	10	7.7	10	7.7	10	7.7	130	100.0
	Q2	120	75.0	25	15.6	10	6.3	10	6.3	10	6.3	160	100.0
	Q3	145	72.5	35	17.5	15	7.5	10	5.0	10	5.0	200	100.0
	Q4	160	71.1	45	20.0	10	4.4	10	4.4	10	4.4	225	100.0
	Q5(most)	150	76.9	30	15.4	10	5.1	10	5.1	.	.	195	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 318: K-10 groups by NZDep by legal marital status**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Marital Status (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	Q1(least)	85	73.9	25	21.7	10	8.7	.	.	10	8.7	115	100.0
	Q2	100	80.0	20	16.0	10	8.0	10	8.0	10	8.0	125	100.0
	Q3	70	73.7	15	15.8	10	10.5	.	.	10	10.5	95	100.0
	Q4	90	72.0	25	20.0	10	8.0	10	8.0	10	8.0	125	100.0
	Q5(most)	90	66.7	35	25.9	10	7.4	10	7.4	10	7.4	135	100.0
Never Married	Q1(least)	605	80.1	105	13.9	30	4.0	10	1.3	10	1.3	755	100.0
	Q2	700	74.1	165	17.5	60	6.3	10	1.1	10	1.1	945	100.0
	Q3	690	75.4	140	15.3	55	6.0	20	2.2	10	1.1	915	100.0
	Q4	865	72.4	210	17.6	80	6.7	30	2.5	10	0.8	1195	100.0
	Q5(most)	915	66.5	290	21.1	105	7.6	40	2.9	25	1.8	1375	100.0
Divorced Widowed Separated	Q1(least)	300	82.2	45	12.3	10	2.7	10	2.7	10	2.7	365	100.0
	Q2	435	80.6	60	11.1	30	5.6	10	1.9	10	1.9	540	100.0
	Q3	415	74.8	90	16.2	30	5.4	15	2.7	10	1.8	555	100.0
	Q4	540	69.7	145	18.7	50	6.5	25	3.2	15	1.9	775	100.0
	Q5(most)	515	67.8	140	18.4	75	9.9	25	3.3	10	1.3	760	100.0
Married	Q1(least)	2040	87.7	210	9.0	35	1.5	15	0.6	25	1.1	2325	100.0
	Q2	1750	82.0	260	12.2	85	4.0	15	0.7	25	1.2	2135	100.0
	Q3	1320	81.2	200	12.3	70	4.3	15	0.9	25	1.5	1625	100.0
	Q4	1445	75.7	310	16.2	95	5.0	25	1.3	35	1.8	1910	100.0
	Q5(most)	1065	74.0	225	15.6	95	6.6	35	2.4	20	1.4	1440	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 319: K-10 groups by NZDep by family structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Family Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	Q1(least)	1015	86.0	120	10.2	25	2.1	10	0.8	10	0.8	1180	100.0
	Q2	1055	82.7	145	11.4	55	4.3	10	0.8	10	0.8	1275	100.0
	Q3	795	80.7	125	12.7	40	4.1	10	1.0	20	2.0	985	100.0
	Q4	890	75.7	200	17.0	55	4.7	10	0.9	20	1.7	1175	100.0
	Q5(most)	575	72.8	135	17.1	50	6.3	20	2.5	10	1.3	790	100.0
Couple with children	Q1(least)	1580	85.6	200	10.8	35	1.9	15	0.8	20	1.1	1845	100.0
	Q2	1340	79.3	235	13.9	75	4.4	15	0.9	25	1.5	1690	100.0
	Q3	1040	78.2	175	13.2	80	6.0	25	1.9	10	0.8	1330	100.0
	Q4	1135	74.4	255	16.7	85	5.6	25	1.6	20	1.3	1525	100.0
	Q5(most)	975	70.9	250	18.2	95	6.9	30	2.2	25	1.8	1375	100.0
Sole parent	Q1(least)	135	75.0	30	16.7	15	8.3	10	5.6	.	.	180	100.0
	Q2	185	74.0	40	16.0	10	4.0	10	4.0	10	4.0	250	100.0
	Q3	205	74.5	45	16.4	15	5.5	10	3.6	10	3.6	275	100.0
	Q4	285	65.5	80	18.4	50	11.5	20	4.6	.	.	435	100.0
	Q5(most)	430	61.9	160	23.0	65	9.4	35	5.0	10	1.4	695	100.0
Not in a family nucleus	Q1(least)	305	84.7	40	11.1	10	2.8	10	2.8	10	2.8	360	100.0
	Q2	410	76.6	75	14.0	35	6.5	10	1.9	10	1.9	535	100.0
	Q3	455	76.5	95	16.0	30	5.0	15	2.5	10	1.7	595	100.0
	Q4	635	73.4	155	17.9	45	5.2	20	2.3	15	1.7	865	100.0
	Q5(most)	600	70.2	140	16.4	65	7.6	25	2.9	20	2.3	855	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>



**Table 320: K-10 groups by NZDep by household structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Household Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	Q1(least)	2715	85.4	340	10.7	75	2.4	25	0.8	30	0.9	3180	100.0
	Q2	2555	80.0	425	13.3	145	4.5	30	0.9	40	1.3	3195	100.0
	Q3	2010	78.8	340	13.3	135	5.3	35	1.4	30	1.2	2550	100.0
	Q4	2300	74.6	520	16.9	175	5.7	55	1.8	35	1.1	3085	100.0
	Q5(most)	1830	68.5	515	19.3	205	7.7	85	3.2	40	1.5	2670	100.0
Two or more families	Q1(least)	30	66.7	10	22.2	.	.	10	22.2	10	22.2	45	100.0
	Q2	55	91.7	10	16.7	10	16.7	.	.	10	16.7	60	100.0
	Q3	60	66.7	15	16.7	10	11.1	10	11.1	10	11.1	90	100.0
	Q4	65	56.5	30	26.1	15	13.0	10	8.7	10	8.7	115	100.0
	Q5(most)	215	72.9	50	16.9	20	6.8	10	3.4	10	3.4	295	100.0
Other multi-person household	Q1(least)	80	88.9	10	11.1	10	11.1	.	.	.	.	90	100.0
	Q2	90	72.0	20	16.0	10	8.0	.	.	.	.	125	100.0
	Q3	100	71.4	30	21.4	10	7.1	10	7.1	10	7.1	140	100.0
	Q4	175	76.1	40	17.4	15	6.5	10	4.3	10	4.3	230	100.0
	Q5(most)	170	72.3	45	19.1	15	6.4	10	4.3	10	4.3	235	100.0
One person household	Q1(least)	205	83.7	30	12.2	10	4.1	10	4.1	10	4.1	245	100.0
	Q2	285	78.1	45	12.3	20	5.5	10	2.7	10	2.7	365	100.0
	Q3	315	76.8	60	14.6	20	4.9	10	2.4	10	2.4	410	100.0
	Q4	410	71.9	100	17.5	30	5.3	15	2.6	15	2.6	570	100.0
	Q5(most)	365	70.2	75	14.4	45	8.7	20	3.8	10	1.9	520	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

### **11.5 The Association of NZDep with Perceived Stress**

Overall the proportion of respondents reporting that they felt in control most or all of the time increased with improving area deprivation. Similar trends were observed for the other perceived stress questions. Further tables of perceived stress by NZ Deprivation index by other demographic variables are not presented in this report, due to small cell counts.

**Table 321: Perceived stress by NZDep, overall**

NZDep Index (W1)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Q1(least)	40	1.1	80	2.2	280	7.9	750	21.0	2385	66.9	35	1.0	3565	100.0
Q2	55	1.5	110	2.9	335	8.9	785	21.0	2420	64.6	40	1.1	3745	100.0
Q3	55	1.7	100	3.1	305	9.6	660	20.7	2025	63.5	35	1.1	3190	100.0
Q4	65	1.6	175	4.4	455	11.4	840	21.0	2430	60.7	35	0.9	4005	100.0
Q5(most)	95	2.6	215	5.8	540	14.5	780	21.0	2045	55.0	40	1.1	3715	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1920</b>	<b>10.5</b>	<b>3815</b>	<b>20.9</b>	<b>11305</b>	<b>62.0</b>	<b>185</b>	<b>1.0</b>	<b>18220</b>	<b>100.0</b>
	Unable to overcome difficulties (W3)													
Q1(least)	15	0.4	35	1.0	180	5.0	560	15.7	2740	76.9	30	0.8	3565	100.0
Q2	25	0.7	50	1.3	250	6.7	600	16.0	2780	74.2	35	0.9	3745	100.0
Q3	20	0.6	45	1.4	265	8.3	535	16.8	2290	71.8	30	0.9	3190	100.0
Q4	25	0.6	80	2.0	340	8.5	715	17.9	2815	70.3	30	0.7	4005	100.0
Q5(most)	40	1.1	115	3.1	430	11.6	765	20.6	2325	62.6	40	1.1	3715	100.0
<b>Total</b>	<b>120</b>	<b>0.7</b>	<b>330</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3175</b>	<b>17.4</b>	<b>12950</b>	<b>71.1</b>	<b>170</b>	<b>0.9</b>	<b>18220</b>	<b>100.0</b>
	Confident in handling problems (W3)													
Q1(least)	1430	40.1	1680	47.1	235	6.6	115	3.2	80	2.2	35	1.0	3565	100.0
Q2	1430	38.2	1755	46.9	290	7.7	150	4.0	70	1.9	40	1.1	3745	100.0
Q3	1205	37.8	1480	46.4	280	8.8	130	4.1	55	1.7	35	1.1	3190	100.0
Q4	1445	36.1	1880	46.9	380	9.5	180	4.5	90	2.2	25	0.6	4005	100.0
Q5(most)	1210	32.6	1720	46.3	425	11.4	225	6.1	100	2.7	30	0.8	3715	100.0
<b>Total</b>	<b>6720</b>	<b>36.9</b>	<b>8520</b>	<b>46.8</b>	<b>1615</b>	<b>8.9</b>	<b>805</b>	<b>4.4</b>	<b>400</b>	<b>2.2</b>	<b>170</b>	<b>0.9</b>	<b>18220</b>	<b>100.0</b>
	Felt things were going your way (W3)													
Q1(least)	370	10.4	2185	61.3	750	21.0	160	4.5	55	1.5	35	1.0	3565	100.0
Q2	425	11.3	2100	56.1	870	23.2	245	6.5	60	1.6	45	1.2	3745	100.0
Q3	340	10.7	1715	53.8	785	24.6	220	6.9	90	2.8	35	1.1	3190	100.0
Q4	410	10.2	2105	52.6	990	24.7	330	8.2	125	3.1	40	1.0	4005	100.0
Q5(most)	385	10.4	1780	47.9	1040	28.0	330	8.9	130	3.5	55	1.5	3715	100.0
<b>Total</b>	<b>1940</b>	<b>10.6</b>	<b>9890</b>	<b>54.3</b>	<b>4425</b>	<b>24.3</b>	<b>1285</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18220</b>	<b>100.0</b>

## **11.6 The Association of NZDep with Chronic Diseases**

Overall, there were higher proportions of respondents reporting chronic diseases in the more deprived areas (NZDepQ4 and NZDepQ5). However, there were high proportions of respondents in NZDepQ1 reporting high cholesterol. Consequently, over 12% of respondents in the most deprived areas had more than two comorbid diseases. This relationship was consistent the older age groups (ages 45+ years), as well as for the non-Māori, non-Pacific, non-Asian ethnic group. Divorced, widowed or separated respondents had higher proportions reporting high blood pressure, high cholesterol, heart disease, and stroke. This group also had high proportions of respondents with more than two comorbid diseases.

**Table 322: Chronic diseases by NZDep, overall**

NZDep Index (W1)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NZDepQ1(least)	590	16.5	675	18.9	660	18.5	180	5.0	65	1.8	100	2.8	450	12.6	270	7.6	3565	100.0
NZDepQ2	710	19.0	780	20.8	660	17.6	225	6.0	75	2.0	125	3.3	500	13.4	340	9.1	3745	100.0
NZDepQ3	590	18.5	700	21.9	570	17.9	205	6.4	80	2.5	135	4.2	435	13.6	290	9.1	3190	100.0
NZDepQ4	765	19.1	945	23.6	665	16.6	285	7.1	105	2.6	210	5.2	560	14.0	395	9.9	4005	100.0
NZDepQ5(most)	770	20.7	890	24.0	590	15.9	265	7.1	125	3.4	230	6.2	490	13.2	380	10.2	3715	100.0
<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 323: Number of comorbid disease by NZDep, overall**

NZDep Index (W1)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NZDepQ1(least)	1695	47.5	1570	44.0	275	7.7	20	0.6	3565	100.0
NZDepQ2	1680	44.9	1720	45.9	335	8.9	10	0.3	3745	100.0
NZDepQ3	1435	45.0	1440	45.1	315	9.9	10	0.3	3190	100.0
NZDepQ4	1745	43.6	1830	45.7	420	10.5	10	0.2	4005	100.0
NZDepQ5(most)	1690	45.5	1550	41.7	460	12.4	10	0.3	3715	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 324: Chronic diseases by NZDep by age and sex**

		Chronic Diseases (W3)																		
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total		
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Age (W1)	NZDep Index (W1)																			
	0-14	Q1(least)	30	25.0	.	.	.	.	10	8.3	.	.	10	8.3	15	12.5	.	.	120	100.0
		Q2	40	32.0	10	8.0	.	.	10	8.0	.	.	.	.	10	8.0	.	.	125	100.0
		Q3	20	22.2	10	11.1	.	.	.	.	.	.	10	11.1	10	11.1	10	11.1	90	100.0
		Q4	25	20.8	10	8.3	10	8.3	.	.	.	.	.	.	10	8.3	10	8.3	120	100.0
	Q5(most)	30	22.2	10	7.4	.	.	.	.	.	.	.	.	10	7.4	10	7.4	135	100.0	
15-24	Q1(least)	120	27.6	10	2.3	10	2.3	10	2.3	10	2.3	.	.	40	9.2	35	8.0	435	100.0	

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Age (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	Q2	120	25.8	15	3.2	10	2.2	10	2.2	.	.	10	2.2	55	11.8	35	7.5	465	100.0
	Q3	125	28.1	10	2.2	10	2.2	.	.	10	2.2	10	2.2	45	10.1	20	4.5	445	100.0
	Q4	155	29.2	25	4.7	15	2.8	10	1.9	.	.	10	1.9	60	11.3	45	8.5	530	100.0
	Q5(most)	160	25.2	35	5.5	15	2.4	10	1.6	10	1.6	10	1.6	65	10.2	50	7.9	635	100.0
25-34	Q1(least)	65	16.9	25	6.5	25	6.5	10	2.6	10	2.6	10	2.6	45	11.7	25	6.5	385	100.0
	Q2	135	24.3	50	9.0	35	6.3	10	1.8	10	1.8	10	1.8	85	15.3	60	10.8	555	100.0
	Q3	115	23.2	50	10.1	35	7.1	10	2.0	10	2.0	10	2.0	80	16.2	65	13.1	495	100.0
	Q4	170	23.3	65	8.9	40	5.5	10	1.4	10	1.4	10	1.4	115	15.8	75	10.3	730	100.0
	Q5(most)	150	22.6	75	11.3	50	7.5	10	1.5	10	1.5	10	1.5	100	15.0	70	10.5	665	100.0
35-44	Q1(least)	135	16.9	80	10.0	100	12.5	10	1.3	10	1.3	10	1.3	130	16.3	75	9.4	800	100.0
	Q2	155	18.9	115	14.0	115	14.0	10	1.2	10	1.2	10	1.2	125	15.2	105	12.8	820	100.0
	Q3	120	18.6	90	14.0	75	11.6	10	1.6	10	1.6	15	2.3	100	15.5	65	10.1	645	100.0
	Q4	150	18.4	115	14.1	110	13.5	15	1.8	10	1.2	25	3.1	130	16.0	95	11.7	815	100.0
	Q5(most)	125	18.0	115	16.5	75	10.8	25	3.6	20	2.9	30	4.3	100	14.4	80	11.5	695	100.0
45-54	Q1(least)	100	12.7	155	19.7	180	22.9	20	2.5	10	1.3	20	2.5	95	12.1	65	8.3	785	100.0
	Q2	110	15.8	145	20.9	155	22.3	20	2.9	10	1.4	20	2.9	100	14.4	65	9.4	695	100.0
	Q3	85	15.5	115	20.9	135	24.5	20	3.6	10	1.8	30	5.5	75	13.6	55	10.0	550	100.0
	Q4	95	16.0	165	27.7	120	20.2	25	4.2	10	1.7	35	5.9	105	17.6	75	12.6	595	100.0
	Q5(most)	130	21.3	185	30.3	150	24.6	45	7.4	15	2.5	55	9.0	110	18.0	80	13.1	610	100.0
55-64	Q1(least)	80	14.0	180	31.6	175	30.7	50	8.8	10	1.8	30	5.3	75	13.2	50	8.8	570	100.0
	Q2	85	16.5	170	33.0	170	33.0	55	10.7	10	1.9	40	7.8	55	10.7	45	8.7	515	100.0
	Q3	55	12.8	165	38.4	135	31.4	40	9.3	10	2.3	25	5.8	55	12.8	45	10.5	430	100.0
	Q4	85	17.0	195	39.0	155	31.0	65	13.0	25	5.0	50	10.0	75	15.0	50	10.0	500	100.0
	Q5(most)	100	20.4	215	43.9	155	31.6	65	13.3	20	4.1	70	14.3	55	11.2	55	11.2	490	100.0
65+	Q1(least)	60	12.8	225	47.9	165	35.1	95	20.2	40	8.5	40	8.5	45	9.6	20	4.3	470	100.0
	Q2	75	13.0	285	49.6	180	31.3	135	23.5	55	9.6	55	9.6	75	13.0	30	5.2	575	100.0
	Q3	75	14.0	270	50.5	195	36.4	135	25.2	55	10.3	55	10.3	65	12.1	40	7.5	535	100.0
	Q4	90	12.6	370	51.7	225	31.5	170	23.8	65	9.1	90	12.6	65	9.1	50	7.0	715	100.0
	Q5(most)	80	16.2	260	52.5	145	29.3	115	23.2	70	14.1	55	11.1	50	10.1	40	8.1	495	100.0
Male	Q1(least)	260	15.2	330	19.4	370	21.7	115	6.7	40	2.3	55	3.2	125	7.3	80	4.7	1705	100.0
	Q2	305	17.4	370	21.1	350	19.9	125	7.1	30	1.7	65	3.7	135	7.7	120	6.8	1755	100.0
	Q3	250	16.7	295	19.7	300	20.1	110	7.4	35	2.3	65	4.3	115	7.7	80	5.4	1495	100.0
	Q4	300	16.4	410	22.4	325	17.8	155	8.5	50	2.7	105	5.7	140	7.7	115	6.3	1830	100.0

		<b>Chronic Diseases (W3)</b>																	
		<b>Asthma</b>		<b>High BP</b>		<b>High Chol</b>		<b>Heart Dis</b>		<b>Stroke</b>		<b>Diabetes</b>		<b>Migraine</b>		<b>Depr-Schiz</b>		<b>Total</b>	
<b>Age (W1)</b>	<b>NZDep Index (W1)</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
	Q5(most)	275	17.2	355	22.2	275	17.2	135	8.4	65	4.1	110	6.9	125	7.8	115	7.2	1600	100.0
Female	Q1(least)	330	17.7	350	18.8	290	15.6	65	3.5	25	1.3	45	2.4	330	17.7	195	10.5	1860	100.0
	Q2	405	20.3	410	20.6	310	15.5	110	5.5	40	2.0	60	3.0	365	18.3	220	11.0	1995	100.0
	Q3	340	20.1	400	23.6	275	16.2	95	5.6	50	2.9	70	4.1	315	18.6	215	12.7	1695	100.0
	Q4	465	21.3	535	24.5	335	15.4	130	6.0	55	2.5	105	4.8	425	19.5	275	12.6	2180	100.0
	Q5(most)	495	23.4	540	25.5	315	14.9	125	5.9	60	2.8	120	5.7	360	17.0	265	12.5	2115	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 325: Number of comorbid disease by NZDep by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
0-14	Q1(least)	75	62.5	40	33.3	.	.	10	8.3	120	100.0
	Q2	85	68.0	40	32.0	10	8.0	.	.	125	100.0
	Q3	60	66.7	30	33.3	.	.	.	.	90	100.0
	Q4	90	75.0	30	25.0	10	8.3	.	.	120	100.0
	Q5(most)	95	70.4	35	25.9	10	7.4	10	7.4	135	100.0
15-24	Q1(least)	260	59.8	170	39.1	10	2.3	10	2.3	435	100.0
	Q2	275	59.1	185	39.8	10	2.2	.	.	465	100.0
	Q3	285	64.0	160	36.0	10	2.2	.	.	445	100.0
	Q4	305	57.5	205	38.7	15	2.8	.	.	530	100.0
	Q5(most)	385	60.6	225	35.4	15	2.4	10	1.6	635	100.0
25-34	Q1(least)	235	61.0	125	32.5	15	3.9	10	2.6	385	100.0
	Q2	290	52.3	235	42.3	25	4.5	10	1.8	555	100.0
	Q3	250	50.5	215	43.4	25	5.1	.	.	495	100.0
	Q4	405	55.5	285	39.0	35	4.8	10	1.4	730	100.0
	Q5(most)	360	54.1	265	39.8	40	6.0	10	1.5	665	100.0
35-44	Q1(least)	430	53.8	330	41.3	35	4.4	10	1.3	800	100.0
	Q2	410	50.0	360	43.9	45	5.5	10	1.2	820	100.0
	Q3	345	53.5	255	39.5	40	6.2	10	1.6	645	100.0
	Q4	400	49.1	360	44.2	50	6.1	10	1.2	815	100.0
	Q5(most)	380	54.7	250	36.0	65	9.4	10	1.4	695	100.0
45-54	Q1(least)	365	46.5	360	45.9	55	7.0	10	1.3	785	100.0
	Q2	295	42.4	355	51.1	40	5.8	10	1.4	695	100.0
	Q3	215	39.1	290	52.7	40	7.3	.	.	550	100.0
	Q4	225	37.8	310	52.1	60	10.1	.	.	595	100.0
	Q5(most)	225	36.9	260	42.6	120	19.7	10	1.6	610	100.0
55-64	Q1(least)	195	34.2	305	53.5	65	11.4	10	1.8	570	100.0
	Q2	170	33.0	260	50.5	80	15.5	.	.	515	100.0
	Q3	160	37.2	200	46.5	75	17.4	10	2.3	430	100.0
	Q4	160	32.0	250	50.0	95	19.0	10	2.0	500	100.0
	Q5(most)	135	27.6	255	52.0	105	21.4	10	2.0	490	100.0
65+	Q1(least)	130	27.7	240	51.1	100	21.3	10	2.1	470	100.0

		<b>Comorbidity Index (W3)</b>									
		<b>No comorbid</b>		<b>1-2 comorbid</b>		<b>&gt;2 comorbid</b>		<b>NA</b>		<b>Total</b>	
<b>Age (W1)</b>	<b>NZDep Index (W1)</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
	Q2	145	25.2	285	49.6	135	23.5	10	1.7	575	100.0
	Q3	110	20.6	290	54.2	130	24.3	10	1.9	535	100.0
	Q4	160	22.4	390	54.5	165	23.1	10	1.4	715	100.0
	Q5(most)	100	20.2	270	54.5	115	23.2	10	2.0	495	100.0
Male	Q1(least)	840	49.3	725	42.5	120	7.0	15	0.9	1705	100.0
	Q2	825	47.0	785	44.7	140	8.0	10	0.6	1755	100.0
	Q3	745	49.8	625	41.8	120	8.0	10	0.7	1495	100.0
	Q4	875	47.8	785	42.9	165	9.0	10	0.5	1830	100.0
	Q5(most)	790	49.4	630	39.4	175	10.9	10	0.6	1600	100.0
Female	Q1(least)	850	45.7	840	45.2	155	8.3	10	0.5	1860	100.0
	Q2	855	42.9	930	46.6	195	9.8	10	0.5	1995	100.0
	Q3	690	40.7	810	47.8	190	11.2	10	0.6	1695	100.0
	Q4	870	39.9	1040	47.7	260	11.9	10	0.5	2180	100.0
	Q5(most)	895	42.3	920	43.5	290	13.7	10	0.5	2115	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>



**Table 326: Chronic diseases by NZDep by prioritised ethnicity**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Ethnicity (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	Q1(least)	545	16.6	645	19.7	630	19.2	170	5.2	60	1.8	90	2.7	430	13.1	250	7.6	3280	100.0
	Q2	625	18.9	720	21.8	610	18.4	215	6.5	70	2.1	110	3.3	450	13.6	310	9.4	3310	100.0
	Q3	480	18.2	625	23.7	500	18.9	190	7.2	80	3.0	115	4.4	380	14.4	265	10.0	2640	100.0
	Q4	580	18.4	780	24.7	560	17.7	255	8.1	100	3.2	160	5.1	470	14.9	330	10.5	3155	100.0
	Q5(most)	455	22.0	565	27.3	385	18.6	175	8.5	90	4.3	100	4.8	315	15.2	295	14.3	2070	100.0
Māori	Q1(least)	35	25.9	25	18.5	15	11.1	10	7.4	10	7.4	10	7.4	15	11.1	10	7.4	135	100.0
	Q2	55	23.4	35	14.9	25	10.6	10	4.3	10	4.3	10	4.3	40	17.0	20	8.5	235	100.0
	Q3	70	26.9	45	17.3	40	15.4	10	3.8	10	3.8	10	3.8	35	13.5	20	7.7	260	100.0
	Q4	120	26.4	105	23.1	60	13.2	20	4.4	10	2.2	25	5.5	60	13.2	45	9.9	455	100.0
	Q5(most)	250	26.0	220	22.9	140	14.6	55	5.7	30	3.1	70	7.3	135	14.1	60	6.3	960	100.0
Pacific	Q1(least)	10	66.7	10	66.7	10	66.7	.	.	.	.	10	66.7	.	.	.	.	15	100.0
	Q2	10	22.2	10	22.2	10	22.2	10	22.2	10	22.2	10	22.2	10	22.2	10	22.2	45	100.0
	Q3	15	16.7	10	11.1	10	11.1	10	11.1	10	11.1	10	11.1	10	11.1	10	11.1	90	100.0
	Q4	30	18.2	35	21.2	25	15.2	15	9.1	10	6.1	20	12.1	20	12.1	10	6.1	165	100.0
	Q5(most)	55	11.2	85	17.3	45	9.2	25	5.1	10	2.0	45	9.2	25	5.1	20	4.1	490	100.0
Asian	Q1(least)	15	11.1	10	7.4	15	11.1	10	7.4	.	.	10	7.4	10	7.4	10	7.4	135	100.0
	Q2	20	12.5	15	9.4	20	12.5	10	6.3	.	.	10	6.3	10	6.3	10	6.3	160	100.0
	Q3	25	12.5	20	10.0	15	7.5	10	5.0	10	5.0	10	5.0	10	5.0	10	5.0	200	100.0
	Q4	30	13.6	25	11.4	20	9.1	10	4.5	.	.	10	4.5	15	6.8	10	4.5	220	100.0
	Q5(most)	15	7.7	20	10.3	25	12.8	10	5.1	10	5.1	15	7.7	10	5.1	10	5.1	195	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 327: Number of comorbid disease by NZDep by prioritised ethnicity**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Ethnicity (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	Q1(least)	1530	46.6	1460	44.5	265	8.1	20	0.6	3280	100.0
	Q2	1450	43.8	1540	46.5	310	9.4	10	0.3	3310	100.0
	Q3	1120	42.4	1230	46.6	280	10.6	10	0.4	2640	100.0
	Q4	1295	41.0	1505	47.7	355	11.3	10	0.3	3155	100.0
	Q5(most)	805	38.9	970	46.9	300	14.5	10	0.5	2070	100.0
Māori	Q1(least)	65	48.1	65	48.1	10	7.4	.	.	135	100.0
	Q2	110	46.8	115	48.9	15	6.4	.	.	235	100.0
	Q3	115	44.2	120	46.2	15	5.8	.	.	260	100.0
	Q4	210	46.2	200	44.0	45	9.9	10	2.2	455	100.0
	Q5(most)	440	45.8	400	41.7	120	12.5	10	1.0	960	100.0
Pacific	Q1(least)	10	66.7	10	66.7	10	66.7	.	.	15	100.0
	Q2	20	44.4	20	44.4	10	22.2	.	.	45	100.0
	Q3	55	61.1	35	38.9	10	11.1	.	.	90	100.0
	Q4	85	51.5	65	39.4	20	12.1	10	6.1	165	100.0
	Q5(most)	310	63.3	135	27.6	35	7.1	10	2.0	490	100.0
Asian	Q1(least)	90	66.7	40	29.6	10	7.4	.	.	135	100.0
	Q2	105	65.6	45	28.1	10	6.3	10	6.3	160	100.0
	Q3	140	70.0	55	27.5	10	5.0	.	.	200	100.0
	Q4	155	70.5	60	27.3	10	4.5	10	4.5	220	100.0
	Q5(most)	135	69.2	50	25.6	15	7.7	.	.	195	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 328: Chronic diseases by NZDep by legal marital status**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Marital Status (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	Q1(least)	30	26.1	.	.	.	.	10	8.7	.	.	10	8.7	10	8.7	.	.	115	100.0
	Q2	40	32.0	10	8.0	.	.	10	8.0	.	.	.	.	10	8.0	.	.	125	100.0
	Q3	20	21.1	10	10.5	.	.	.	.	.	.	10	10.5	10	10.5	10	10.5	95	100.0
	Q4	25	20.8	10	8.3	10	8.3	.	.	.	.	.	.	10	8.3	10	8.3	120	100.0
	Q5(most)	30	22.2	10	7.4	10	7.4	.	.	.	.	.	.	10	7.4	10	7.4	135	100.0
Never Married	Q1(least)	170	22.5	55	7.3	60	7.9	10	1.3	10	1.3	10	1.3	80	10.6	70	9.3	755	100.0
	Q2	230	24.3	70	7.4	65	6.9	10	1.1	10	1.1	10	1.1	120	12.7	95	10.1	945	100.0
	Q3	230	25.3	85	9.3	50	5.5	10	1.1	10	1.1	10	1.1	125	13.7	95	10.4	910	100.0
	Q4	280	23.4	120	10.0	80	6.7	25	2.1	10	0.8	25	2.1	145	12.1	115	9.6	1195	100.0
	Q5(most)	330	24.0	185	13.5	100	7.3	25	1.8	20	1.5	40	2.9	170	12.4	150	10.9	1375	100.0
Divorced Widowed Separated	Q1(least)	50	13.9	105	29.2	90	25.0	30	8.3	10	2.8	10	2.8	50	13.9	35	9.7	360	100.0
	Q2	95	17.6	160	29.6	125	23.1	55	10.2	20	3.7	20	3.7	90	16.7	65	12.0	540	100.0
	Q3	95	17.1	195	35.1	145	26.1	75	13.5	30	5.4	35	6.3	95	17.1	75	13.5	555	100.0
	Q4	135	17.4	285	36.8	175	22.6	105	13.5	45	5.8	55	7.1	125	16.1	100	12.9	775	100.0
	Q5(most)	185	24.2	305	39.9	190	24.8	90	11.8	45	5.9	65	8.5	130	17.0	115	15.0	765	100.0
Married	Q1(least)	335	14.4	515	22.2	510	21.9	140	6.0	45	1.9	80	3.4	305	13.1	165	7.1	2325	100.0
	Q2	345	16.2	550	25.8	475	22.2	165	7.7	50	2.3	90	4.2	285	13.3	175	8.2	2135	100.0
	Q3	245	15.0	420	25.8	370	22.7	130	8.0	45	2.8	90	5.5	205	12.6	120	7.4	1630	100.0
	Q4	325	17.0	535	28.0	410	21.5	160	8.4	55	2.9	130	6.8	285	14.9	165	8.6	1910	100.0
	Q5(most)	230	15.9	395	27.3	305	21.1	145	10.0	65	4.5	120	8.3	180	12.5	110	7.6	1445	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 329: Number of comorbid disease by NZDep by legal marital status**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Marital Status (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	Q1(least)	75	65.2	40	34.8	.	.	10	8.7	115	100.0
	Q2	85	68.0	40	32.0	10	8.0	.	.	125	100.0
	Q3	60	63.2	30	31.6	.	.	.	.	95	100.0
	Q4	90	75.0	30	25.0	10	8.3	.	.	120	100.0
	Q5(most)	95	70.4	40	29.6	10	7.4	10	7.4	135	100.0
Never Married	Q1(least)	420	55.6	305	40.4	30	4.0	10	1.3	755	100.0
	Q2	510	54.0	395	41.8	40	4.2	10	1.1	945	100.0
	Q3	500	54.9	375	41.2	40	4.4	.	.	910	100.0
	Q4	650	54.4	490	41.0	50	4.2	10	0.8	1195	100.0
	Q5(most)	750	54.5	525	38.2	100	7.3	10	0.7	1375	100.0
Divorced Widowed Separated	Q1(least)	140	38.9	170	47.2	45	12.5	10	2.8	360	100.0
	Q2	180	33.3	290	53.7	70	13.0	10	1.9	540	100.0
	Q3	180	32.4	275	49.5	95	17.1	10	1.8	555	100.0
	Q4	245	31.6	405	52.3	125	16.1	10	1.3	775	100.0
	Q5(most)	220	28.8	375	49.0	165	21.6	10	1.3	765	100.0
Married	Q1(least)	1055	45.4	1055	45.4	200	8.6	15	0.6	2325	100.0
	Q2	910	42.6	995	46.6	230	10.8	10	0.5	2135	100.0
	Q3	685	42.0	765	46.9	170	10.4	10	0.6	1630	100.0
	Q4	765	40.1	900	47.1	240	12.6	10	0.5	1910	100.0
	Q5(most)	630	43.6	615	42.6	195	13.5	10	0.7	1445	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 330: Chronic diseases by NZDep by family structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Family Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	Q1(least)	170	14.4	360	30.5	320	27.1	110	9.3	35	3.0	60	5.1	145	12.3	90	7.6	1180	100.0
	Q2	235	18.4	390	30.6	320	25.1	140	11.0	45	3.5	70	5.5	170	13.3	95	7.5	1275	100.0
	Q3	160	16.2	305	30.8	250	25.3	110	11.1	35	3.5	55	5.6	135	13.6	80	8.1	990	100.0
	Q4	195	16.5	400	33.9	285	24.2	130	11.0	45	3.8	90	7.6	150	12.7	90	7.6	1180	100.0
	Q5(most)	145	18.4	260	32.9	200	25.3	110	13.9	50	6.3	70	8.9	85	10.8	75	9.5	790	100.0
Couple with children	Q1(least)	320	17.3	200	10.8	240	13.0	30	1.6	10	0.5	30	1.6	230	12.5	120	6.5	1845	100.0
	Q2	320	18.9	215	12.7	200	11.8	30	1.8	10	0.6	30	1.8	230	13.6	150	8.9	1690	100.0
	Q3	250	18.8	170	12.8	170	12.8	25	1.9	10	0.8	45	3.4	165	12.4	105	7.9	1330	100.0
	Q4	295	19.3	210	13.8	175	11.5	40	2.6	10	0.7	45	3.0	215	14.1	135	8.9	1525	100.0
	Q5(most)	255	18.6	235	17.2	155	11.3	55	4.0	25	1.8	75	5.5	160	11.7	95	6.9	1370	100.0
Sole parent	Q1(least)	45	25.7	20	11.4	15	8.6	10	5.7	10	5.7	10	5.7	30	17.1	30	17.1	175	100.0
	Q2	55	22.4	35	14.3	35	14.3	10	4.1	10	4.1	10	4.1	25	10.2	30	12.2	245	100.0
	Q3	65	23.6	40	14.5	20	7.3	10	3.6	10	3.6	10	3.6	55	20.0	30	10.9	275	100.0
	Q4	95	21.8	65	14.9	45	10.3	20	4.6	10	2.3	10	2.3	85	19.5	65	14.9	435	100.0
	Q5(most)	170	24.3	135	19.3	75	10.7	35	5.0	20	2.9	35	5.0	120	17.1	85	12.1	700	100.0
Not in a family nucleus	Q1(least)	55	15.1	100	27.4	85	23.3	30	8.2	15	4.1	10	2.7	40	11.0	30	8.2	365	100.0
	Q2	95	17.9	150	28.3	110	20.8	50	9.4	20	3.8	25	4.7	75	14.2	55	10.4	530	100.0
	Q3	110	18.5	185	31.1	130	21.8	60	10.1	30	5.0	30	5.0	75	12.6	75	12.6	595	100.0
	Q4	175	20.2	270	31.2	155	17.9	90	10.4	40	4.6	60	6.9	110	12.7	100	11.6	865	100.0
	Q5(most)	200	23.5	265	31.2	160	18.8	65	7.6	40	4.7	55	6.5	120	14.1	130	15.3	850	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1165</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 331: Number of comorbid disease by NZDep by family structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Family Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
Couple only	Q1(least)	455	38.6	565	47.9	150	12.7	10	0.8	1180	100.0
	Q2	465	36.5	635	49.8	175	13.7	10	0.8	1275	100.0
	Q3	370	37.4	480	48.5	130	13.1	10	1.0	990	100.0
	Q4	425	36.0	575	48.7	175	14.8	10	0.8	1180	100.0
	Q5(most)	285	36.1	375	47.5	130	16.5	10	1.3	790	100.0
Couple with children	Q1(least)	1010	54.7	755	40.9	65	3.5	15	0.8	1845	100.0
	Q2	890	52.7	715	42.3	80	4.7	10	0.6	1690	100.0
	Q3	710	53.4	550	41.4	70	5.3	10	0.8	1330	100.0
	Q4	795	52.1	630	41.3	90	5.9	10	0.7	1525	100.0
	Q5(most)	760	55.5	490	35.8	115	8.4	10	0.7	1370	100.0
Sole parent	Q1(least)	80	45.7	85	48.6	15	8.6	.	.	175	100.0
	Q2	120	49.0	110	44.9	15	6.1	10	4.1	245	100.0
	Q3	135	49.1	125	45.5	20	7.3	.	.	275	100.0
	Q4	200	46.0	195	44.8	40	9.2	.	.	435	100.0
	Q5(most)	320	45.7	295	42.1	80	11.4	10	1.4	700	100.0
Not in a family nucleus	Q1(least)	155	42.5	165	45.2	45	12.3	.	.	365	100.0
	Q2	215	40.6	255	48.1	65	12.3	10	1.9	530	100.0
	Q3	220	37.0	285	47.9	90	15.1	10	1.7	595	100.0
	Q4	325	37.6	430	49.7	115	13.3	10	1.2	865	100.0
	Q5(most)	315	37.1	400	47.1	140	16.5	10	1.2	850	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 332: Chronic diseases by NZDep by household structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Household Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	Q1(least)	535	16.8	570	17.9	575	18.1	150	4.7	50	1.6	90	2.8	405	12.7	235	7.4	3180	100.0
	Q2	605	18.9	620	19.4	545	17.1	180	5.6	60	1.9	100	3.1	425	13.3	285	8.9	3195	100.0
	Q3	475	18.6	515	20.2	430	16.9	145	5.7	50	2.0	105	4.1	350	13.7	215	8.4	2550	100.0
	Q4	580	18.8	660	21.4	495	16.0	195	6.3	60	1.9	140	4.5	440	14.3	290	9.4	3085	100.0
	Q5(most)	545	20.4	600	22.5	420	15.7	195	7.3	90	3.4	160	6.0	355	13.3	245	9.2	2670	100.0
Two or more families	Q1(least)	10	22.2	10	22.2	10	22.2	10	22.2	.	.	10	22.2	10	22.2	10	22.2	45	100.0
	Q2	10	15.4	20	30.8	15	23.1	10	15.4	.	.	10	15.4	10	15.4	10	15.4	65	100.0
	Q3	20	22.2	15	16.7	15	16.7	10	11.1	10	11.1	10	11.1	10	11.1	10	11.1	90	100.0
	Q4	25	21.7	35	30.4	30	26.1	10	8.7	10	8.7	10	8.7	20	17.4	10	8.7	115	100.0
	Q5(most)	50	16.9	50	16.9	30	10.2	10	3.4	10	3.4	20	6.8	25	8.5	15	5.1	295	100.0
Other multi-person household	Q1(least)	15	15.8	10	10.5	10	10.5	10	10.5	10	10.5	10	10.5	10	10.5	10	10.5	95	100.0
	Q2	30	23.1	20	15.4	15	11.5	10	7.7	.	.	10	7.7	25	19.2	15	11.5	130	100.0
	Q3	25	18.5	15	11.1	10	7.4	10	7.4	10	7.4	10	7.4	15	11.1	15	11.1	135	100.0
	Q4	55	23.9	20	8.7	15	6.5	10	4.3	10	4.3	10	4.3	30	13.0	25	10.9	230	100.0
	Q5(most)	70	30.4	35	15.2	25	10.9	10	4.3	10	4.3	10	4.3	40	17.4	30	13.0	230	100.0
One person household	Q1(least)	35	14.3	90	36.7	75	30.6	25	10.2	10	4.1	10	4.1	35	14.3	20	8.2	245	100.0
	Q2	55	15.1	120	32.9	85	23.3	40	11.0	20	5.5	20	5.5	45	12.3	35	9.6	365	100.0
	Q3	75	18.5	160	39.5	120	29.6	60	14.8	25	6.2	30	7.4	60	14.8	55	13.6	405	100.0
	Q4	105	18.4	230	40.4	130	22.8	80	14.0	40	7.0	60	10.5	75	13.2	70	12.3	570	100.0
	Q5(most)	110	21.2	200	38.5	115	22.1	55	10.6	30	5.8	45	8.7	65	12.5	90	17.3	520	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3140</b>	<b>17.2</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2430</b>	<b>13.3</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 333: Number of comorbid disease by NZDep by household structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Household Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
One Family	Q1(least)	1530	48.1	1395	43.9	235	7.4	20	0.6	3180	100.0
	Q2	1465	45.9	1455	45.5	265	8.3	10	0.3	3195	100.0
	Q3	1190	46.7	1135	44.5	220	8.6	10	0.4	2550	100.0
	Q4	1400	45.4	1385	44.9	300	9.7	10	0.3	3085	100.0
	Q5(most)	1245	46.6	1095	41.0	320	12.0	10	0.4	2670	100.0
Two or more families	Q1(least)	20	44.4	15	33.3	10	22.2	10	22.2	45	100.0
	Q2	20	30.8	30	46.2	10	15.4	.	.	65	100.0
	Q3	55	61.1	35	38.9	10	11.1	.	.	90	100.0
	Q4	50	43.5	45	39.1	20	17.4	.	.	115	100.0
	Q5(most)	175	59.3	100	33.9	15	5.1	10	3.4	295	100.0
Other multi-person household	Q1(least)	60	63.2	30	31.6	10	10.5	.	.	95	100.0
	Q2	60	46.2	60	46.2	10	7.7	.	.	130	100.0
	Q3	75	55.6	60	44.4	10	7.4	.	.	135	100.0
	Q4	125	54.3	100	43.5	10	4.3	.	.	230	100.0
	Q5(most)	105	45.7	110	47.8	20	8.7	.	.	230	100.0
One person household	Q1(least)	85	34.7	120	49.0	40	16.3	.	.	245	100.0
	Q2	135	37.0	175	47.9	55	15.1	10	2.7	365	100.0
	Q3	115	28.4	210	51.9	85	21.0	10	2.5	405	100.0
	Q4	170	29.8	300	52.6	100	17.5	10	1.8	570	100.0
	Q5(most)	165	31.7	245	47.1	105	20.2	.	.	520	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>



## 11.7 The Association of NZDep with Smoking Status

Overall, there were higher proportions of current smokers living in the most deprived areas, with high proportions of never smokers in the least deprived areas. This linear increase in the proportion of current smokers with increasing area deprivation was consistent across all age groups and by sex and marital status. The highest proportion of current smokers were in the 15-54 age groups at Wave 1 and in the most deprived areas. There was no sex differential in the proportion of current smokers in the more deprived areas. The rates of current smoking in the Māori ethnic group were highest across all area levels of deprivation, with 45% of Māori in the most deprived area being current smokers.

**Table 334: Smoking status by NZDep, overall**

NZDep Index (W1)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	P	N	P	N	P	N	P	N	P
NZDepQ1(least)	2250	63.1	915	25.7	375	10.5	25	0.7	3565	100.0
NZDepQ2	2155	57.5	1005	26.8	570	15.2	15	0.4	3745	100.0
NZDepQ3	1730	54.2	830	26.0	620	19.4	10	0.3	3190	100.0
NZDepQ4	2030	50.7	1045	26.1	925	23.1	10	0.2	4005	100.0
NZDepQ5(most)	1635	44.0	855	23.0	1210	32.6	20	0.5	3715	100.0
<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 335: Smoking status by NZDep by age and sex**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Age (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
0-14	Q1(least)	110	91.7	10	8.3	10	8.3	10	8.3	120	100.0
	Q2	110	88.0	10	8.0	10	8.0	.	.	125	100.0
	Q3	80	88.9	10	11.1	15	16.7	.	.	90	100.0
	Q4	105	87.5	10	8.3	15	12.5	.	.	120	100.0
	Q5(most)	100	76.9	10	7.7	30	23.1	10	7.7	130	100.0
15-24	Q1(least)	330	75.0	35	8.0	70	15.9	10	2.3	440	100.0
	Q2	320	68.8	45	9.7	100	21.5	.	.	465	100.0
	Q3	305	67.8	35	7.8	105	23.3	.	.	450	100.0
	Q4	335	63.2	55	10.4	135	25.5	.	.	530	100.0
	Q5(most)	340	54.0	60	9.5	225	35.7	10	1.6	630	100.0
25-34	Q1(least)	230	60.5	75	19.7	75	19.7	10	2.6	380	100.0
	Q2	315	56.8	130	23.4	105	18.9	10	1.8	555	100.0
	Q3	280	57.1	95	19.4	120	24.5	.	.	490	100.0
	Q4	360	49.3	145	19.9	220	30.1	10	1.4	730	100.0
	Q5(most)	290	43.6	105	15.8	265	39.8	10	1.5	665	100.0
35-44	Q1(least)	510	63.8	185	23.1	105	13.1	10	1.3	800	100.0
	Q2	460	56.1	215	26.2	140	17.1	10	1.2	820	100.0
	Q3	350	54.7	155	24.2	140	21.9	10	1.6	640	100.0
	Q4	395	48.5	180	22.1	235	28.8	10	1.2	815	100.0
	Q5(most)	275	39.9	145	21.0	270	39.1	10	1.4	690	100.0
45-54	Q1(least)	475	60.5	240	30.6	65	8.3	10	1.3	785	100.0
	Q2	385	55.4	210	30.2	105	15.1	10	1.4	695	100.0
	Q3	265	48.2	160	29.1	130	23.6	.	.	550	100.0
	Q4	295	49.6	160	26.9	140	23.5	10	1.7	595	100.0
	Q5(most)	230	37.7	155	25.4	225	36.9	10	1.6	610	100.0
55-64	Q1(least)	325	57.0	200	35.1	35	6.1	10	1.8	570	100.0
	Q2	260	50.5	170	33.0	80	15.5	.	.	515	100.0
	Q3	210	48.3	140	32.2	80	18.4	10	2.3	435	100.0
	Q4	205	41.0	185	37.0	115	23.0	.	.	500	100.0
	Q5(most)	170	34.7	185	37.8	135	27.6	10	2.0	490	100.0
65+	Q1(least)	265	56.4	185	39.4	25	5.3	10	2.1	470	100.0
	Q2	305	53.0	230	40.0	30	5.2	10	1.7	575	100.0
	Q3	250	46.7	245	45.8	35	6.5	10	1.9	535	100.0
	Q4	335	47.2	315	44.4	55	7.7	10	1.4	710	100.0
	Q5(most)	225	45.5	210	42.4	60	12.1	10	2.0	495	100.0
Male	Q1(least)	1005	59.1	485	28.5	200	11.8	15	0.9	1700	100.0
	Q2	935	53.3	505	28.8	305	17.4	10	0.6	1755	100.0
	Q3	775	51.8	410	27.4	310	20.7	10	0.7	1495	100.0
	Q4	870	47.7	535	29.3	420	23.0	10	0.5	1825	100.0
	Q5(most)	680	42.4	420	26.2	500	31.2	10	0.6	1605	100.0
Female	Q1(least)	1245	66.9	435	23.4	175	9.4	10	0.5	1860	100.0
	Q2	1220	61.2	500	25.1	265	13.3	10	0.5	1995	100.0
	Q3	960	56.6	425	25.1	310	18.3	10	0.6	1695	100.0
	Q4	1160	53.2	510	23.4	500	22.9	10	0.5	2180	100.0
	Q5(most)	960	45.4	440	20.8	705	33.3	10	0.5	2115	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 336: Smoking status by NZDep by prioritised ethnicity**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Ethnicity (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	Q1(least)	2065	63.0	860	26.2	330	10.1	25	0.8	3280	100.0
	Q2	1910	57.7	920	27.8	470	14.2	10	0.3	3310	100.0
	Q3	1410	53.5	750	28.5	470	17.8	10	0.4	2635	100.0
	Q4	1550	49.1	905	28.7	690	21.9	10	0.3	3155	100.0
	Q5(most)	910	44.0	540	26.1	625	30.2	10	0.5	2070	100.0
Māori	Q1(least)	70	50.0	30	21.4	35	25.0	.	.	140	100.0
	Q2	100	42.6	60	25.5	85	36.2	.	.	235	100.0
	Q3	115	44.2	45	17.3	95	36.5	10	3.8	260	100.0
	Q4	185	40.7	105	23.1	170	37.4	10	2.2	455	100.0
	Q5(most)	285	29.7	235	24.5	430	44.8	10	1.0	960	100.0
Pacific	Q1(least)	15	100.0	.	.	10	66.7	.	.	15	100.0
	Q2	20	50.0	10	25.0	10	25.0	.	.	40	100.0
	Q3	50	55.6	15	16.7	25	27.8	.	.	90	100.0
	Q4	100	58.8	25	14.7	40	23.5	10	5.9	170	100.0
	Q5(most)	285	58.2	70	14.3	125	25.5	10	2.0	490	100.0
Asian	Q1(least)	105	77.8	25	18.5	10	7.4	.	.	135	100.0
	Q2	130	83.9	15	9.7	10	6.5	10	6.5	155	100.0
	Q3	150	75.0	15	7.5	30	15.0	.	.	200	100.0
	Q4	190	84.4	10	4.4	20	8.9	10	4.4	225	100.0
	Q5(most)	155	79.5	10	5.1	25	12.8	.	.	195	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4655</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 337: Smoking status by NZDep by legal marital status**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Marital Status (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	Q1(least)	105	87.5	10	8.3	10	8.3	10	8.3	120	100.0
	Q2	115	92.0	10	8.0	10	8.0	.	.	125	100.0
	Q3	75	83.3	10	11.1	10	11.1	.	.	90	100.0
	Q4	100	80.0	10	8.0	15	12.0	.	.	125	100.0
	Q5(most)	105	77.8	10	7.4	30	22.2	10	7.4	135	100.0
Never Married	Q1(least)	520	68.9	100	13.2	135	17.9	10	1.3	755	100.0
	Q2	570	60.3	160	16.9	210	22.2	10	1.1	945	100.0
	Q3	550	60.1	140	15.3	225	24.6	.	.	915	100.0
	Q4	615	51.5	200	16.7	375	31.4	10	0.8	1195	100.0
	Q5(most)	590	42.9	210	15.3	570	41.5	10	0.7	1375	100.0
Divorced Widowed Separated	Q1(least)	190	52.1	125	34.2	50	13.7	10	2.7	365	100.0
	Q2	280	51.9	155	28.7	100	18.5	10	1.9	540	100.0
	Q3	250	45.0	185	33.3	120	21.6	10	1.8	555	100.0
	Q4	335	43.2	230	29.7	210	27.1	10	1.3	775	100.0
	Q5(most)	280	36.8	235	30.9	245	32.2	10	1.3	760	100.0
Married	Q1(least)	1430	61.5	690	29.7	185	8.0	15	0.6	2325	100.0
	Q2	1190	55.7	685	32.1	250	11.7	10	0.5	2135	100.0
	Q3	860	52.9	505	31.1	260	16.0	10	0.6	1625	100.0
	Q4	975	51.0	615	32.2	320	16.8	10	0.5	1910	100.0
	Q5(most)	665	46.2	405	28.1	365	25.3	10	0.7	1440	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3695</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 338: Smoking status by NZDep by family structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Family Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
Couple only	Q1(least)	685	58.1	380	32.2	105	8.9	10	0.8	1180	100.0
	Q2	645	50.6	445	34.9	180	14.1	10	0.8	1275	100.0
	Q3	500	50.5	345	34.8	145	14.6	10	1.0	990	100.0
	Q4	545	46.2	430	36.4	195	16.5	10	0.8	1180	100.0
	Q5(most)	330	41.8	255	32.3	205	25.9	10	1.3	790	100.0
Couple with children	Q1(least)	1245	67.5	395	21.4	185	10.0	15	0.8	1845	100.0
	Q2	1060	62.7	380	22.5	245	14.5	10	0.6	1690	100.0
	Q3	780	58.6	270	20.3	280	21.1	10	0.8	1330	100.0
	Q4	865	56.9	310	20.4	345	22.7	10	0.7	1520	100.0
	Q5(most)	655	47.6	260	18.9	445	32.4	10	0.7	1375	100.0
Sole parent	Q1(least)	100	55.6	40	22.2	40	22.2	.	.	180	100.0
	Q2	130	53.1	60	24.5	60	24.5	10	4.1	245	100.0
	Q3	145	52.7	50	18.2	85	30.9	.	.	275	100.0
	Q4	180	41.4	90	20.7	165	37.9	10	2.3	435	100.0
	Q5(most)	265	38.1	135	19.4	295	42.4	10	1.4	695	100.0
Not in a family nucleus	Q1(least)	215	58.9	100	27.4	45	12.3	10	2.7	365	100.0
	Q2	320	60.4	120	22.6	90	17.0	10	1.9	530	100.0
	Q3	305	50.8	175	29.2	115	19.2	10	1.7	600	100.0
	Q4	435	50.3	220	25.4	215	24.9	10	1.2	865	100.0
	Q5(most)	385	45.3	210	24.7	260	30.6	10	1.2	850	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18215</b>	<b>100.0</b>

**Table 339: Smoking status by NZDep by household structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Household Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%
One Family	Q1(least)	2025	63.7	805	25.3	325	10.2	25	0.8	3180	100.0
	Q2	1830	57.3	870	27.2	480	15.0	10	0.3	3195	100.0
	Q3	1405	55.2	650	25.5	485	19.1	10	0.4	2545	100.0
	Q4	1560	50.6	810	26.3	705	22.9	10	0.3	3085	100.0
	Q5(most)	1170	43.9	615	23.1	870	32.6	15	0.6	2665	100.0
Two or more families	Q1(least)	25	55.6	15	33.3	10	22.2	10	22.2	45	100.0
	Q2	35	58.3	15	25.0	10	16.7	.	.	60	100.0
	Q3	45	47.4	20	21.1	30	31.6	.	.	95	100.0
	Q4	60	52.2	35	30.4	30	26.1	.	.	115	100.0
	Q5(most)	125	42.4	60	20.3	110	37.3	10	3.4	295	100.0
Other multi-person household	Q1(least)	55	57.9	25	26.3	20	21.1	.	.	95	100.0
	Q2	80	64.0	25	20.0	20	16.0	.	.	125	100.0
	Q3	75	53.6	30	21.4	35	25.0	.	.	140	100.0
	Q4	135	57.4	40	17.0	60	25.5	.	.	235	100.0
	Q5(most)	125	53.2	35	14.9	70	29.8	.	.	235	100.0
One person household	Q1(least)	145	59.2	75	30.6	25	10.2	10	4.1	245	100.0
	Q2	215	58.9	95	26.0	50	13.7	10	2.7	365	100.0
	Q3	205	50.0	135	32.9	70	17.1	10	2.4	410	100.0
	Q4	275	48.2	165	28.9	130	22.8	10	1.8	570	100.0
	Q5(most)	215	41.3	145	27.9	155	29.8	10	1.9	520	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

### **11.8 The Association of NZDep with Alcohol Consumption**

Overall, consumption of alcohol increased with improving area deprivation. This was seen in the frequency of drinking as well as binge drinking. Consequently, there were larger proportions of never drinkers in the most deprived areas. This relationship was relatively consistent across age groups and by sex, marital status, family and household structure. There were typically high proportions of non-drinkers in the Pacific and Asian ethnic groups across all levels of area deprivation. However, the proportion of respondents binge drinking increased with increasing area deprivation.

**Table 340: Alcohol consumption by NZDep, overall**

NZDep Index (W1)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NZDepQ1(least)	365	10.3	465	13.1	970	27.2	585	16.4	1145	32.2	25	0.7	730	20.5	3560	100.0
NZDepQ2	475	12.7	655	17.5	1015	27.1	540	14.4	1030	27.5	25	0.7	795	21.2	3745	100.0
NZDepQ3	565	17.7	600	18.8	825	25.9	445	13.9	740	23.2	10	0.3	675	21.2	3190	100.0
NZDepQ4	780	19.5	770	19.2	1100	27.5	570	14.2	765	19.1	20	0.5	830	20.7	4005	100.0
NZDepQ5(most)	1075	28.9	855	23.0	940	25.3	360	9.7	465	12.5	20	0.5	865	23.3	3715	100.0
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 341: Alcohol consumption by NZDep by age and sex**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	Q1(least)	40	34.8	35	30.4	35	30.4	10	8.7	10	8.7	10	8.7	15	13.0	115	100.0
	Q2	35	28.0	55	44.0	30	24.0	10	8.0	10	8.0	10	8.0	20	16.0	125	100.0
	Q3	25	27.8	30	33.3	25	27.8	10	11.1	10	11.1	10	11.1	15	16.7	90	100.0
	Q4	50	41.7	50	41.7	20	16.7	10	8.3	10	8.3	.	.	20	16.7	120	100.0
	Q5(most)	65	48.1	35	25.9	25	18.5	10	7.4	10	7.4	10	7.4	20	14.8	135	100.0
15-24	Q1(least)	45	10.2	90	20.5	180	40.9	80	18.2	45	10.2	10	2.3	200	45.5	440	100.0
	Q2	55	11.8	105	22.6	165	35.5	85	18.3	65	14.0	10	2.2	205	44.1	465	100.0
	Q3	60	13.3	110	24.4	165	36.7	70	15.6	40	8.9	.	.	180	40.0	450	100.0
	Q4	80	15.1	105	19.8	210	39.6	95	17.9	35	6.6	.	.	230	43.4	530	100.0
	Q5(most)	135	21.4	160	25.4	210	33.3	80	12.7	40	6.3	10	1.6	255	40.5	630	100.0
25-34	Q1(least)	35	9.2	70	18.4	125	32.9	70	18.4	85	22.4	10	2.6	115	30.3	380	100.0
	Q2	50	9.0	95	17.1	185	33.3	95	17.1	125	22.5	10	1.8	180	32.4	555	100.0
	Q3	75	15.3	105	21.4	150	30.6	75	15.3	90	18.4	.	.	150	30.6	490	100.0
	Q4	90	12.3	155	21.2	240	32.9	135	18.5	110	15.1	10	1.4	220	30.1	730	100.0
	Q5(most)	140	21.1	170	25.6	220	33.1	65	9.8	65	9.8	10	1.5	225	33.8	665	100.0
35-44	Q1(least)	55	6.8	90	11.2	235	29.2	150	18.6	270	33.5	10	1.2	195	24.2	805	100.0
	Q2	75	9.1	130	15.9	250	30.5	145	17.7	215	26.2	10	1.2	200	24.4	820	100.0
	Q3	80	12.5	110	17.2	175	27.3	125	19.5	155	24.2	10	1.6	155	24.2	640	100.0
	Q4	135	16.6	165	20.2	235	28.8	140	17.2	135	16.6	10	1.2	185	22.7	815	100.0
	Q5(most)	205	29.5	145	20.9	190	27.3	75	10.8	75	10.8	10	1.4	170	24.5	695	100.0
45-54	Q1(least)	65	8.3	70	8.9	190	24.2	150	19.1	300	38.2	10	1.3	130	16.6	785	100.0
	Q2	75	10.7	95	13.6	155	22.1	120	17.1	250	35.7	10	1.4	120	17.1	700	100.0
	Q3	95	17.3	85	15.5	135	24.5	80	14.5	160	29.1	.	.	105	19.1	550	100.0
	Q4	120	20.2	90	15.1	150	25.2	75	12.6	155	26.1	10	1.7	90	15.1	595	100.0
	Q5(most)	185	30.3	145	23.8	120	19.7	60	9.8	95	15.6	10	1.6	110	18.0	610	100.0
55-64	Q1(least)	55	9.6	60	10.5	125	21.9	85	14.9	240	42.1	10	1.8	55	9.6	570	100.0
	Q2	65	12.7	75	14.7	125	24.5	60	11.8	180	35.3	10	2.0	45	8.8	510	100.0
	Q3	85	19.8	75	17.4	75	17.4	55	12.8	130	30.2	10	2.3	55	12.8	430	100.0
	Q4	95	19.0	85	17.0	125	25.0	65	13.0	130	26.0	10	2.0	55	11.0	500	100.0
	Q5(most)	165	33.7	100	20.4	85	17.3	40	8.2	95	19.4	10	2.0	55	11.2	490	100.0



		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
65+	Q1(least)	75	16.0	60	12.8	85	18.1	40	8.5	205	43.6	10	2.1	10	2.1	470	100.0
	Q2	130	22.8	95	16.7	110	19.3	35	6.1	195	34.2	10	1.8	25	4.4	570	100.0
	Q3	145	27.1	95	17.8	95	17.8	35	6.5	165	30.8	10	1.9	25	4.7	535	100.0
	Q4	210	29.6	125	17.6	120	16.9	60	8.5	195	27.5	10	1.4	30	4.2	710	100.0
	Q5(most)	180	36.4	100	20.2	85	17.2	40	8.1	90	18.2	10	2.0	30	6.1	495	100.0
Male	Q1(least)	145	8.5	160	9.4	425	24.9	295	17.3	655	38.4	15	0.9	440	25.8	1705	100.0
	Q2	165	9.4	235	13.4	465	26.5	280	16.0	595	33.9	15	0.9	500	28.5	1755	100.0
	Q3	205	13.7	220	14.7	380	25.4	240	16.1	435	29.1	10	0.7	400	26.8	1495	100.0
	Q4	285	15.6	260	14.2	510	27.9	320	17.5	440	24.0	10	0.5	495	27.0	1830	100.0
	Q5(most)	365	22.7	290	18.1	440	27.4	210	13.1	290	18.1	10	0.6	495	30.8	1605	100.0
Female	Q1(least)	220	11.8	305	16.4	540	29.0	295	15.9	495	26.6	10	0.5	285	15.3	1860	100.0
	Q2	310	15.6	415	20.9	550	27.6	260	13.1	440	22.1	10	0.5	295	14.8	1990	100.0
	Q3	360	21.2	385	22.7	445	26.3	210	12.4	295	17.4	10	0.6	275	16.2	1695	100.0
	Q4	500	23.0	515	23.7	585	26.9	250	11.5	320	14.7	10	0.5	335	15.4	2175	100.0
	Q5(most)	710	33.6	565	26.8	500	23.7	150	7.1	175	8.3	10	0.5	375	17.8	2110	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 342: Alcohol consumption by NZDep by prioritised ethnicity**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Ethnicity (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	Q1(least)	290	8.8	415	12.7	880	26.8	560	17.1	1115	34.0	30	0.9	675	20.6	3280	100.0
	Q2	345	10.4	555	16.8	900	27.2	505	15.3	990	29.9	20	0.6	710	21.5	3310	100.0
	Q3	390	14.8	470	17.8	675	25.6	405	15.3	685	25.9	10	0.4	560	21.2	2640	100.0
	Q4	475	15.1	600	19.0	885	28.1	480	15.2	700	22.2	10	0.3	650	20.6	3155	100.0
	Q5(most)	420	20.2	470	22.7	555	26.7	240	11.6	385	18.6	10	0.5	465	22.4	2075	100.0
Māori	Q1(least)	25	18.5	30	22.2	40	29.6	15	11.1	30	22.2	.	.	45	33.3	135	100.0
	Q2	40	17.0	55	23.4	80	34.0	25	10.6	35	14.9	10	4.3	70	29.8	235	100.0
	Q3	30	11.8	70	27.5	95	37.3	30	11.8	35	13.7	10	3.9	95	37.3	255	100.0
	Q4	105	23.1	95	20.9	145	31.9	60	13.2	45	9.9	10	2.2	145	31.9	455	100.0
	Q5(most)	255	26.6	270	28.1	280	29.2	90	9.4	65	6.8	10	1.0	310	32.3	960	100.0
Pacific	Q1(least)	10	66.7	10	66.7	10	66.7	10	66.7	.	.	.	.	10	66.7	15	100.0
	Q2	15	33.3	10	22.2	15	33.3	10	22.2	10	22.2	10	22.2	10	22.2	45	100.0
	Q3	40	44.4	25	27.8	20	22.2	10	11.1	10	11.1	10	11.1	15	16.7	90	100.0
	Q4	80	48.5	40	24.2	30	18.2	10	6.1	10	6.1	10	6.1	25	15.2	165	100.0
	Q5(most)	285	58.2	80	16.3	85	17.3	20	4.1	10	2.0	10	2.0	75	15.3	490	100.0
Asian	Q1(least)	50	37.0	25	18.5	40	29.6	10	7.4	10	7.4	.	.	10	7.4	135	100.0
	Q2	80	50.0	30	18.8	30	18.8	15	9.4	10	6.3	10	6.3	10	6.3	160	100.0
	Q3	100	50.0	40	20.0	40	20.0	10	5.0	10	5.0	.	.	10	5.0	200	100.0
	Q4	115	52.3	40	18.2	40	18.2	15	6.8	10	4.5	10	4.5	10	4.5	220	100.0
	Q5(most)	115	59.0	35	17.9	25	12.8	10	5.1	10	5.1	10	5.1	10	5.1	195	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 343: Alcohol consumption by NZDep by legal marital status**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Marital Status (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	Q1(least)	40	33.3	30	25.0	35	29.2	10	8.3	10	8.3	10	8.3	15	12.5	120	100.0
	Q2	35	28.0	55	44.0	30	24.0	10	8.0	10	8.0	10	8.0	20	16.0	125	100.0
	Q3	25	27.8	30	33.3	30	33.3	10	11.1	10	11.1	10	11.1	10	11.1	90	100.0
	Q4	45	37.5	50	41.7	20	16.7	10	8.3	10	8.3	.	.	25	20.8	120	100.0
	Q5(most)	65	46.4	35	25.0	25	17.9	10	7.1	10	7.1	10	7.1	20	14.3	140	100.0
Never Married	Q1(least)	75	9.9	125	16.4	275	36.2	135	17.8	135	17.8	10	1.3	290	38.2	760	100.0
	Q2	90	9.5	185	19.6	310	32.8	180	19.0	170	18.0	10	1.1	365	38.6	945	100.0
	Q3	120	13.1	200	21.9	295	32.2	160	17.5	135	14.8	.	.	325	35.5	915	100.0
	Q4	165	13.8	240	20.1	415	34.7	215	18.0	160	13.4	10	0.8	410	34.3	1195	100.0
	Q5(most)	290	21.1	330	24.0	455	33.1	160	11.6	125	9.1	10	0.7	495	36.0	1375	100.0
Divorced Widowed Separated	Q1(least)	35	9.7	50	13.9	95	26.4	45	12.5	135	37.5	10	2.8	60	16.7	360	100.0
	Q2	80	14.8	95	17.6	140	25.9	75	13.9	140	25.9	10	1.9	90	16.7	540	100.0
	Q3	115	20.5	105	18.8	125	22.3	70	12.5	140	25.0	10	1.8	90	16.1	560	100.0
	Q4	180	23.2	140	18.1	200	25.8	100	12.9	150	19.4	10	1.3	130	16.8	775	100.0
	Q5(most)	240	31.4	180	23.5	170	22.2	70	9.2	100	13.1	10	1.3	120	15.7	765	100.0
Married	Q1(least)	215	9.2	260	11.2	565	24.3	395	17.0	875	37.6	15	0.6	360	15.5	2325	100.0
	Q2	270	12.6	320	15.0	540	25.3	280	13.1	715	33.5	10	0.5	315	14.8	2135	100.0
	Q3	300	18.5	265	16.3	375	23.1	210	12.9	460	28.3	10	0.6	250	15.4	1625	100.0
	Q4	385	20.2	345	18.1	455	23.8	250	13.1	465	24.3	10	0.5	270	14.1	1910	100.0
	Q5(most)	475	33.0	305	21.2	285	19.8	130	9.0	230	16.0	10	0.7	235	16.3	1440	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 344: Smoking status by NZDep by family structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Family Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	Q1(least)	115	9.7	135	11.4	265	22.5	170	14.4	485	41.1	10	0.8	150	12.7	1180	100.0
	Q2	150	11.8	190	14.9	320	25.1	155	12.2	450	35.3	15	1.2	195	15.3	1275	100.0
	Q3	155	15.7	150	15.2	210	21.3	135	13.7	325	33.0	10	1.0	185	18.8	985	100.0
	Q4	185	15.7	190	16.2	270	23.0	170	14.5	360	30.6	10	0.9	195	16.6	1175	100.0
	Q5(most)	200	25.2	170	21.4	170	21.4	80	10.1	170	21.4	10	1.3	140	17.6	795	100.0
Couple with children	Q1(least)	180	9.8	255	13.8	550	29.8	340	18.4	505	27.4	15	0.8	455	24.7	1845	100.0
	Q2	210	12.4	315	18.6	470	27.8	270	16.0	415	24.6	10	0.6	410	24.3	1690	100.0
	Q3	235	17.7	265	20.0	375	28.3	190	14.3	260	19.6	10	0.8	300	22.6	1325	100.0
	Q4	320	21.1	330	21.7	450	29.6	210	13.8	210	13.8	10	0.7	320	21.1	1520	100.0
	Q5(most)	420	30.7	305	22.3	370	27.0	135	9.9	135	9.9	10	0.7	375	27.4	1370	100.0
Sole parent	Q1(least)	15	8.6	40	22.9	60	34.3	25	14.3	35	20.0	.	.	55	31.4	175	100.0
	Q2	30	12.2	55	22.4	75	30.6	35	14.3	40	16.3	10	4.1	65	26.5	245	100.0
	Q3	55	20.0	75	27.3	75	27.3	35	12.7	35	12.7	.	.	75	27.3	275	100.0
	Q4	85	19.3	110	25.0	140	31.8	55	12.5	45	10.2	10	2.3	120	27.3	440	100.0
	Q5(most)	210	30.2	215	30.9	170	24.5	50	7.2	45	6.5	10	1.4	175	25.2	695	100.0
Not in a family nucleus	Q1(least)	50	13.9	45	12.5	95	26.4	50	13.9	125	34.7	10	2.8	75	20.8	360	100.0
	Q2	80	15.1	90	17.0	155	29.2	80	15.1	125	23.6	10	1.9	130	24.5	530	100.0
	Q3	115	19.3	115	19.3	165	27.7	80	13.4	120	20.2	10	1.7	120	20.2	595	100.0
	Q4	185	21.3	150	17.2	240	27.6	140	16.1	145	16.7	10	1.1	195	22.4	870	100.0
	Q5(most)	245	28.7	165	19.3	230	26.9	90	10.5	115	13.5	10	1.2	180	21.1	855	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 345: Alcohol consumption by NZDep by household structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Household Structure (W1)	NZDep Index (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	Q1(least)	315	9.9	415	13.1	875	27.5	525	16.5	1020	32.1	20	0.6	655	20.6	3180	100.0
	Q2	385	12.1	560	17.6	855	26.8	460	14.4	905	28.4	25	0.8	665	20.8	3190	100.0
	Q3	430	16.9	480	18.8	650	25.5	365	14.3	620	24.3	10	0.4	550	21.6	2550	100.0
	Q4	575	18.6	615	19.9	850	27.6	425	13.8	610	19.8	15	0.5	625	20.3	3085	100.0
	Q5(most)	750	28.1	635	23.8	680	25.5	260	9.7	330	12.4	15	0.6	630	23.6	2670	100.0
Two or more families	Q1(least)	10	22.2	10	22.2	10	22.2	10	22.2	10	22.2	10	22.2	10	22.2	45	100.0
	Q2	15	25.0	15	25.0	20	33.3	10	16.7	10	16.7	.	.	10	16.7	60	100.0
	Q3	30	31.6	20	21.1	25	26.3	10	10.5	10	10.5	.	.	20	21.1	95	100.0
	Q4	40	34.8	20	17.4	25	21.7	10	8.7	15	13.0	.	.	20	17.4	115	100.0
	Q5(most)	110	37.3	75	25.4	55	18.6	20	6.8	25	8.5	10	3.4	75	25.4	295	100.0
Other multi-person household	Q1(least)	15	15.8	10	10.5	20	21.1	15	15.8	25	26.3	.	.	35	36.8	95	100.0
	Q2	10	7.7	20	15.4	45	34.6	15	11.5	25	19.2	.	.	55	42.3	130	100.0
	Q3	15	10.7	25	17.9	50	35.7	25	17.9	30	21.4	.	.	55	39.3	140	100.0
	Q4	15	6.5	30	13.0	85	37.0	65	28.3	30	13.0	.	.	105	45.7	230	100.0
	Q5(most)	40	17.4	40	17.4	90	39.1	35	15.2	30	13.0	10	4.3	90	39.1	230	100.0
One person household	Q1(least)	30	12.2	30	12.2	65	26.5	30	12.2	85	34.7	10	4.1	30	12.2	245	100.0
	Q2	60	16.4	60	16.4	95	26.0	60	16.4	90	24.7	10	2.7	65	17.8	365	100.0
	Q3	95	23.5	75	18.5	105	25.9	50	12.3	85	21.0	10	2.5	50	12.3	405	100.0
	Q4	145	25.2	110	19.1	135	23.5	65	11.3	110	19.1	10	1.7	80	13.9	575	100.0
	Q5(most)	170	32.7	105	20.2	115	22.1	45	8.7	85	16.3	10	1.9	70	13.5	520	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

## **Chapter 12 The Association of the New Zealand Individual Deprivation score (NZ<sub>i</sub>Dep) with Health Measures**

The NZ<sub>i</sub>Dep index is a tool for measuring socioeconomic position for individuals and is based on eight simple questions.(Salmond et al., 2005) The index is indicative of level of individual deprivation, and was designed for use as a variable in research, and for elucidating the relationships between socioeconomic position and health/social outcomes.

### ***12.1 The Association of NZ<sub>i</sub>Dep with Demographics***

Overall, 71% of the population answered no to all of the eight deprivation questions. More males than females had no deprivation variables and there were an increasing proportion of respondents with no individual deprivation with increasing age.

Approximately 50% of the Māori and Pacific respondents had one or more individual deprivation variables, with high proportions with three or more deprivation variables. There were higher proportions of married respondents, living in a couple only or one family households with no individual deprivation variables. Consequently, there were higher proportions of respondents never married, divorced, widowed or separated, sole parents with one or more deprivation variables. Respondents who were living in households with two or more families, multiple person households were also more likely to have one or more deprivation variables.

**Table 346: NZiDep (Wave 3), overall and by age and sex**

	NZiDep Group (W3)													
	NA		0 vars		1 vars		2 vars		3-4 vars		5+ vars		Total	
Age, mean SD	43.0	19.6	45.7	18.7	41.3	17.5	38.9	15.6	37.5	14.0	38.1	11.4	44.0	18.2
Age (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	10	1.7	505	85.6	50	8.5	10	1.7	10	1.7	10	1.7	590	100.0
15-24	10	0.4	1535	61.0	530	21.1	220	8.7	190	7.6	30	1.2	2515	100.0
25-34	10	0.4	1755	62.2	505	17.9	230	8.2	240	8.5	80	2.8	2820	100.0
35-44	15	0.4	2535	67.2	615	16.3	280	7.4	240	6.4	90	2.4	3770	100.0
45-54	10	0.3	2460	76.0	405	12.5	155	4.8	150	4.6	55	1.7	3235	100.0
55-64	15	0.6	1835	73.1	385	15.3	125	5.0	115	4.6	25	1.0	2510	100.0
65+	10	0.4	2380	85.5	295	10.6	70	2.5	25	0.9	10	0.4	2785	100.0
<b>Male</b>	<b>40</b>	<b>0.5</b>	<b>6420</b>	<b>76.6</b>	<b>1135</b>	<b>13.5</b>	<b>395</b>	<b>4.7</b>	<b>310</b>	<b>3.7</b>	<b>80</b>	<b>1.0</b>	<b>8380</b>	<b>100.0</b>
<b>Female</b>	<b>30</b>	<b>0.3</b>	<b>6590</b>	<b>67.0</b>	<b>1645</b>	<b>16.7</b>	<b>700</b>	<b>7.1</b>	<b>655</b>	<b>6.7</b>	<b>215</b>	<b>2.2</b>	<b>9835</b>	<b>100.0</b>
<b>Total</b>	<b>75</b>	<b>0.4</b>	<b>13005</b>	<b>71.4</b>	<b>2785</b>	<b>15.3</b>	<b>1095</b>	<b>6.0</b>	<b>965</b>	<b>5.3</b>	<b>295</b>	<b>1.6</b>	<b>18215</b>	<b>100.0</b>

**Table 347: NZiDep (Wave 3) by prioritised ethnicity**

	NZiDep Group (W3)													
	NA		0 vars		1 vars		2 vars		3-4 vars		5+ vars		Total	
Ethnicity (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	45	0.3	10855	75.1	2005	13.9	760	5.3	600	4.2	180	1.2	14455	100.0
Māori	10	0.5	1100	53.8	400	19.6	205	10.0	245	12.0	85	4.2	2045	100.0
Pacific	10	1.2	405	50.3	190	23.6	90	11.2	85	10.6	20	2.5	805	100.0
Asian	10	1.1	640	69.9	180	19.7	45	4.9	35	3.8	10	1.1	915	100.0
<b>Total</b>	<b>75</b>	<b>0.4</b>	<b>13010</b>	<b>71.4</b>	<b>2780</b>	<b>15.3</b>	<b>1095</b>	<b>6.0</b>	<b>965</b>	<b>5.3</b>	<b>290</b>	<b>1.6</b>	<b>18220</b>	<b>100.0</b>

**Table 348: NZiDep (Wave 3) by legal marital status**

	NZiDep Group (W3)													
	NA		0 vars		1 vars		2 vars		3-4 vars		5+ vars		Total	
Marital Status (W1)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	10	1.7	510	85.7	50	8.4	10	1.7	10	1.7	10	1.7	595	100.0
Never Married	15	0.3	3110	60.0	1030	19.9	450	8.7	455	8.8	135	2.6	5185	100.0
Divorced	10	0.3	1875	62.5	540	18.0	245	8.2	235	7.8	90	3.0	3000	100.0
Widowed	35	0.4	7525	79.7	1165	12.3	395	4.2	265	2.8	60	0.6	9440	100.0
Separated	10	0.3	1875	62.5	540	18.0	245	8.2	235	7.8	90	3.0	3000	100.0
Married	35	0.4	7525	79.7	1165	12.3	395	4.2	265	2.8	60	0.6	9440	100.0
<b>Total</b>	<b>70</b>	<b>0.4</b>	<b>13010</b>	<b>71.4</b>	<b>2785</b>	<b>15.3</b>	<b>1100</b>	<b>6.0</b>	<b>965</b>	<b>5.3</b>	<b>290</b>	<b>1.6</b>	<b>18215</b>	<b>100.0</b>

**Table 349: NZiDep (Wave 3) by family structure**

Family Structure (W1)	NZiDep Group (W3)													
	NA		0 vars		1 vars		2 vars		3-4 vars		5+ vars		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	20	0.4	4530	83.7	590	10.9	155	2.9	105	1.9	20	0.4	5415	100.0
Couple with children	40	0.5	5655	72.9	1175	15.1	465	6.0	345	4.4	85	1.1	7760	100.0
Sole parent	10	0.5	735	40.1	425	23.2	235	12.8	305	16.6	130	7.1	1835	100.0
Not in a family nucleus	10	0.3	2095	65.2	590	18.4	245	7.6	210	6.5	65	2.0	3215	100.0
<b>Total</b>	<b>70</b>	<b>0.4</b>	<b>13005</b>	<b>71.4</b>	<b>2785</b>	<b>15.3</b>	<b>1100</b>	<b>6.0</b>	<b>965</b>	<b>5.3</b>	<b>290</b>	<b>1.6</b>	<b>18215</b>	<b>100.0</b>

**Table 350: NZiDep (Wave 3) by household structure**

Household Structure (W1)	NZiDep Group (W3)													
	NA		0 vars		1 vars		2 vars		3-4 vars		5+ vars		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	60	0.4	10755	73.3	2115	14.4	815	5.6	720	4.9	215	1.5	14675	100.0
Two or more families	10	1.6	340	55.7	130	21.3	55	9.0	55	9.0	15	2.5	610	100.0
Other multi-person household	10	1.2	485	58.8	200	24.2	70	8.5	60	7.3	10	1.2	825	100.0
One person household	10	0.5	1430	67.9	335	15.9	150	7.1	125	5.9	50	2.4	2105	100.0
<b>Total</b>	<b>70</b>	<b>0.4</b>	<b>13010</b>	<b>71.4</b>	<b>2785</b>	<b>15.3</b>	<b>1100</b>	<b>6.0</b>	<b>965</b>	<b>5.3</b>	<b>290</b>	<b>1.6</b>	<b>18215</b>	<b>100.0</b>

## **12.2 The Association of NZiDep with Self-Rated Health**

Overall, the proportion of respondents reporting excellent health status increased with decreasing number of individual deprivation variables. This relationship was consistent across most of the age groups, as well as by sex and ethnicity. Typically, the proportions of respondents reporting excellent health status with no deprivation variables was double that of respondents with five or more deprivation variables. There were high proportions of respondents with the 3-4 or 5+ deprivation variables reporting fair or poor health status, however, the numbers in these groups tend to be small. The linear relationship of increasing proportions reporting excellent health status with decreasing number of deprivation variables was typically consistent across marital status, family and household structure groups.



**Table 351: Self-rated health, by NZiDep, overall**

NZiDep Group (W3)	Self Rated Health (W1)											
	Excellent		Very Good		Good		Fair		Poor		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA	25	35.7	20	28.6	15	21.4	10	14.3	10	14.3	70	100.0
0 vars	5435	41.8	4400	33.8	2410	18.5	650	5.0	110	0.8	13010	100.0
1 vars	885	31.8	895	32.1	670	24.1	245	8.8	80	2.9	2785	100.0
2 vars	315	28.8	360	32.9	285	26.0	105	9.6	35	3.2	1095	100.0
3-4 vars	230	23.8	290	30.1	255	26.4	135	14.0	50	5.2	965	100.0
5+ vars	55	18.6	75	25.4	75	25.4	70	23.7	25	8.5	295	100.0
<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 352: Self-rated health, by NZiDep, by age and sex**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0
	0 vars	290	57.4	155	30.7	55	10.9	10	2.0	10	2.0	505	100.0
	1 vars	20	40.0	25	50.0	10	20.0	10	20.0	.	.	50	100.0
	2 vars	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	3-4 vars	10	66.7	10	66.7	10	66.7	10	66.7	10	66.7	15	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	.	.	10	100.0
15-24	NA	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
	0 vars	855	55.7	460	30.0	180	11.7	30	2.0	10	0.7	1535	100.0
	1 vars	225	42.5	190	35.8	100	18.9	10	1.9	10	1.9	530	100.0
	2 vars	95	43.2	70	31.8	50	22.7	10	4.5	10	4.5	220	100.0
	3-4 vars	60	31.6	65	34.2	50	26.3	10	5.3	10	5.3	190	100.0
	5+ vars	10	33.3	15	50.0	10	33.3	10	33.3	.	.	30	100.0
25-34	NA	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0
	0 vars	950	54.0	590	33.5	180	10.2	35	2.0	10	0.6	1760	100.0
	1 vars	235	47.0	160	32.0	80	16.0	25	5.0	10	2.0	500	100.0
	2 vars	85	37.8	85	37.8	50	22.2	10	4.4	10	4.4	225	100.0
	3-4 vars	70	29.8	80	34.0	60	25.5	20	8.5	10	4.3	235	100.0
	5+ vars	20	23.5	25	29.4	20	23.5	20	23.5	10	11.8	85	100.0
35-44	NA	10	66.7	10	66.7	10	66.7	10	66.7	10	66.7	15	100.0
	0 vars	1255	49.5	850	33.5	360	14.2	65	2.6	10	0.4	2535	100.0
	1 vars	195	31.7	215	35.0	145	23.6	40	6.5	15	2.4	615	100.0
	2 vars	80	28.6	100	35.7	70	25.0	25	8.9	10	3.6	280	100.0
	3-4 vars	60	25.0	85	35.4	55	22.9	30	12.5	15	6.3	240	100.0
	5+ vars	15	16.7	15	16.7	30	33.3	20	22.2	10	11.1	90	100.0
45-54	NA	10	100.0	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	1080	43.8	895	36.3	400	16.2	70	2.8	15	0.6	2465	100.0
	1 vars	110	27.2	130	32.1	115	28.4	35	8.6	10	2.5	405	100.0
	2 vars	25	16.1	55	35.5	50	32.3	20	12.9	15	9.7	155	100.0
	3-4 vars	20	13.3	30	20.0	55	36.7	25	16.7	20	13.3	150	100.0
	5+ vars	10	18.2	10	18.2	15	27.3	20	36.4	10	18.2	55	100.0
55-64	NA	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0
	0 vars	580	31.6	705	38.4	430	23.4	105	5.7	20	1.1	1835	100.0
	1 vars	65	16.7	110	28.2	120	30.8	65	16.7	25	6.4	390	100.0
	2 vars	15	12.0	35	28.0	40	32.0	30	24.0	10	8.0	125	100.0
	3-4 vars	15	13.0	30	26.1	30	26.1	35	30.4	10	8.7	115	100.0
	5+ vars	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	25	100.0
65+	NA	.	.	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	435	18.3	750	31.5	800	33.6	335	14.1	70	2.9	2380	100.0
	1 vars	30	10.3	65	22.4	105	36.2	65	22.4	25	8.6	290	100.0
	2 vars	10	14.3	10	14.3	30	42.9	20	28.6	10	14.3	70	100.0
	3-4 vars	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	25	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	.	.	10	100.0
Male	NA	15	37.5	15	37.5	10	25.0	10	25.0	10	25.0	40	100.0
	0 vars	2685	41.8	2170	33.8	1200	18.7	310	4.8	55	0.9	6420	100.0
	1 vars	335	29.4	370	32.5	270	23.7	120	10.5	40	3.5	1140	100.0
	2 vars	115	29.1	130	32.9	85	21.5	45	11.4	15	3.8	395	100.0
	3-4 vars	70	22.6	85	27.4	90	29.0	45	14.5	20	6.5	310	100.0
	5+ vars	15	18.8	15	18.8	20	25.0	15	18.8	10	12.5	80	100.0
Female	NA	10	33.3	10	33.3	10	33.3	10	33.3	10	33.3	30	100.0
	0 vars	2745	41.7	2235	33.9	1215	18.4	340	5.2	60	0.9	6590	100.0

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
	1 vars	555	33.8	525	32.0	395	24.1	125	7.6	40	2.4	1640	100.0
	2 vars	200	28.6	225	32.1	195	27.9	60	8.6	20	2.9	700	100.0
	3-4 vars	165	25.2	205	31.3	170	26.0	85	13.0	30	4.6	655	100.0
	5+ vars	40	19.0	55	26.2	55	26.2	50	23.8	20	9.5	210	100.0
<b>Total</b>	<b>Total</b>	<b>6940</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 353: Self-rated health, by NZiDep, by prioritised ethnicity**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Ethnicity (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	15	33.3	15	33.3	15	33.3	10	22.2	10	22.2	45	100.0
	0 vars	4515	41.6	3715	34.2	1975	18.2	555	5.1	100	0.9	10860	100.0
	1 vars	635	31.7	650	32.4	475	23.7	195	9.7	60	3.0	2005	100.0
	2 vars	220	28.9	245	32.2	200	26.3	70	9.2	25	3.3	760	100.0
	3-4 vars	150	25.0	190	31.7	160	26.7	75	12.5	30	5.0	600	100.0
	5+ vars	25	13.9	40	22.2	50	27.8	45	25.0	15	8.3	180	100.0
Māori	NA	.	.	10	100.0	.	.	.	.	10	100.0	10	100.0
	0 vars	435	39.4	390	35.3	220	19.9	55	5.0	10	0.9	1105	100.0
	1 vars	115	28.8	135	33.8	110	27.5	40	10.0	10	2.5	400	100.0
	2 vars	45	22.5	70	35.0	60	30.0	20	10.0	10	5.0	200	100.0
	3-4 vars	50	20.4	75	30.6	75	30.6	45	18.4	10	4.1	245	100.0
	5+ vars	20	22.2	25	27.8	20	22.2	20	22.2	10	11.1	90	100.0
Pacific	NA	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	0 vars	205	50.6	110	27.2	70	17.3	15	3.7	10	2.5	405	100.0
	1 vars	70	36.8	55	28.9	40	21.1	10	5.3	10	5.3	190	100.0
	2 vars	35	38.9	25	27.8	15	16.7	15	16.7	10	11.1	90	100.0
	3-4 vars	20	25.0	20	25.0	15	18.8	15	18.8	10	12.5	80	100.0
	5+ vars	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	25	100.0
Asian	NA	10	100.0	10	100.0	10	100.0	10	100.0	.	.	10	100.0
	0 vars	280	43.8	190	29.7	140	21.9	30	4.7	.	.	640	100.0
	1 vars	65	36.1	55	30.6	45	25.0	10	5.6	10	5.6	180	100.0
	2 vars	20	40.0	15	30.0	10	20.0	10	20.0	.	.	50	100.0
	3-4 vars	10	28.6	15	42.9	10	28.6	10	28.6	10	28.6	35	100.0
	5+ vars	.	.	10	100.0	10	100.0	10	100.0	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6035</b>	<b>33.1</b>	<b>3715</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18215</b>	<b>100.0</b>

**Table 354: Self-rated health, by NZiDep, by legal marital status**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Marital Status (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0
	0 vars	295	57.8	150	29.4	55	10.8	10	2.0	10	2.0	510	100.0
	1 vars	25	50.0	20	40.0	10	20.0	10	20.0	.	.	50	100.0
	2 vars	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	3-4 vars	10	66.7	10	66.7	10	66.7	10	66.7	10	66.7	15	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	.	.	.	10
Never Married	NA	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	0 vars	1570	50.6	1010	32.5	435	14.0	80	2.6	10	0.3	3105	100.0
	1 vars	380	36.9	345	33.5	230	22.3	60	5.8	15	1.5	1030	100.0
	2 vars	160	35.6	145	32.2	110	24.4	30	6.7	10	2.2	450	100.0
	3-4 vars	120	26.7	155	34.4	120	26.7	40	8.9	20	4.4	450	100.0
	5+ vars	30	22.2	40	29.6	35	25.9	25	18.5	10	7.4	135	100.0
Divorced Widowed Separated	NA	10	66.7	10	66.7	10	66.7	10	66.7	10	66.7	15	100.0
	0 vars	580	31.0	635	34.0	475	25.4	150	8.0	30	1.6	1870	100.0
	1 vars	140	25.9	145	26.9	145	26.9	80	14.8	25	4.6	540	100.0
	2 vars	45	18.8	80	33.3	75	31.3	35	14.6	10	4.2	240	100.0
	3-4 vars	45	18.8	55	22.9	70	29.2	45	18.8	20	8.3	240	100.0
	5+ vars	10	10.5	20	21.1	25	26.3	25	26.3	15	15.8	95	100.0
Married	NA	10	28.6	15	42.9	10	28.6	10	28.6	10	28.6	35	100.0
	0 vars	2985	39.7	2605	34.6	1450	19.3	415	5.5	70	0.9	7525	100.0
	1 vars	345	29.6	375	32.2	295	25.3	105	9.0	40	3.4	1165	100.0
	2 vars	105	26.6	130	32.9	95	24.1	45	11.4	10	2.5	395	100.0
	3-4 vars	60	23.1	75	28.8	65	25.0	45	17.3	15	5.8	260	100.0
	5+ vars	10	16.7	15	25.0	15	25.0	20	33.3	10	16.7	60	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>1210</b>	<b>6.6</b>	<b>310</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

**Table 355: Self-rated health, by NZiDep, by family structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Poor		Fair		Total	
Family Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA	10	50.0	10	50.0	10	50.0	10	50.0	.	.	20	100.0
	0 vars	1545	34.1	1600	35.3	1020	22.5	55	1.2	315	7.0	4530	100.0
	1 vars	145	24.6	185	31.4	170	28.8	20	3.4	70	11.9	590	100.0
	2 vars	35	23.3	45	30.0	50	33.3	10	6.7	20	13.3	150	100.0
	3-4 vars	15	14.3	25	23.8	40	38.1	10	9.5	20	19.0	105	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	10	66.7	10	66.7	15	100.0
Couple with children	NA	20	50.0	10	25.0	10	25.0	10	25.0	10	25.0	40	100.0
	0 vars	2865	50.7	1850	32.7	765	13.5	25	0.4	155	2.7	5655	100.0
	1 vars	435	37.0	405	34.5	240	20.4	25	2.1	70	6.0	1175	100.0
	2 vars	145	31.2	155	33.3	110	23.7	10	2.2	40	8.6	465	100.0
	3-4 vars	95	27.9	115	33.8	75	22.1	15	4.4	45	13.2	340	100.0
	5+ vars	20	23.5	25	29.4	20	23.5	10	11.8	20	23.5	85	100.0
Sole parent	NA	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0
	0 vars	330	45.2	225	30.8	135	18.5	10	1.4	30	4.1	730	100.0
	1 vars	145	34.1	145	34.1	95	22.4	15	3.5	35	8.2	425	100.0
	2 vars	75	31.9	90	38.3	50	21.3	10	4.3	15	6.4	235	100.0
	3-4 vars	80	26.2	95	31.1	85	27.9	15	4.9	25	8.2	305	100.0
	5+ vars	25	19.2	30	23.1	35	26.9	10	7.7	25	19.2	130	100.0
Not in a family nucleus	NA	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0
	0 vars	690	32.9	735	35.1	485	23.2	25	1.2	150	7.2	2095	100.0
	1 vars	155	26.1	170	28.6	165	27.7	25	4.2	75	12.6	595	100.0
	2 vars	60	24.5	65	26.5	75	30.6	10	4.1	35	14.3	245	100.0
	3-4 vars	40	19.0	60	28.6	55	26.2	15	7.1	45	21.4	210	100.0
	5+ vars	10	15.4	15	23.1	20	30.8	15	23.1	15	23.1	65	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3715</b>	<b>20.4</b>	<b>315</b>	<b>1.7</b>	<b>1210</b>	<b>6.6</b>	<b>18220</b>	<b>100.0</b>

**Table 356: Self-rated health, by NZiDep, by household structure**

		Self Rated Health (W1)											
		Excellent		Very Good		Good		Fair		Poor		Total	
Household Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	20	33.3	15	25.0	15	25.0	10	16.7	10	16.7	60	100.0
	0 vars	4685	43.6	3615	33.6	1890	17.6	480	4.5	80	0.7	10750	100.0
	1 vars	700	33.1	695	32.9	490	23.2	170	8.0	55	2.6	2115	100.0
	2 vars	250	30.5	285	34.8	190	23.2	75	9.1	20	2.4	820	100.0
	3-4 vars	180	25.0	225	31.3	195	27.1	85	11.8	35	4.9	720	100.0
	5+ vars	40	18.6	55	25.6	55	25.6	50	23.3	10	4.7	215	100.0
Two or more families	NA	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0
	0 vars	130	38.2	105	30.9	70	20.6	30	8.8	10	2.9	340	100.0
	1 vars	40	29.6	45	33.3	30	22.2	10	7.4	10	7.4	135	100.0
	2 vars	15	25.0	10	16.7	25	41.7	10	16.7	10	16.7	60	100.0
	3-4 vars	15	25.0	10	16.7	15	25.0	10	16.7	10	16.7	60	100.0
	5+ vars	10	50.0	10	50.0	10	50.0	10	50.0	.	.	20	100.0
Other multi-person household	NA	10	100.0	.	.	.	.	.	.	.	.	10	100.0
	0 vars	215	44.8	175	36.5	75	15.6	10	2.1	10	2.1	480	100.0
	1 vars	75	37.5	65	32.5	45	22.5	10	5.0	10	5.0	200	100.0
	2 vars	30	42.9	15	21.4	20	28.6	10	14.3	10	14.3	70	100.0
	3-4 vars	15	23.1	25	38.5	15	23.1	10	15.4	10	15.4	65	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	10	66.7	.	.	15	100.0
One person household	NA	10	100.0	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	400	27.9	500	34.8	375	26.1	130	9.1	25	1.7	1435	100.0
	1 vars	75	22.4	90	26.9	105	31.3	55	16.4	15	4.5	335	100.0
	2 vars	25	16.1	45	29.0	50	32.3	25	16.1	10	6.5	155	100.0
	3-4 vars	20	16.0	30	24.0	35	28.0	30	24.0	10	8.0	125	100.0
	5+ vars	10	20.0	10	20.0	10	20.0	15	30.0	15	30.0	50	100.0
<b>Total</b>	<b>Total</b>	<b>6945</b>	<b>38.1</b>	<b>6040</b>	<b>33.2</b>	<b>3710</b>	<b>20.4</b>	<b>1205</b>	<b>6.6</b>	<b>315</b>	<b>1.7</b>	<b>18220</b>	<b>100.0</b>

### 12.3 The Association of NZiDep with Health-Related Quality of Life (SF-36)

Overall, mean SF-36 scores increased with decreasing number of deprivation variables. Mean SF-36 scores for respondents with no deprivation variables were higher than the overall mean scores, with mean scores for individuals with one or more deprivation variable lower than the overall mean. The mean scores for respondents with five or more deprivation variables were at least 20 lower than the overall mean. This was typically consistent across age groups and by sex and ethnicity. The mean vitality score for respondents with five or more deprivation variables was 44, which is lower than 50, indicating that this population feels tired and worn out a lot of the time. Mean SF-36 scores for Māori and Pacific respondents with no deprivation variables were higher than mean scores for other ethnic groups. The linear relationship can be seen across the marital status, family and household structure groups.

**Table 357: Overall mean (SD) SF-36 score, by NZiDep**

NZiDep Group (W3)	SF36 (W3)																			
	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA	59.5	21.7	68.5	28.5	69.5	27.1	80.1	25.0	58.5	25.4	75.5	18.6	72.6	32.1	74.3	31.1	46.6	13.0	48.3	9.3
0 vars	81.0	18.3	83.9	21.5	86.7	21.9	92.7	17.5	67.0	19.0	85.5	12.3	94.6	13.7	87.8	20.6	53.7	7.6	51.0	8.7
1 vars	74.0	21.7	79.1	24.3	80.5	25.1	87.0	23.1	60.8	20.6	80.8	15.1	89.7	18.8	83.6	23.9	50.6	9.5	49.3	10.0
2 vars	71.2	22.4	76.3	25.5	77.0	26.6	83.9	24.9	56.5	21.3	77.3	17.2	85.8	21.2	82.7	23.8	48.1	10.6	48.9	10.0
3-4 vars	67.6	23.8	73.1	26.8	73.3	28.0	77.3	28.7	54.2	21.2	72.5	18.6	80.3	25.0	80.2	25.5	45.2	12.0	48.2	10.9
5+ vars	59.3	25.6	66.5	28.1	65.5	29.5	64.3	34.1	44.4	23.0	64.7	22.2	69.1	28.7	74.4	27.5	39.1	14.5	46.3	11.5
<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 358: Mean (SD) SF-36 score by NZiDep by age and sex**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	NZiDep Group (W3)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0-14	NA	76.7	23.3	85.8	18.0	78.1	24.9	81.3	24.7	69.8	15.0	80.8	11.1	80.6	26.2	94.2	10.2	49.3	9.6	52.3	6.4
	0 vars	84.0	15.0	88.1	17.9	91.1	16.1	93.4	15.5	71.4	17.4	83.4	12.4	94.7	13.3	97.4	8.8	52.8	7.5	54.6	5.3
	1 vars	79.4	16.6	89.1	15.6	89.0	18.6	88.0	21.6	65.9	20.0	78.7	15.2	89.4	20.2	96.8	8.2	49.0	10.4	55.0	5.1
	2 vars	74.3	22.7	77.6	26.5	79.8	26.5	80.8	26.8	60.1	16.0	73.1	18.5	82.1	30.6	93.5	10.3	45.6	13.0	52.5	7.9
	3-4 vars	76.5	22.5	86.4	18.7	88.4	17.8	84.1	21.0	67.6	19.3	77.7	17.4	85.2	19.3	96.4	9.2	48.2	11.7	54.5	3.1
	5+ vars	82.3	20.4	100.0	0.0	100.0	0.0	91.7	14.4	62.5	0.0	71.7	20.2	100.0	0.0	100.0	0.0	46.8	7.2	59.7	4.9
15-24	NA	62.0	.	71.0	.	100.0	.	100.0	.	81.3	.	55.0	.	100.0	.	100.0	.	45.8	.	56.7	.
	0 vars	83.2	15.8	87.1	19.7	90.3	18.1	92.7	16.1	68.2	17.7	83.5	12.6	94.4	13.1	96.4	10.3	52.3	7.9	54.1	5.7
	1 vars	79.2	17.3	84.6	21.4	87.0	20.7	87.4	22.4	64.1	19.1	81.0	14.4	91.1	16.8	93.1	16.0	50.2	9.4	53.0	7.4
	2 vars	74.4	19.8	81.0	22.4	84.1	21.0	86.9	20.5	59.7	20.0	78.0	16.0	87.8	18.8	92.5	15.4	48.3	10.1	52.4	6.9
	3-4 vars	72.9	21.2	79.6	22.4	80.0	22.8	79.3	25.6	54.7	18.2	72.6	17.2	84.9	20.7	91.2	16.2	44.8	11.3	52.3	7.8
	5+ vars	71.0	18.1	69.4	24.8	73.4	24.7	73.4	27.8	51.6	23.0	69.2	20.9	76.0	26.6	88.3	19.1	42.4	14.4	50.3	9.3
25-34	NA	51.0	22.6	40.5	29.0	43.8	0.0	68.8	44.2	21.9	22.1	55.0	28.3	62.5	53.0	91.9	4.3	32.2	25.4	45.5	8.0
	0 vars	85.2	14.5	87.1	19.3	90.3	18.2	93.3	15.9	67.2	18.1	84.8	12.3	95.0	12.3	94.9	12.6	52.9	7.7	53.8	6.3
	1 vars	79.3	19.2	81.5	23.0	85.1	21.1	89.1	20.1	61.7	19.4	80.8	14.6	90.1	18.0	92.0	15.0	50.2	9.4	52.2	7.6
	2 vars	79.0	17.8	84.7	20.6	85.1	20.1	89.1	19.6	60.0	19.5	79.3	15.5	88.0	19.3	91.3	13.7	49.1	9.8	52.9	6.3
	3-4 vars	73.1	21.1	77.7	24.8	78.4	24.8	82.1	26.4	56.8	21.0	72.9	19.2	82.2	24.3	88.6	17.7	45.6	12.2	51.4	8.5
	5+ vars	68.2	22.1	74.5	24.2	73.1	27.5	68.0	33.7	47.4	22.6	67.3	20.0	72.8	26.5	86.7	18.3	39.9	14.2	51.0	8.8
35-44	NA	52.0	.	51.0	.	56.3	.	75.0	.	.	.	.	.	33.3	.	50.0	.	.	.	.	.
	0 vars	84.3	15.6	86.0	19.8	89.8	18.1	93.3	16.6	67.9	17.6	84.8	12.4	94.5	13.8	93.6	12.1	53.1	7.8	53.2	6.3
	1 vars	76.4	20.0	80.4	23.3	82.4	23.2	87.8	21.8	61.0	20.1	80.2	14.9	90.5	17.6	87.8	19.1	50.2	9.5	50.8	8.8
	2 vars	75.1	21.2	77.1	24.2	79.1	26.2	82.6	26.0	57.9	21.1	78.1	17.4	86.9	21.1	85.8	20.5	48.4	10.8	50.0	9.2
	3-4 vars	68.5	24.0	72.1	27.0	74.0	28.4	75.2	28.9	53.6	21.7	71.8	17.9	79.5	24.8	80.5	25.9	44.6	11.8	48.3	11.0
	5+ vars	60.4	26.1	66.5	28.5	67.1	28.9	61.9	36.0	43.7	23.2	64.2	22.3	65.2	29.5	74.6	26.2	38.1	14.5	46.8	10.8
45-54	NA	48.5	19.1	30.5	14.8	37.5	17.7	62.5	17.7	68.8	.	100.0	.	50.0	.	52.5	31.8	57.2	.	29.6	.
	0 vars	82.8	17.1	84.1	21.1	88.9	19.6	94.1	15.6	68.6	17.6	86.0	11.9	95.4	12.2	90.4	16.5	54.2	7.2	51.8	7.6
	1 vars	73.5	21.7	77.9	24.5	81.2	24.3	89.6	20.4	63.2	19.4	81.4	14.7	89.5	18.8	83.0	22.3	51.5	9.0	49.0	9.5
	2 vars	63.3	23.4	66.7	29.0	66.6	29.2	78.3	28.2	52.9	21.6	73.9	18.2	80.5	24.5	74.2	28.1	46.5	11.4	44.7	11.7
	3-4 vars	58.1	25.6	66.1	30.1	65.1	31.0	70.9	31.7	50.8	22.0	70.3	20.2	74.0	28.6	69.0	27.9	43.7	12.7	43.7	12.0
	5+ vars	40.5	22.0	55.0	28.9	48.1	29.5	53.1	34.7	33.6	19.9	54.3	23.6	61.5	30.1	54.5	29.1	34.1	14.0	39.3	11.9
55-64	NA	46.8	16.9	72.8	31.7	75.0	28.6	100.0	0.0	31.3	.	80.0	.	75.0	43.3	56.7	32.1	49.0	.	40.4	.
	0 vars	80.0	18.5	82.6	21.6	87.1	21.3	94.1	16.1	69.6	17.6	87.1	11.6	95.6	12.1	86.3	18.5	55.1	6.9	50.2	8.3
	1 vars	66.1	24.8	73.6	26.3	73.9	28.4	85.3	26.1	59.4	21.5	82.9	15.2	88.6	20.3	73.3	26.7	51.8	9.4	44.7	11.0



		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Age (W1)	NZiDep Group (W3)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
	2 vars	60.9	25.6	69.5	26.3	70.4	30.0	84.1	26.6	52.4	23.0	77.3	18.6	84.1	22.8	69.9	26.8	48.8	11.0	44.0	11.1
	3-4 vars	59.7	24.1	63.9	28.2	61.6	30.1	77.2	31.3	52.3	22.8	73.9	19.9	78.7	27.0	62.7	28.7	47.3	12.3	41.3	11.7
	5+ vars	49.9	26.0	59.4	31.2	59.5	28.4	68.5	30.7	50.2	24.3	72.6	21.6	73.6	29.7	57.6	30.3	45.3	13.8	38.8	12.4
65+	NA	77.0	.	94.0	.	100.0	.	37.5	.	.	.	.	.	.	.	45.0	63.6	.	.	.	.
	0 vars	71.1	22.6	76.9	25.0	74.8	29.1	88.9	22.6	60.8	22.7	86.6	12.7	92.6	17.1	67.0	29.1	54.6	8.0	43.7	11.3
	1 vars	60.4	23.9	69.9	27.0	63.7	30.3	79.4	28.7	50.9	23.7	78.8	17.6	86.4	23.2	55.5	30.0	50.0	10.5	39.9	11.9
	2 vars	57.2	22.2	64.2	29.5	55.4	27.8	74.8	31.0	43.9	22.3	73.2	19.0	84.2	20.3	52.9	27.2	47.0	10.9	38.5	10.8
	3-4 vars	56.0	24.3	69.0	26.5	62.2	33.2	72.4	35.7	54.7	24.5	79.6	13.6	78.5	29.4	54.4	32.6	49.2	9.9	38.9	11.8
	5+ vars	60.0	.	22.0	.	75.0	.	100.0	.	37.5	.	95.0	.	91.7	.	65.0	.	56.7	.	33.8	.
Male	NA	67.5	18.8	75.8	27.7	79.7	28.5	84.7	21.4	76.0	8.3	84.2	15.6	79.8	28.0	79.4	34.3	53.6	5.1	51.0	10.6
	0 vars	81.2	18.1	84.8	21.0	88.0	21.2	93.8	16.2	69.1	18.5	86.3	11.8	95.4	12.7	90.0	18.4	54.3	7.2	51.6	8.1
	1 vars	72.6	22.4	79.6	24.0	80.4	25.8	87.0	23.7	62.3	20.8	81.2	15.3	90.2	18.6	84.4	24.1	50.8	9.7	49.2	10.1
	2 vars	70.4	22.3	76.6	24.9	77.6	27.2	84.0	25.3	59.1	20.9	78.1	16.6	85.9	21.6	83.4	23.9	48.8	10.4	48.9	9.9
	3-4 vars	65.5	23.0	72.1	28.0	73.5	28.5	78.7	28.2	56.3	21.2	72.6	18.7	80.8	25.4	79.8	26.5	45.8	11.9	47.7	11.4
	5+ vars	54.9	24.9	66.0	27.8	62.3	31.5	64.9	34.7	47.0	24.2	68.8	23.6	72.5	29.9	71.3	28.4	41.6	14.8	44.0	11.6
Female	NA	48.5	21.6	62.0	29.2	59.4	22.9	75.0	29.1	37.5	22.5	65.0	17.7	65.5	36.5	68.6	28.3	38.2	15.1	45.2	7.2
	0 vars	80.8	18.4	82.9	21.9	85.4	22.5	91.6	18.7	65.1	19.2	84.6	12.8	93.7	14.6	85.6	22.4	53.2	8.0	50.5	9.2
	1 vars	74.9	21.2	78.8	24.4	80.6	24.7	87.0	22.6	59.8	20.5	80.6	14.9	89.3	18.9	83.1	23.8	50.4	9.4	49.3	10.0
	2 vars	71.7	22.5	76.1	25.8	76.7	26.2	83.8	24.6	55.0	21.4	76.8	17.5	85.8	21.0	82.3	23.7	47.8	10.7	48.8	10.0
	3-4 vars	68.7	24.1	73.6	26.2	73.2	27.8	76.7	29.0	53.2	21.1	72.5	18.6	80.1	24.9	80.4	25.1	45.0	12.0	48.4	10.6
	5+ vars	60.9	25.7	66.7	28.3	66.7	28.7	64.1	34.0	43.5	22.5	63.1	21.6	67.8	28.3	75.5	27.2	38.3	14.3	47.1	11.4
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 359: Mean (SD) SF-36 score by NZiDep by prioritised ethnicity**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Ethnicity (W1)	NZiDep Group (W3)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
nM,nP,nA	NA	56.5	21.5	69.5	21.7	70.0	24.8	76.1	27.1	52.7	26.7	67.9	18.2	66.7	33.8	70.4	33.7	41.3	13.6	50.0	7.1
	0 vars	81.0	18.4	83.2	21.7	86.3	22.4	92.6	17.7	66.4	19.1	85.5	12.3	94.7	13.6	87.0	21.3	53.8	7.6	50.8	8.9
	1 vars	73.4	22.1	77.4	24.9	79.3	25.9	86.4	23.3	59.1	20.8	80.5	15.1	90.0	18.4	82.3	24.7	50.4	9.5	48.6	10.5
	2 vars	70.5	23.0	74.4	26.1	76.0	27.4	82.9	25.4	54.3	21.7	76.0	17.5	86.0	20.9	81.8	24.1	47.5	10.8	48.5	10.2
	3-4 vars	67.8	24.0	72.4	26.9	73.1	28.3	77.6	28.6	52.0	21.2	71.8	18.7	81.1	24.7	80.3	25.3	44.8	11.9	48.2	10.9
	5+ vars	56.6	25.1	64.6	29.0	63.0	30.4	62.7	34.8	40.4	22.4	62.7	23.6	68.6	29.9	72.6	28.7	37.8	15.0	45.6	12.0
Māori	NA	56.3	23.8	70.5	41.7	75.0	35.4	75.0	35.4	81.3	.	95.0	.	100.0	.	65.0	49.5	58.2	.	55.3	.
	0 vars	81.4	18.0	86.1	20.8	88.3	20.4	93.2	16.5	69.5	17.9	85.9	12.3	94.5	13.9	91.1	17.2	53.9	7.7	52.1	7.7
	1 vars	76.7	20.4	83.8	22.3	84.2	23.5	88.1	23.7	65.6	20.3	82.2	16.0	89.5	19.9	87.3	21.7	51.2	10.5	51.3	8.5
	2 vars	74.7	20.5	81.2	22.9	81.1	24.0	88.3	21.9	62.6	19.8	82.3	15.1	87.9	20.6	85.9	22.7	51.0	9.5	49.9	9.0
	3-4 vars	68.4	23.4	73.6	26.6	73.7	27.5	74.5	30.6	56.3	21.1	73.2	19.0	78.5	25.7	79.8	26.3	45.3	12.8	48.1	10.8
	5+ vars	66.9	24.8	71.8	24.9	71.8	27.3	69.7	33.5	53.1	22.8	69.7	19.2	72.0	27.6	79.7	24.2	42.5	13.2	48.4	9.9
Pacific	NA	66.0	26.7	58.5	44.5	54.2	35.5	93.8	12.5	64.6	25.3	86.7	12.6	83.3	28.9	90.0	13.2	54.9	4.2	42.1	13.7
	0 vars	81.0	18.6	87.3	19.7	88.3	19.8	92.1	17.4	73.3	18.6	84.8	12.4	92.1	16.4	92.0	16.7	53.6	7.9	52.6	6.8
	1 vars	73.4	21.5	82.8	21.5	80.5	23.4	86.3	22.4	64.7	18.3	80.8	13.7	85.3	21.7	85.3	22.8	50.3	8.9	50.1	8.5
	2 vars	67.7	22.6	79.2	25.2	73.2	27.6	80.0	26.4	58.9	18.7	78.1	14.1	80.8	25.7	79.2	26.1	48.0	9.4	47.8	11.3
	3-4 vars	62.1	24.9	71.5	28.7	69.4	30.5	80.3	26.2	61.7	20.4	75.2	17.1	78.6	27.7	77.1	26.9	47.7	10.4	45.9	11.6
	5+ vars	53.8	27.0	61.5	31.6	61.4	27.9	58.7	31.6	45.4	22.3	60.8	20.8	63.8	25.8	69.8	27.3	37.4	13.8	44.5	12.1
Asian	NA	77.0	.	94.0	.	100.0	.	.	.	.	.	.	.	.	.	90.0	.	.	.	.	.
	0 vars	79.9	17.3	88.3	19.5	90.1	17.6	92.8	16.5	70.1	16.8	83.9	12.8	94.0	12.9	92.2	15.2	52.9	7.5	53.1	6.7
	1 vars	74.5	20.3	84.0	22.0	86.1	20.2	91.9	18.3	65.7	18.9	81.3	14.0	91.7	16.5	88.3	19.0	51.5	8.4	51.4	8.2
	2 vars	74.6	17.8	79.6	23.0	81.6	19.3	86.5	22.3	60.2	20.2	73.6	21.1	84.0	18.8	89.1	14.6	46.9	12.2	52.2	7.5
	3-4 vars	73.4	18.5	87.1	15.1	83.9	16.0	85.7	19.9	59.9	17.2	73.3	18.3	84.0	19.9	89.1	19.2	46.2	10.5	53.4	6.7
	5+ vars	45.5	27.5	63.8	29.2	62.5	32.3	50.0	20.4	34.4	12.0	67.5	15.0	58.3	15.2	63.8	39.0	36.2	10.1	42.1	15.2
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 360: Mean (SD) SF-36 score by NZiDep by legal marital status**

		SF36 (W3)																			
Marital Status (W1)	NZiDep Group (W3)	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NA:DK:REF	NA	76.7	23.3	85.8	18.0	78.1	24.9	81.3	24.7	69.8	15.0	80.8	11.1	80.6	26.2	94.2	10.2	49.3	9.6	52.3	6.4
	0 vars	84.0	14.9	88.1	17.8	91.0	16.3	93.4	15.4	71.3	17.5	83.4	12.4	94.7	13.2	97.3	8.9	52.8	7.5	54.6	5.3
	1 vars	79.4	16.6	89.1	15.6	89.0	18.6	88.0	21.6	65.9	20.0	78.7	15.2	89.4	20.2	96.8	8.2	49.0	10.4	55.0	5.1
	2 vars	74.3	22.7	77.6	26.5	79.8	26.5	80.8	26.8	60.1	16.0	73.1	18.5	82.1	30.6	93.5	10.3	45.6	13.0	52.5	7.9
	3-4 vars	76.2	21.5	87.5	18.2	89.4	17.3	81.3	22.3	67.2	18.5	75.0	19.1	85.1	18.4	96.7	8.9	46.8	12.2	55.2	3.9
	5+ vars	82.3	20.4	100.0	0.0	100.0	0.0	91.7	14.4	62.5	0.0	71.7	20.2	100.0	0.0	100.0	0.0	46.8	7.2	59.7	4.9
Never Married	NA	56.3	19.1	77.3	20.3	81.3	32.5	79.2	36.1	43.8	53.0	45.0	14.1	75.0	43.3	89.6	10.0	30.0	22.3	53.9	3.9
	0 vars	83.1	16.2	86.6	19.7	89.7	18.8	93.0	16.0	68.1	17.8	84.2	12.3	94.4	13.0	94.3	13.7	52.8	7.7	53.4	6.6
	1 vars	77.4	19.4	82.7	22.2	84.9	21.8	87.5	21.9	63.1	19.7	80.8	14.8	90.5	17.5	90.3	18.4	50.3	9.6	51.8	8.2
	2 vars	74.0	20.0	80.6	22.3	82.1	23.3	86.1	22.2	59.9	20.7	78.5	16.5	86.8	20.5	88.7	19.5	48.7	10.6	51.2	8.0
	3-4 vars	70.7	22.3	75.8	25.3	77.3	25.9	78.7	27.1	55.8	20.2	72.1	18.8	81.9	23.7	85.7	22.2	45.1	12.1	50.3	9.7
	5+ vars	64.2	22.8	70.7	26.0	69.4	29.4	65.5	35.1	47.3	22.0	67.1	20.1	68.3	28.8	81.9	24.2	39.7	13.9	48.9	10.2
Divorced Widowed Separated	NA	45.2	14.9	40.6	12.5	55.0	15.6	85.0	22.4	34.4	4.4	77.5	3.5	64.6	41.0	53.0	30.3	49.6	0.8	40.1	0.4
	0 vars	77.4	20.3	80.8	23.2	81.8	25.6	90.8	20.4	64.3	21.0	85.7	12.8	93.8	15.5	78.1	27.1	54.1	8.1	47.8	10.6
	1 vars	69.6	23.9	74.7	26.0	75.3	28.3	84.1	26.1	57.5	22.5	80.3	16.0	88.4	21.1	74.1	28.4	50.4	10.2	46.0	11.4
	2 vars	65.9	24.3	68.0	28.2	68.7	29.5	80.0	28.9	51.4	23.2	74.7	19.2	84.1	22.7	72.9	27.9	47.3	11.5	45.0	11.5
	3-4 vars	63.4	25.4	66.9	28.8	65.2	31.0	71.4	32.6	49.7	22.6	71.3	19.5	75.4	27.9	70.5	28.8	44.1	12.6	44.4	12.2
	5+ vars	52.6	27.3	60.5	29.1	60.0	27.6	60.9	33.3	40.8	24.3	60.2	24.6	67.4	27.9	66.3	28.0	37.3	15.4	43.4	12.1
Married	NA	57.8	17.4	71.3	44.6	62.5	53.0	70.8	31.5	68.8	.	100.0	.	50.0	.	55.0	48.2	57.2	.	29.6	.
	0 vars	80.8	18.6	83.2	21.9	86.4	22.2	93.0	17.5	67.0	18.9	86.0	12.1	94.8	13.6	86.8	20.6	54.1	7.5	50.6	8.8
	1 vars	72.8	22.2	77.6	24.9	78.8	25.8	87.8	22.5	60.1	20.3	81.2	14.9	89.6	18.7	81.5	24.5	50.9	9.0	48.3	10.3
	2 vars	71.2	23.3	76.4	26.0	76.2	27.0	83.7	24.8	55.4	20.2	77.5	16.4	85.9	20.8	81.5	23.7	48.2	10.0	48.5	10.3
	3-4 vars	65.9	24.2	73.6	26.7	73.2	27.4	80.2	27.2	55.0	21.1	74.2	17.4	81.9	24.4	78.9	25.4	46.5	11.2	47.5	10.7
	5+ vars	57.4	26.5	64.5	29.4	63.7	31.1	65.5	33.7	42.8	22.8	65.8	22.6	71.6	30.0	68.9	29.5	40.2	14.5	44.3	12.2
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 361: Mean (SD) SF-36 score by NZiDep by family structure**

		SF36 (W3)																			
Family Structure (W1)	NZiDep Group (W3)	GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Couple only	NA	56.0	29.7	85.0	21.0	71.9	39.8	37.5	0.0	6.3	.	35.0	.	25.0	.	59.6	51.6	14.3	.	51.1	.
	0 vars	79.1	19.8	81.7	22.6	84.1	24.1	92.4	18.1	66.7	19.7	86.4	12.1	94.4	14.1	83.6	23.0	54.4	7.5	49.3	9.6
	1 vars	69.0	23.1	73.1	26.6	74.1	28.1	84.7	25.2	58.1	20.8	80.6	15.4	87.7	20.7	76.7	26.7	50.4	9.6	46.1	11.0
	2 vars	66.6	24.6	69.7	28.6	71.7	29.9	81.3	27.4	51.3	22.9	74.9	18.7	82.9	23.3	75.6	28.2	46.8	11.4	46.1	11.6
	3-4 vars	62.7	24.6	69.4	26.7	71.2	27.8	77.5	27.7	54.6	22.6	73.5	19.2	80.3	25.8	74.2	27.3	46.2	11.7	45.5	11.1
	5+ vars	57.7	17.6	61.8	22.8	63.9	28.1	53.5	31.2	48.3	19.9	66.7	20.1	67.6	31.4	63.3	27.3	40.2	13.3	42.5	10.5
Couple with children	NA	57.4	17.8	63.5	28.7	59.4	26.7	76.8	21.0	66.3	13.7	75.0	17.7	61.1	26.7	81.7	19.1	45.9	8.9	46.6	11.6
	0 vars	83.6	16.0	86.2	19.9	90.0	18.2	93.6	16.1	68.3	17.7	85.0	12.3	94.9	12.9	93.5	13.4	53.3	7.6	53.2	6.6
	1 vars	76.7	19.9	82.6	21.9	84.1	22.4	88.5	21.1	62.3	19.8	81.0	14.9	90.6	17.5	89.1	18.7	50.5	9.2	51.4	8.5
	2 vars	74.2	21.5	79.7	23.2	80.7	23.9	85.0	23.1	57.4	19.7	78.1	16.0	86.9	20.1	87.1	19.6	48.2	10.1	50.7	8.8
	3-4 vars	69.8	23.3	75.8	25.9	75.6	26.6	81.5	26.2	55.3	20.8	74.0	17.7	83.9	22.4	83.8	23.1	46.4	11.4	49.4	10.1
	5+ vars	58.0	26.5	66.6	28.8	65.7	28.8	67.2	32.4	43.7	22.4	65.7	21.7	73.0	27.9	74.8	27.3	40.0	13.6	46.0	11.2
Sole parent	NA	85.3	11.6	94.0	8.5	98.4	3.1	100.0	0.0	79.2	9.5	88.3	5.8	100.0	0.0	95.0	10.0	56.5	2.2	55.8	0.9
	0 vars	80.3	19.2	84.8	22.0	87.0	22.0	91.1	19.6	67.2	19.4	83.9	13.1	93.5	15.8	89.3	20.8	52.8	8.3	51.8	8.8
	1 vars	76.6	20.5	82.4	23.1	84.3	22.5	87.2	23.2	62.7	19.8	81.3	14.2	90.2	18.8	87.5	21.2	50.5	9.7	51.1	9.1
	2 vars	73.5	20.7	78.5	25.1	79.0	25.1	87.0	22.0	59.6	20.5	79.1	16.1	86.9	20.7	85.3	21.4	49.4	10.0	49.7	9.2
	3-4 vars	68.6	23.3	75.5	26.0	75.0	27.9	75.3	29.1	55.5	21.4	72.2	19.3	78.6	25.8	82.2	24.8	44.6	12.6	49.3	10.6
	5+ vars	66.8	23.5	72.2	27.5	71.8	28.2	68.9	33.0	47.9	23.2	66.9	21.2	71.3	26.1	81.5	24.0	40.4	13.9	49.4	10.7
Not in a family nucleus	NA	43.8	16.2	38.0	12.7	54.7	18.0	87.5	25.0	34.4	4.4	77.5	3.5	75.0	43.3	53.8	35.0	49.6	0.8	40.1	0.4
	0 vars	78.3	19.3	81.9	22.4	83.1	24.7	91.4	19.0	64.5	20.1	85.3	12.3	94.3	14.1	80.8	26.3	53.8	7.7	48.8	10.1
	1 vars	71.5	23.3	75.8	25.5	77.3	27.1	86.1	24.3	59.3	22.2	80.5	15.9	89.5	19.3	76.8	28.1	50.8	9.9	47.0	11.1
	2 vars	66.2	23.0	71.7	26.6	71.4	29.2	80.2	28.4	54.8	23.2	75.2	19.0	84.6	22.3	76.2	27.6	47.5	11.6	46.3	10.9
	3-4 vars	65.3	24.5	67.2	28.4	68.1	29.9	73.3	31.8	50.4	20.5	70.0	18.7	77.1	27.0	74.5	28.1	43.9	12.0	45.8	11.9
	5+ vars	46.5	25.3	56.3	27.4	53.5	29.9	54.3	37.3	37.7	23.1	58.5	24.8	60.0	32.5	62.9	30.1	35.3	16.4	41.5	12.0
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

**Table 362: Mean (SD) SF-36 score by NZiDep by household structure**

		SF36 (W3)																			
		GH		BP		RP		SF		VT		MH		RE		PF		MCS		PCS	
Household Structure (W1)	NZiDep Group (W3)	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
One Family	NA	61.8	23.5	71.1	26.1	69.8	28.4	77.9	25.6	63.9	25.0	75.0	20.8	65.2	32.5	76.1	32.9	45.9	14.4	50.2	9.3
	0 vars	81.4	18.1	84.1	21.4	87.2	21.4	92.9	17.3	67.4	18.7	85.5	12.3	94.6	13.7	89.0	19.3	53.7	7.6	51.4	8.4
	1 vars	74.4	21.3	80.0	23.9	81.4	24.5	87.2	22.7	61.2	20.2	80.9	15.0	89.8	18.6	85.2	22.6	50.5	9.4	49.9	9.7
	2 vars	72.8	22.0	77.4	25.0	78.7	25.5	85.0	23.5	57.0	20.7	77.6	16.6	86.6	20.7	85.0	21.9	48.3	10.3	49.7	9.5
	3-4 vars	68.2	23.7	74.3	26.3	74.3	27.4	78.0	28.1	54.9	21.2	73.2	18.6	81.4	24.3	81.7	24.6	45.6	11.9	48.7	10.6
	5+ vars	63.3	24.3	69.5	27.8	69.1	28.4	67.2	32.7	46.1	22.6	66.3	21.0	71.1	27.4	77.6	26.0	40.1	13.6	47.7	10.9
Two or more families	NA	72.0	.	100.0	0.0	100.0	.	100.0	.	.	.	.	.	100.0	.	80.0	.	.	.	.	.
	0 vars	80.5	18.8	86.0	21.3	88.8	19.7	92.8	17.3	71.2	18.3	85.9	12.2	93.4	14.7	89.2	19.4	54.0	7.6	52.1	7.4
	1 vars	74.0	22.2	79.6	24.4	79.8	25.0	85.4	24.9	61.9	19.9	81.1	14.6	87.4	21.7	85.0	21.2	50.2	9.5	49.5	9.6
	2 vars	71.2	21.9	80.1	26.5	77.4	26.8	85.7	23.4	58.7	18.9	80.2	16.3	81.5	22.6	80.1	26.2	49.2	9.8	48.4	10.9
	3-4 vars	69.3	24.3	78.2	25.5	77.8	27.8	82.8	25.0	58.9	21.2	75.3	17.6	79.3	27.1	81.3	27.5	46.9	11.8	49.2	11.1
	5+ vars	54.7	29.0	63.1	31.3	66.0	29.3	64.1	37.3	47.7	23.3	66.9	24.6	76.0	24.9	74.1	31.6	41.1	16.2	44.7	14.1
Other multi-person household	NA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	0 vars	83.3	15.4	85.7	19.9	89.1	19.5	92.9	15.2	67.1	17.3	84.7	11.1	94.8	12.3	92.5	16.2	53.0	7.1	52.9	7.2
	1 vars	80.5	16.4	80.5	24.5	86.1	21.3	89.9	21.2	64.3	19.1	81.4	14.2	91.9	16.3	89.6	19.0	51.3	8.9	51.6	8.7
	2 vars	72.1	20.9	76.7	23.5	77.4	26.3	85.9	24.1	60.1	22.6	76.9	16.7	87.0	19.5	87.5	20.3	48.6	10.7	50.0	9.6
	3-4 vars	70.6	22.3	67.4	28.4	72.5	26.8	75.6	27.2	50.3	19.1	72.3	15.6	78.4	26.5	83.5	23.0	44.3	11.4	48.3	11.4
	5+ vars	59.6	22.1	72.0	23.4	76.1	25.4	69.3	30.3	38.6	20.3	60.5	20.3	65.2	31.8	74.1	21.5	36.4	14.1	49.3	10.7
One person household	NA	48.5	14.2	37.0	15.4	58.3	20.1	83.3	28.9	34.4	4.4	77.5	3.5	100.0	0.0	65.0	32.8	49.6	0.8	40.1	0.4
	0 vars	77.0	19.6	80.7	22.9	81.2	25.8	90.9	20.1	63.6	20.8	85.5	12.7	94.4	14.3	76.7	27.6	54.1	7.9	47.5	10.5
	1 vars	67.2	25.0	72.7	25.7	72.1	28.8	84.5	25.3	56.1	23.4	80.0	16.5	88.8	20.5	69.4	29.7	50.7	10.3	44.3	11.4
	2 vars	62.5	23.6	68.4	27.5	67.5	30.2	76.3	30.9	51.0	23.7	74.2	20.2	83.0	23.8	69.2	29.0	46.7	12.2	43.9	11.1
	3-4 vars	62.1	24.4	66.9	28.3	66.0	31.1	72.0	33.7	50.1	21.4	67.7	20.3	75.6	27.2	69.7	28.6	43.2	12.5	44.8	11.6
	5+ vars	43.7	24.9	53.5	26.4	48.2	29.0	51.2	37.5	37.6	24.1	58.0	25.8	59.1	33.0	60.9	30.4	35.1	17.0	39.9	11.6
<b>Total</b>	<b>Total</b>	<b>78.2</b>	<b>20.2</b>	<b>81.8</b>	<b>22.9</b>	<b>84.1</b>	<b>23.7</b>	<b>90.0</b>	<b>20.7</b>	<b>64.4</b>	<b>20.1</b>	<b>83.2</b>	<b>14.4</b>	<b>92.1</b>	<b>16.9</b>	<b>86.2</b>	<b>22.0</b>	<b>52.2</b>	<b>9.1</b>	<b>50.4</b>	<b>9.2</b>

## 12.4 The Association of NZiDep with Mental Distress (K-10)

Overall, the proportion of respondents reporting low levels of mental distress increased with decreasing number of deprivation variables. Typically, this was consistent across age groups, by sex, ethnicity, marital status, family and household structure. This was consequently reflected in declines in the proportion reporting moderate to high level of mental distress with increasing number of deprivation variables. There was a dramatic difference in the proportion of respondents reporting low mental distress between respondents reporting no deprivation variables and those reporting three or more.

**Table 363: K-10 groups by NZiDep, overall**

NZiDep Group (W3)	Kessler Groups (W3)											
	Low		Moderate		High		Very High		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
NA	10	14.3	.	.	10	14.3	.	.	60	85.7	70	100.0
0 vars	10850	83.4	1575	12.1	385	3.0	90	0.7	110	0.8	13010	100.0
1 vars	1945	70.0	555	20.0	205	7.4	45	1.6	30	1.1	2780	100.0
2 vars	655	59.8	265	24.2	120	11.0	45	4.1	15	1.4	1095	100.0
3-4 vars	475	49.2	250	25.9	160	16.6	75	7.8	10	1.0	965	100.0
5+ vars	95	32.8	70	24.1	70	24.1	50	17.2	10	3.4	290	100.0
<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 364: K-10 groups by NZiDep by age and sex**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	10	100.0	.	.	10	100.0	.	.	10	100.0	10	100.0
	0 vars	385	76.2	85	16.8	25	5.0	10	2.0	10	2.0	505	100.0
	1 vars	30	54.5	10	18.2	10	18.2	10	18.2	10	18.2	55	100.0
	2 vars	10	66.7	10	66.7	10	66.7	10	66.7	.	.	15	100.0
	3-4 vars	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	5+ vars	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
15-24	NA	.	.	.	.	10	100.0	.	.	10	100.0	10	100.0
	0 vars	1205	78.5	250	16.3	65	4.2	15	1.0	10	0.7	1535	100.0
	1 vars	355	67.0	125	23.6	40	7.5	10	1.9	10	1.9	530	100.0
	2 vars	130	59.1	45	20.5	30	13.6	10	4.5	10	4.5	220	100.0
	3-4 vars	85	44.7	60	31.6	35	18.4	15	7.9	.	.	190	100.0
	5+ vars	10	28.6	15	42.9	10	28.6	10	28.6	.	.	35	100.0
25-34	NA	.	.	.	.	10	100.0	.	.	10	100.0	10	100.0
	0 vars	1470	83.8	230	13.1	40	2.3	15	0.9	10	0.6	1755	100.0
	1 vars	350	69.3	105	20.8	30	5.9	10	2.0	10	2.0	505	100.0
	2 vars	150	65.2	50	21.7	20	8.7	10	4.3	10	4.3	230	100.0
	3-4 vars	125	52.1	55	22.9	40	16.7	15	6.3	10	4.2	240	100.0
	5+ vars	40	47.1	15	17.6	15	17.6	10	11.8	10	11.8	85	100.0
35-44	NA	.	.	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	2160	85.2	280	11.0	65	2.6	10	0.4	20	0.8	2535	100.0
	1 vars	440	71.5	115	18.7	45	7.3	10	1.6	10	1.6	615	100.0
	2 vars	175	63.6	70	25.5	20	7.3	15	5.5	10	3.6	275	100.0
	3-4 vars	125	52.1	60	25.0	40	16.7	15	6.3	10	4.2	240	100.0
	5+ vars	30	33.3	20	22.2	25	27.8	15	16.7	10	11.1	90	100.0
45-54	NA	10	100.0	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	2140	87.0	225	9.1	65	2.6	20	0.8	15	0.6	2460	100.0
	1 vars	305	75.3	65	16.0	25	6.2	10	2.5	10	2.5	405	100.0
	2 vars	75	48.4	45	29.0	20	12.9	10	6.5	10	6.5	155	100.0
	3-4 vars	65	43.3	35	23.3	30	20.0	15	10.0	10	6.7	150	100.0
	5+ vars	10	18.2	15	27.3	15	27.3	15	27.3	10	18.2	55	100.0
55-64	NA	10	66.7	.	.	.	.	.	.	15	100.0	15	100.0
	0 vars	1590	86.6	185	10.1	40	2.2	10	0.5	15	0.8	1835	100.0
	1 vars	280	72.7	65	16.9	30	7.8	10	2.6	10	2.6	385	100.0
	2 vars	75	60.0	30	24.0	10	8.0	10	8.0	10	8.0	125	100.0
	3-4 vars	65	56.5	25	21.7	15	13.0	10	8.7	10	8.7	115	100.0
	5+ vars	10	40.0	10	40.0	10	40.0	10	40.0	.	.	25	100.0
65+	NA	.	.	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	1910	80.3	320	13.4	90	3.8	15	0.6	45	1.9	2380	100.0
	1 vars	185	62.7	65	22.0	25	8.5	10	3.4	10	3.4	295	100.0
	2 vars	40	53.3	15	20.0	10	13.3	10	13.3	10	13.3	75	100.0
	3-4 vars	15	75.0	10	50.0	10	50.0	.	.	.	.	20	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	.	.	10	100.0
Male	NA	10	25.0	.	.	10	25.0	.	.	35	87.5	40	100.0
	0 vars	5435	84.7	735	11.5	165	2.6	30	0.5	55	0.9	6415	100.0
	1 vars	785	68.9	230	20.2	95	8.3	15	1.3	15	1.3	1140	100.0
	2 vars	235	59.5	95	24.1	45	11.4	15	3.8	10	2.5	395	100.0
	3-4 vars	165	53.2	65	21.0	60	19.4	15	4.8	10	3.2	310	100.0
	5+ vars	30	37.5	25	31.3	15	18.8	10	12.5	.	.	80	100.0
Female	NA	10	28.6	.	.	10	28.6	.	.	30	85.7	35	100.0
	0 vars	5420	82.2	835	12.7	215	3.3	60	0.9	55	0.8	6590	100.0

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
	1 vars	1165	70.8	325	19.8	110	6.7	30	1.8	15	0.9	1645	100.0
	2 vars	425	60.3	170	24.1	75	10.6	30	4.3	10	1.4	705	100.0
	3-4 vars	315	48.1	180	27.5	95	14.5	55	8.4	10	1.5	655	100.0
	5+ vars	70	32.6	50	23.3	55	25.6	40	18.6	10	4.7	215	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 365: K-10 groups by NZiDep by prioritised ethnicity**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Ethnicity (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	10	22.2	.	.	10	22.2	.	.	40	88.9	45	100.0
	0 vars	9125	84.1	1280	11.8	310	2.9	65	0.6	75	0.7	10855	100.0
	1 vars	1425	71.1	395	19.7	140	7.0	30	1.5	20	1.0	2005	100.0
	2 vars	455	60.3	180	23.8	75	9.9	40	5.3	10	1.3	755	100.0
	3-4 vars	310	51.7	150	25.0	100	16.7	45	7.5	10	1.7	600	100.0
	5+ vars	60	33.3	40	22.2	40	22.2	35	19.4	10	5.6	180	100.0
Māori	NA	10	100.0	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	915	83.2	135	12.3	30	2.7	10	0.9	15	1.4	1100	100.0
	1 vars	270	67.5	85	21.3	35	8.8	10	2.5	10	2.5	400	100.0
	2 vars	125	62.5	50	25.0	20	10.0	10	5.0	10	5.0	200	100.0
	3-4 vars	115	46.0	60	24.0	45	18.0	25	10.0	10	4.0	250	100.0
	5+ vars	35	41.2	20	23.5	25	29.4	10	11.8	10	11.8	85	100.0
Pacific	NA	10	100.0	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	300	74.1	70	17.3	20	4.9	10	2.5	15	3.7	405	100.0
	1 vars	125	64.1	45	23.1	20	10.3	10	5.1	10	5.1	195	100.0
	2 vars	50	55.6	20	22.2	15	16.7	10	11.1	10	11.1	90	100.0
	3-4 vars	40	47.1	20	23.5	15	17.6	10	11.8	10	11.8	85	100.0
	5+ vars	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	25	100.0
Asian	NA	.	.	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	505	78.9	85	13.3	25	3.9	10	1.6	10	1.6	640	100.0
	1 vars	125	69.4	35	19.4	15	8.3	10	5.6	10	5.6	180	100.0
	2 vars	25	50.0	15	30.0	10	20.0	10	20.0	10	20.0	50	100.0
	3-4 vars	15	42.9	20	57.1	10	28.6	10	28.6	.	.	35	100.0
	5+ vars	.	.	10	100.0	10	100.0	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>



**Table 366: K-10 groups by NZiDep by legal marital status**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Marital Status (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	10	100.0	.	.	10	100.0	.	.	10	100.0	10	100.0
	0 vars	390	76.5	85	16.7	30	5.9	10	2.0	10	2.0	510	100.0
	1 vars	30	54.5	15	27.3	10	18.2	10	18.2	10	18.2	55	100.0
	2 vars	10	100.0	10	100.0	10	100.0	10	100.0	.	.	10	100.0
	3-4 vars	10	66.7	10	66.7	10	66.7	.	.	.	.	15	100.0
	5+ vars	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0
Never Married	NA	.	.	.	.	10	50.0	.	.	15	75.0	20	100.0
	0 vars	2540	81.8	435	14.0	95	3.1	20	0.6	15	0.5	3105	100.0
	1 vars	700	68.0	215	20.9	80	7.8	20	1.9	10	1.0	1030	100.0
	2 vars	270	60.0	105	23.3	55	12.2	15	3.3	10	2.2	450	100.0
	3-4 vars	210	46.2	120	26.4	80	17.6	35	7.7	10	2.2	455	100.0
	5+ vars	45	33.3	35	25.9	25	18.5	20	14.8	10	7.4	135	100.0
Divorced Widowed Separated	NA	10	100.0	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	1555	83.2	225	12.0	65	3.5	15	0.8	20	1.1	1870	100.0
	1 vars	385	71.3	105	19.4	40	7.4	10	1.9	10	1.9	540	100.0
	2 vars	130	54.2	65	27.1	25	10.4	15	6.3	10	4.2	240	100.0
	3-4 vars	115	48.9	60	25.5	45	19.1	20	8.5	10	4.3	235	100.0
	5+ vars	25	26.3	25	26.3	25	26.3	15	15.8	10	10.5	95	100.0
Married	NA	10	28.6	.	.	.	.	.	.	30	85.7	35	100.0
	0 vars	6365	84.6	830	11.0	195	2.6	50	0.7	75	1.0	7525	100.0
	1 vars	830	71.6	220	19.0	85	7.3	15	1.3	15	1.3	1160	100.0
	2 vars	240	60.8	90	22.8	40	10.1	15	3.8	10	2.5	395	100.0
	3-4 vars	145	55.8	65	25.0	35	13.5	15	5.8	10	3.8	260	100.0
	5+ vars	25	41.7	10	16.7	15	25.0	10	16.7	10	16.7	60	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.0</b>	<b>2710</b>	<b>14.9</b>	<b>940</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18220</b>	<b>100.0</b>

**Table 367: K-10 groups by NZiDep by family structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Family Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	0 vars	3785	83.6	535	11.8	135	3.0	25	0.6	45	1.0	4530	100.0
	1 vars	400	67.8	115	19.5	55	9.3	10	1.7	10	1.7	590	100.0
	2 vars	85	54.8	35	22.6	15	9.7	10	6.5	10	6.5	155	100.0
	3-4 vars	55	52.4	25	23.8	20	19.0	10	9.5	10	9.5	105	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	10	66.7	.	.	15	100.0
	NA	.	.	.	.	.	50.0	.	.	.	75.0	.	20
Couple with children	0 vars	4750	84.0	655	11.6	165	2.9	40	0.7	45	0.8	5655	100.0
	1 vars	825	70.5	245	20.9	80	6.8	15	1.3	15	1.3	1170	100.0
	2 vars	270	58.7	115	25.0	55	12.0	15	3.3	10	2.2	460	100.0
	3-4 vars	180	52.2	95	27.5	45	13.0	20	5.8	10	2.9	345	100.0
	5+ vars	35	41.2	15	17.6	20	23.5	10	11.8	10	11.8	85	100.0
	NA	10	28.6	.	.	10	28.6	.	.	35	100.0	35	100.0
Sole parent	0 vars	580	79.5	115	15.8	25	3.4	10	1.4	10	1.4	730	100.0
	1 vars	305	70.9	75	17.4	30	7.0	15	3.5	10	2.3	430	100.0
	2 vars	150	62.5	55	22.9	20	8.3	10	4.2	10	4.2	240	100.0
	3-4 vars	145	47.5	75	24.6	55	18.0	25	8.2	10	3.3	305	100.0
	5+ vars	45	36.0	35	28.0	25	20.0	15	12.0	10	8.0	125	100.0
	NA	10	100.0	.	.	.	.	.	.	10	100.0	10	100.0
Not in a family nucleus	0 vars	1735	83.0	260	12.4	65	3.1	10	0.5	25	1.2	2090	100.0
	1 vars	415	70.3	115	19.5	40	6.8	10	1.7	10	1.7	590	100.0
	2 vars	140	57.1	60	24.5	25	10.2	15	6.1	10	4.1	245	100.0
	3-4 vars	95	45.2	55	26.2	40	19.0	15	7.1	10	4.8	210	100.0
	5+ vars	15	23.1	15	23.1	15	23.1	20	30.8	.	.	65	100.0
	NA	10	100.0	.	.	.	.	.	.	10	100.0	10	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>230</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

**Table 368: K-10 groups by NZiDep by household structure**

		Kessler Groups (W3)											
		Low		Moderate		High		Very High		NA:DK:REF		Total	
Household Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	10	16.7	.	.	10	16.7	.	.	55	91.7	60	100.0
	0 vars	8990	83.6	1290	12.0	320	3.0	75	0.7	85	0.8	10755	100.0
	1 vars	1475	69.9	425	20.1	155	7.3	30	1.4	25	1.2	2110	100.0
	2 vars	490	59.8	200	24.4	85	10.4	30	3.7	10	1.2	820	100.0
	3-4 vars	360	50.3	180	25.2	115	16.1	50	7.0	10	1.4	715	100.0
	5+ vars	80	37.2	55	25.6	50	23.3	30	14.0	10	4.7	215	100.0
Two or more families	NA	.	.	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	265	77.9	45	13.2	10	2.9	10	2.9	10	2.9	340	100.0
	1 vars	85	63.0	30	22.2	10	7.4	10	7.4	10	7.4	135	100.0
	2 vars	30	50.0	15	25.0	10	16.7	10	16.7	10	16.7	60	100.0
	3-4 vars	30	54.5	15	27.3	10	18.2	10	18.2	10	18.2	55	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	10	66.7	10	66.7	15	100.0
Other multi-person household	NA	.	.	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	400	83.3	65	13.5	15	3.1	10	2.1	10	2.1	480	100.0
	1 vars	145	72.5	35	17.5	15	7.5	10	5.0	.	.	200	100.0
	2 vars	40	57.1	25	35.7	10	14.3	10	14.3	10	14.3	70	100.0
	3-4 vars	30	50.0	20	33.3	10	16.7	10	16.7	10	16.7	60	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	10	66.7	.	.	15	100.0
One person household	NA	10	100.0	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	1195	83.3	170	11.8	40	2.8	10	0.7	15	1.0	1435	100.0
	1 vars	235	70.1	70	20.9	20	6.0	10	3.0	10	3.0	335	100.0
	2 vars	85	56.7	30	20.0	20	13.3	15	10.0	10	6.7	150	100.0
	3-4 vars	55	44.0	30	24.0	30	24.0	10	8.0	10	8.0	125	100.0
	5+ vars	10	20.0	15	30.0	15	30.0	15	30.0	.	.	50	100.0
<b>Total</b>	<b>Total</b>	<b>14035</b>	<b>77.1</b>	<b>2710</b>	<b>14.9</b>	<b>945</b>	<b>5.2</b>	<b>300</b>	<b>1.6</b>	<b>235</b>	<b>1.3</b>	<b>18215</b>	<b>100.0</b>

### **12.5 The Association of NZiDep with Perceived Stress**

Overall the proportion of respondents reporting that they felt in control most or all of the time increased with decreasing number of individual deprivation variables. Similar trends were observed for the other perceived stress questions. Further tables of perceived stress by NZ individual deprivation index by other demographic variables are not presented in this report, due to small cell counts.

**Table 369: Perceived stress by NZiDep, overall**

NZiDep Group (W3)	Unable to control important things (W3)													
	All of the time		Most of the time		Some of the time		A little of the time		None of the time		NA:DK:REF		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	10	14.3	.	.	10	14.3	10	14.3	10	14.3	70	100.0	70	100.0
0 vars	170	1.3	305	2.3	1055	8.1	2485	19.1	8920	68.6	75	0.6	13010	100.0
1 vars	55	2.0	140	5.0	360	12.9	700	25.2	1505	54.1	25	0.9	2780	100.0
2 vars	30	2.7	90	8.2	180	16.4	300	27.4	490	44.7	10	0.9	1095	100.0
3-4 vars	40	4.1	90	9.3	240	24.9	275	28.5	320	33.2	10	1.0	965	100.0
5+ vars	20	6.8	55	18.6	85	28.8	60	20.3	70	23.7	10	3.4	295	100.0
<b>Total</b>	<b>310</b>	<b>1.7</b>	<b>685</b>	<b>3.8</b>	<b>1920</b>	<b>10.5</b>	<b>3820</b>	<b>21.0</b>	<b>11305</b>	<b>62.1</b>	<b>185</b>	<b>1.0</b>	<b>18215</b>	<b>100.0</b>
	Unable to overcome difficulties (W3)													
NA	.	.	.	.	.	.	10	14.3	10	14.3	65	92.9	70	100.0
0 vars	60	0.5	115	0.9	720	5.5	1950	15.0	10105	77.7	60	0.5	13010	100.0
1 vars	20	0.7	55	2.0	300	10.8	580	20.9	1795	64.6	30	1.1	2780	100.0
2 vars	15	1.4	45	4.1	160	14.6	285	26.0	580	53.0	10	0.9	1095	100.0
3-4 vars	15	1.6	75	7.8	200	20.7	270	28.0	400	41.5	10	1.0	965	100.0
5+ vars	10	3.4	35	11.9	85	28.8	85	28.8	75	25.4	10	3.4	295	100.0
<b>Total</b>	<b>120</b>	<b>0.7</b>	<b>335</b>	<b>1.8</b>	<b>1465</b>	<b>8.0</b>	<b>3175</b>	<b>17.4</b>	<b>12950</b>	<b>71.1</b>	<b>170</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
	Confident in handling problems (W3)													
NA	10	14.3	10	14.3	10	14.3	10	14.3	.	.	65	92.9	70	100.0
0 vars	5345	41.1	6090	46.8	845	6.5	410	3.2	260	2.0	65	0.5	13010	100.0
1 vars	860	30.9	1340	48.2	345	12.4	155	5.6	60	2.2	20	0.7	2780	100.0
2 vars	285	26.0	525	47.9	165	15.1	85	7.8	30	2.7	10	0.9	1095	100.0
3-4 vars	195	20.2	435	45.1	185	19.2	115	11.9	35	3.6	10	1.0	965	100.0
5+ vars	40	13.6	125	42.4	70	23.7	35	11.9	20	6.8	10	3.4	295	100.0
<b>Total</b>	<b>6715</b>	<b>36.9</b>	<b>8515</b>	<b>46.7</b>	<b>1610</b>	<b>8.8</b>	<b>810</b>	<b>4.4</b>	<b>395</b>	<b>2.2</b>	<b>165</b>	<b>0.9</b>	<b>18215</b>	<b>100.0</b>
	Felt things were going your way (W3)													
NA	.	.	10	14.3	10	14.3	.	.	.	.	65	92.9	70	100.0
0 vars	1580	12.1	7705	59.2	2765	21.3	655	5.0	220	1.7	90	0.7	13010	100.0
1 vars	235	8.5	1325	47.7	845	30.4	275	9.9	75	2.7	30	1.1	2780	100.0
2 vars	65	5.9	455	41.6	365	33.3	145	13.2	55	5.0	15	1.4	1095	100.0
3-4 vars	55	5.7	310	32.1	355	36.8	165	17.1	75	7.8	10	1.0	965	100.0
5+ vars	10	3.4	85	28.8	100	33.9	60	20.3	40	13.6	10	3.4	295	100.0
<b>Total</b>	<b>1940</b>	<b>10.7</b>	<b>9885</b>	<b>54.3</b>	<b>4425</b>	<b>24.3</b>	<b>1285</b>	<b>7.1</b>	<b>465</b>	<b>2.6</b>	<b>210</b>	<b>1.2</b>	<b>18215</b>	<b>100.0</b>

## 12.6 The Association of NZiDep with Chronic Diseases

Overall, there were higher proportions of respondents reporting chronic diseases with more deprivation variables. However, there were high proportions of respondents with no deprivation variables reporting high blood pressure or cholesterol. Consequently, over 14% of respondents with three or more deprivation variables had more than two comorbid diseases. Over 40% of the respondents with five or more deprivation variables reported they had asthma. This relationship was consistent across the age groups and by ethnicity.

**Table 370: Chronic diseases by NZiDep, overall**

NZiDep Group (W3)	Chronic Diseases (W3)																	
	Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	10	14.3	10	14.3	10	14.3	10	14.3	.	.	10	14.3	10	14.3	.	.	70	100.0
0 vars	2210	17.0	2865	22.0	2350	18.1	820	6.3	285	2.2	495	3.8	1510	11.6	820	6.3	13010	100.0
1 vars	555	19.9	605	21.7	415	14.9	195	7.0	90	3.2	140	5.0	425	15.3	325	11.7	2785	100.0
2 vars	255	23.3	235	21.5	180	16.4	60	5.5	35	3.2	65	5.9	185	16.9	180	16.4	1095	100.0
3-4 vars	275	28.5	195	20.2	145	15.0	65	6.7	30	3.1	70	7.3	220	22.8	225	23.3	965	100.0
5+ vars	120	40.7	85	28.8	55	18.6	20	6.8	15	5.1	30	10.2	80	27.1	120	40.7	295	100.0
<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 371: Number of comorbid disease by NZiDep, overall**

NZiDep Group (W3)	Comorbidity Index (W3)									
	No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA	10	14.3	10	14.3	10	14.3	50	71.4	70	100.0
0 vars	6145	47.2	5760	44.3	1095	8.4	10	0.1	13010	100.0
1 vars	1245	44.7	1220	43.8	315	11.3	.	.	2785	100.0
2 vars	445	40.6	500	45.7	145	13.2	10	0.9	1095	100.0
3-4 vars	335	34.7	470	48.7	160	16.6	.	.	965	100.0
5+ vars	65	22.0	145	49.2	85	28.8	.	.	295	100.0
<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 372: Chronic diseases by NZiDep by age and sex**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	105	20.8	10	2.0	.	.	10	2.0	.	.	10	2.0	35	6.9	10	2.0	505	100.0
	1 vars	15	30.0	10	20.0	10	20.0	10	20.0	.	.	.	.	10	20.0	10	20.0	50	100.0
	2 vars	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	10	100.0	10	100.0
	3-4 vars	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	10	100.0	10	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10
15-24	NA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
	0 vars	385	25.1	40	2.6	20	1.3	10	0.7	10	0.7	10	0.7	140	9.1	70	4.6	1535	100.0
	1 vars	145	27.4	30	5.7	10	1.9	10	1.9	10	1.9	10	1.9	55	10.4	40	7.5	530	100.0
	2 vars	70	31.8	10	4.5	10	4.5	.	.	10	4.5	10	4.5	30	13.6	30	13.6	220	100.0
	3-4 vars	60	32.4	15	8.1	10	5.4	10	5.4	.	.	10	5.4	35	18.9	30	16.2	185	100.0
	5+ vars	10	28.6	10	28.6	.	.	.	.	.	.	10	28.6	10	28.6	15	42.9	35	100.0
25-34	NA	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	380	21.6	145	8.2	120	6.8	15	0.9	10	0.6	15	0.9	220	12.5	120	6.8	1760	100.0
	1 vars	100	19.8	45	8.9	30	5.9	10	2.0	10	2.0	10	2.0	80	15.8	55	10.9	505	100.0
	2 vars	55	23.9	45	19.6	10	4.3	10	4.3	.	.	.	.	40	17.4	35	15.2	230	100.0
	3-4 vars	70	29.2	25	10.4	15	6.3	10	4.2	10	4.2	10	4.2	55	22.9	50	20.8	240	100.0
	5+ vars	40	47.1	10	11.8	10	11.8	10	11.8	10	11.8	10	11.8	30	35.3	40	47.1	85	100.0
35-44	NA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
	0 vars	425	16.8	310	12.2	320	12.6	25	1.0	10	0.4	40	1.6	340	13.4	175	6.9	2535	100.0
	1 vars	110	17.9	90	14.6	70	11.4	15	2.4	10	1.6	15	2.4	110	17.9	95	15.4	615	100.0
	2 vars	60	21.8	40	14.5	35	12.7	10	3.6	10	3.6	10	3.6	45	16.4	45	16.4	275	100.0
	3-4 vars	55	22.9	45	18.8	35	14.6	15	6.3	10	4.2	15	6.3	60	25.0	65	27.1	240	100.0
	5+ vars	35	38.9	35	38.9	15	16.7	10	11.1	10	11.1	10	11.1	30	33.3	35	38.9	90	100.0
45-54	NA	10	100.0	10	100.0	.	.	.	.	.	.	10	100.0	.	.	.	.	10	100.0
	0 vars	355	14.4	530	21.5	560	22.8	80	3.3	20	0.8	90	3.7	320	13.0	190	7.7	2460	100.0
	1 vars	60	14.8	105	25.9	85	21.0	20	4.9	10	2.5	20	4.9	80	19.8	50	12.3	405	100.0
	2 vars	30	19.4	50	32.3	45	29.0	10	6.5	10	6.5	15	9.7	40	25.8	35	22.6	155	100.0
	3-4 vars	45	30.0	60	40.0	40	26.7	10	6.7	10	6.7	25	16.7	35	23.3	45	30.0	150	100.0
	5+ vars	25	45.5	25	45.5	15	27.3	10	18.2	10	18.2	10	18.2	15	27.3	20	36.4	55	100.0
55-64	NA	10	66.7	10	66.7	10	66.7	10	66.7	.	.	10	66.7	10	66.7	.	.	15	100.0
	0 vars	255	13.9	640	34.9	545	29.7	170	9.3	35	1.9	125	6.8	210	11.4	130	7.1	1835	100.0

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	1 vars	75	19.2	165	42.3	130	33.3	65	16.7	20	5.1	45	11.5	45	11.5	50	12.8	390	100.0
	2 vars	30	23.1	55	42.3	50	38.5	20	15.4	10	7.7	30	23.1	20	15.4	30	23.1	130	100.0
	3-4 vars	30	25.0	45	37.5	35	29.2	20	16.7	10	8.3	15	12.5	30	25.0	25	20.8	120	100.0
	5+ vars	10	40.0	15	60.0	15	60.0	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	25	100.0
65+	NA	10	100.0	.	.	10	100.0	.	.	.	.	10	100.0	.	.	.	.	10	100.0
	0 vars	300	12.6	1200	50.4	785	33.0	530	22.3	220	9.2	225	9.5	245	10.3	130	5.5	2380	100.0
	1 vars	60	20.3	165	55.9	95	32.2	90	30.5	50	16.9	45	15.3	45	15.3	30	10.2	295	100.0
	2 vars	15	21.4	40	57.1	25	35.7	25	35.7	10	14.3	10	14.3	15	21.4	10	14.3	70	100.0
	3-4 vars	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	10	40.0	25	100.0
	5+ vars	.	.	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
Male	NA	10	25.0	10	25.0	10	25.0	.	.	.	.	10	25.0	10	25.0	.	.	40	100.0
	0 vars	1000	15.6	1335	20.8	1300	20.2	475	7.4	140	2.2	275	4.3	420	6.5	280	4.4	6420	100.0
	1 vars	200	17.6	230	20.3	175	15.4	90	7.9	35	3.1	60	5.3	115	10.1	95	8.4	1135	100.0
	2 vars	80	20.3	95	24.1	65	16.5	30	7.6	15	3.8	30	7.6	45	11.4	50	12.7	395	100.0
	3-4 vars	75	24.2	65	21.0	55	17.7	30	9.7	15	4.8	35	11.3	55	17.7	65	21.0	310	100.0
	5+ vars	25	31.3	30	37.5	25	31.3	10	12.5	10	12.5	10	12.5	15	18.8	25	31.3	80	100.0
Female	NA	10	28.6	10	28.6	10	28.6	10	28.6	.	.	10	28.6	10	28.6	.	.	35	100.0
	0 vars	1205	18.3	1530	23.2	1050	15.9	345	5.2	140	2.1	225	3.4	1090	16.5	540	8.2	6590	100.0
	1 vars	355	21.6	375	22.8	245	14.9	100	6.1	50	3.0	80	4.9	310	18.8	235	14.3	1645	100.0
	2 vars	180	25.5	145	20.6	110	15.6	35	5.0	20	2.8	40	5.7	140	19.9	140	19.9	705	100.0
	3-4 vars	195	29.8	130	19.8	90	13.7	35	5.3	15	2.3	35	5.3	170	26.0	160	24.4	655	100.0
	5+ vars	100	46.5	60	27.9	35	16.3	10	4.7	10	4.7	20	9.3	70	32.6	95	44.2	215	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>805</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 373: Number of comorbid disease by NZiDep by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
0-14	NA	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	360	71.3	140	27.7	10	2.0	.	.	505	100.0
	1 vars	30	60.0	15	30.0	10	20.0	.	.	50	100.0
	2 vars	10	100.0	10	100.0	.	.	.	.	10	100.0
	3-4 vars	10	100.0	10	100.0	.	.	.	.	10	100.0
	5+ vars	10	100.0	10	100.0	.	.	.	.	10	100.0
	15-24	NA	10	100.0	.	.	.	.	10	100.0	10
0 vars	995	64.8	530	34.5	15	1.0	.	.	1535	100.0	
1 vars	310	58.5	205	38.7	15	2.8	.	.	530	100.0	
2 vars	110	50.0	95	43.2	10	4.5	.	.	220	100.0	
3-4 vars	80	43.2	95	51.4	10	5.4	.	.	185	100.0	
5+ vars	10	28.6	15	42.9	10	28.6	.	.	35	100.0	
25-34	NA	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	1045	59.4	645	36.6	65	3.7	.	.	1760	100.0
	1 vars	280	55.4	205	40.6	20	4.0	.	.	505	100.0
	2 vars	110	47.8	110	47.8	10	4.3	.	.	230	100.0
	3-4 vars	95	39.6	125	52.1	20	8.3	.	.	240	100.0
	5+ vars	20	23.5	45	52.9	20	23.5	.	.	85	100.0
	35-44	NA	10	100.0	.	.	.	.	15	150.0	10
0 vars		1415	55.8	1020	40.2	100	3.9	.	.	2535	100.0
1 vars		300	48.8	270	43.9	45	7.3	.	.	615	100.0
2 vars		135	49.1	110	40.0	25	9.1	.	.	275	100.0
3-4 vars		90	37.5	110	45.8	40	16.7	.	.	240	100.0
5+ vars		25	27.8	40	44.4	25	27.8	.	.	90	100.0
45-54		NA	10	100.0	.	.	10	100.0	10	100.0	10
	0 vars	1085	44.1	1210	49.2	165	6.7	.	.	2460	100.0
	1 vars	160	39.5	195	48.1	50	12.3	.	.	405	100.0
	2 vars	45	29.0	75	48.4	40	25.8	.	.	155	100.0
	3-4 vars	30	20.0	70	46.7	50	33.3	.	.	150	100.0
	5+ vars	10	18.2	25	45.5	20	36.4	.	.	55	100.0
	55-64	NA	10	66.7	10	66.7	10	66.7	10	66.7	15
0 vars		650	35.4	955	52.0	235	12.8	.	.	1835	100.0



		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
	1 vars	115	29.5	180	46.2	95	24.4	.	.	390	100.0
	2 vars	25	19.2	60	46.2	40	30.8	10	7.7	130	100.0
	3-4 vars	30	25.0	50	41.7	35	29.2	.	.	120	100.0
	5+ vars	10	40.0	15	60.0	10	40.0	.	.	25	100.0
65+	NA	10	100.0	.	.	10	100.0	10	100.0	10	100.0
	0 vars	595	25.0	1265	53.2	520	21.8	10	0.4	2380	100.0
	1 vars	45	15.3	155	52.5	95	32.2	.	.	295	100.0
	2 vars	10	14.3	40	57.1	25	35.7	.	.	70	100.0
	3-4 vars	10	40.0	15	60.0	10	40.0	.	.	25	100.0
	5+ vars	.	.	10	100.0	.	.	.	.	10	100.0
Male	NA	10	25.0	10	25.0	10	25.0	25	62.5	40	100.0
	0 vars	3205	49.9	2725	42.4	485	7.6	10	0.2	6420	100.0
	1 vars	565	49.8	470	41.4	105	9.3	.	.	1135	100.0
	2 vars	175	44.3	170	43.0	50	12.7	10	2.5	395	100.0
	3-4 vars	105	33.9	145	46.8	55	17.7	.	.	310	100.0
	5+ vars	20	25.0	35	43.8	20	25.0	.	.	80	100.0
Female	NA	10	28.6	10	28.6	.	.	25	71.4	35	100.0
	0 vars	2935	44.5	3040	46.1	610	9.3	10	0.2	6590	100.0
	1 vars	675	41.0	755	45.9	210	12.8	.	.	1645	100.0
	2 vars	275	39.0	330	46.8	95	13.5	.	.	705	100.0
	3-4 vars	225	34.4	325	49.6	105	16.0	.	.	655	100.0
	5+ vars	40	18.6	110	51.2	65	30.2	.	.	215	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 374: Chronic diseases by NZiDep by prioritised ethnicity**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Ethnicity (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	10	20.0	10	20.0	10	20.0	10	20.0	.	.	10	20.0	10	20.0	.	.	50	100.0
	0 vars	1840	16.9	2550	23.5	2105	19.4	760	7.0	270	2.5	410	3.8	1350	12.4	760	7.0	10860	100.0
	1 vars	410	20.4	460	22.9	330	16.4	155	7.7	70	3.5	90	4.5	345	17.2	275	13.7	2010	100.0
	2 vars	175	23.2	165	21.9	125	16.6	45	6.0	20	2.6	35	4.6	145	19.2	155	20.5	755	100.0
	3-4 vars	180	30.0	115	19.2	95	15.8	40	6.7	20	3.3	30	5.0	150	25.0	175	29.2	600	100.0
	5+ vars	75	41.7	40	22.2	30	16.7	10	5.6	10	5.6	10	5.6	55	30.6	90	50.0	180	100.0
Māori	NA	.	.	10	100.0	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	260	23.6	210	19.1	150	13.6	40	3.6	15	1.4	45	4.1	110	10.0	40	3.6	1100	100.0
	1 vars	100	24.7	80	19.8	45	11.1	20	4.9	15	3.7	25	6.2	50	12.3	30	7.4	405	100.0
	2 vars	55	27.5	45	22.5	30	15.0	10	5.0	10	5.0	10	5.0	30	15.0	15	7.5	200	100.0
	3-4 vars	70	28.6	65	26.5	35	14.3	20	8.2	10	4.1	25	10.2	60	24.5	35	14.3	245	100.0
	5+ vars	35	41.2	25	29.4	15	17.6	10	11.8	10	11.8	10	11.8	25	29.4	25	29.4	85	100.0
Pacific	NA	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0	10	100.0	.	.	10	100.0
	0 vars	45	11.1	50	12.3	35	8.6	10	2.5	10	2.5	25	6.2	20	4.9	10	2.5	405	100.0
	1 vars	25	12.8	35	17.9	20	10.3	10	5.1	10	5.1	15	7.7	20	10.3	10	5.1	195	100.0
	2 vars	15	16.7	25	27.8	15	16.7	10	11.1	10	11.1	15	16.7	10	11.1	10	11.1	90	100.0
	3-4 vars	15	17.6	15	17.6	10	11.8	15	17.6	10	11.8	10	11.8	10	11.8	10	11.8	85	100.0
	5+ vars	10	50.0	15	75.0	10	50.0	10	50.0	10	50.0	10	50.0	10	50.0	10	50.0	20	100.0
Asian	NA	10	100.0	.	.	10	100.0	.	.	.	.	10	100.0	.	.	.	.	10	100.0
	0 vars	70	10.9	50	7.8	65	10.2	10	1.6	10	1.6	20	3.1	35	5.5	10	1.6	640	100.0
	1 vars	15	8.1	30	16.2	20	10.8	10	5.4	10	5.4	10	5.4	10	5.4	10	5.4	185	100.0
	2 vars	10	20.0	10	20.0	10	20.0	10	20.0	.	.	10	20.0	10	20.0	10	20.0	50	100.0
	3-4 vars	10	28.6	10	28.6	10	28.6	.	.	.	.	10	28.6	10	28.6	10	28.6	35	100.0
	5+ vars	10	100.0	10	100.0	10	100.0	10	100.0	.	.	10	100.0	.	.	10	100.0	10	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1675</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 375: Number of comorbid disease by NZiDep by age and sex**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Ethnicity (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	10	20.0	10	20.0	.	.	35	70.0	50	100.0
	0 vars	4865	44.8	5000	46.0	995	9.2	.	.	10860	100.0
	1 vars	820	40.8	935	46.5	250	12.4	.	.	2010	100.0
	2 vars	285	37.7	365	48.3	105	13.9	10	1.3	755	100.0
	3-4 vars	185	30.8	310	51.7	105	17.5	.	.	600	100.0
	5+ vars	40	22.2	85	47.2	55	30.6	.	.	180	100.0
Māori	NA	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	550	50.0	480	43.6	75	6.8	10	0.9	1100	100.0
	1 vars	185	45.7	175	43.2	40	9.9	.	.	405	100.0
	2 vars	95	47.5	80	40.0	25	12.5	.	.	200	100.0
	3-4 vars	85	34.7	120	49.0	45	18.4	.	.	245	100.0
	5+ vars	20	23.5	45	52.9	15	17.6	.	.	85	100.0
Pacific	NA	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0
	0 vars	275	67.9	115	28.4	15	3.7	10	2.5	405	100.0
	1 vars	115	59.0	65	33.3	15	7.7	.	.	195	100.0
	2 vars	35	38.9	40	44.4	15	16.7	.	.	90	100.0
	3-4 vars	40	47.1	35	41.2	10	11.8	.	.	85	100.0
	5+ vars	10	50.0	10	50.0	10	50.0	.	.	20	100.0
Asian	NA	.	.	.	.	10	100.0	10	100.0	10	100.0
	0 vars	455	71.1	165	25.8	15	2.3	.	.	640	100.0
	1 vars	120	64.9	50	27.0	10	5.4	.	.	185	100.0
	2 vars	25	50.0	20	40.0	10	20.0	.	.	50	100.0
	3-4 vars	20	57.1	10	28.6	10	28.6	.	.	35	100.0
	5+ vars	.	.	10	100.0	10	100.0	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8105</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 376: Chronic diseases by NZiDep by legal marital status**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Marital Status (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	110	21.8	10	2.0	10	2.0	10	2.0	.	.	10	2.0	35	6.9	10	2.0	505	100.0
	1 vars	10	20.0	10	20.0	10	20.0	10	20.0	.	.	.	.	10	20.0	10	20.0	50	100.0
	2 vars	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	10	100.0	10	100.0
	3-4 vars	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	10	100.0	10	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10
Never Married	NA	.	.	.	.	.	.	.	.	.	.	.	.	10	50.0	.	.	20	100.0
	0 vars	700	22.5	255	8.2	220	7.1	35	1.1	20	0.6	40	1.3	320	10.3	180	5.8	3105	100.0
	1 vars	240	23.3	115	11.2	65	6.3	15	1.5	10	1.0	25	2.4	135	13.1	120	11.7	1030	100.0
	2 vars	115	25.8	65	14.6	30	6.7	10	2.2	10	2.2	10	2.2	55	12.4	70	15.7	445	100.0
	3-4 vars	130	28.9	60	13.3	30	6.7	15	3.3	10	2.2	15	3.3	90	20.0	100	22.2	450	100.0
	5+ vars	50	37.0	30	22.2	15	11.1	10	7.4	10	7.4	10	7.4	40	29.6	55	40.7	135	100.0
Divorced Widowed Separated	NA	10	66.7	10	66.7	10	66.7	10	66.7	.	.	10	66.7	.	.	.	.	15	100.0
	0 vars	290	15.5	675	36.1	445	23.8	215	11.5	90	4.8	100	5.3	240	12.8	135	7.2	1870	100.0
	1 vars	105	19.4	200	37.0	130	24.1	75	13.9	30	5.6	40	7.4	100	18.5	85	15.7	540	100.0
	2 vars	55	22.9	70	29.2	55	22.9	30	12.5	10	4.2	20	8.3	50	20.8	60	25.0	240	100.0
	3-4 vars	70	29.2	75	31.3	60	25.0	25	10.4	10	4.2	20	8.3	75	31.3	80	33.3	240	100.0
	5+ vars	40	44.4	35	38.9	25	27.8	10	11.1	10	11.1	15	16.7	25	27.8	40	44.4	90	100.0
Married	NA	10	28.6	10	28.6	10	28.6	.	.	.	.	10	28.6	10	28.6	.	.	35	100.0
	0 vars	1110	14.8	1925	25.6	1690	22.5	565	7.5	175	2.3	355	4.7	920	12.2	495	6.6	7525	100.0
	1 vars	195	16.7	290	24.9	220	18.9	105	9.0	45	3.9	70	6.0	180	15.5	120	10.3	1165	100.0
	2 vars	85	21.5	105	26.6	90	22.8	25	6.3	15	3.8	35	8.9	85	21.5	55	13.9	395	100.0
	3-4 vars	65	24.5	65	24.5	55	20.8	25	9.4	10	3.8	30	11.3	55	20.8	40	15.1	265	100.0
	5+ vars	25	38.5	20	30.8	20	30.8	10	15.4	10	15.4	10	15.4	20	30.8	25	38.5	65	100.0
<b>Total</b>	<b>Total</b>	<b>3425</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>

**Table 377: Number of comorbid disease by NZiDep by legal marital status**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Marital Status (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	360	71.3	140	27.7	10	2.0	.	.	505	100.0
	1 vars	35	70.0	15	30.0	10	20.0	.	.	50	100.0
	2 vars	10	100.0	10	100.0	.	.	.	.	10	100.0
	3-4 vars	10	100.0	10	100.0	.	.	.	.	10	100.0
	5+ vars	10	100.0	10	100.0	.	.	.	.	10	100.0
Never Married	NA	10	50.0	10	50.0	.	.	15	75.0	20	100.0
	0 vars	1830	58.9	1175	37.8	100	3.2	10	0.3	3105	100.0
	1 vars	550	53.4	425	41.3	55	5.3	.	.	1030	100.0
	2 vars	225	50.6	195	43.8	30	6.7	.	.	445	100.0
	3-4 vars	185	41.1	225	50.0	45	10.0	.	.	450	100.0
	5+ vars	40	29.6	65	48.1	35	25.9	.	.	135	100.0
Divorced Widowed Separated	NA	10	66.7	10	66.7	.	.	10	66.7	15	100.0
	0 vars	670	35.8	945	50.5	260	13.9	10	0.5	1870	100.0
	1 vars	165	30.6	270	50.0	105	19.4	.	.	540	100.0
	2 vars	70	29.2	120	50.0	50	20.8	10	4.2	240	100.0
	3-4 vars	50	20.8	125	52.1	60	25.0	.	.	240	100.0
	5+ vars	15	16.7	50	55.6	25	27.8	.	.	90	100.0
Married	NA	10	28.6	10	28.6	10	28.6	30	85.7	35	100.0
	0 vars	3290	43.7	3500	46.5	735	9.8	.	.	7525	100.0
	1 vars	495	42.5	515	44.2	155	13.3	.	.	1165	100.0
	2 vars	145	36.7	175	44.3	75	19.0	.	.	395	100.0
	3-4 vars	100	37.7	110	41.5	60	22.6	.	.	265	100.0
	5+ vars	10	15.4	30	46.2	20	30.8	.	.	65	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

**Table 378: Chronic diseases by NZiDep by family structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Family Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA	10	50.0	10	50.0	10	50.0	.	.	.	.	10	50.0	10	50.0	.	.	20	100.0
	0 vars	720	15.9	1425	31.5	1160	25.6	485	10.7	160	3.5	260	5.7	535	11.8	300	6.6	4530	100.0
	1 vars	120	20.5	195	33.3	135	23.1	85	14.5	40	6.8	40	6.8	90	15.4	75	12.8	585	100.0
	2 vars	40	25.8	50	32.3	45	29.0	20	12.9	10	6.5	20	12.9	35	22.6	30	19.4	155	100.0
	3-4 vars	25	23.8	35	33.3	25	23.8	15	14.3	10	9.5	15	14.3	25	23.8	20	19.0	105	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	10	66.7	.	.	.	.	10	66.7	10	66.7	15	100.0
Couple with children	NA	10	25.0	10	25.0	10	25.0	.	.	.	.	10	25.0	10	25.0	.	.	40	100.0
	0 vars	985	17.4	690	12.2	695	12.3	110	1.9	25	0.4	125	2.2	655	11.6	330	5.8	5655	100.0
	1 vars	225	19.1	160	13.6	120	10.2	35	3.0	15	1.3	35	3.0	165	14.0	115	9.8	1175	100.0
	2 vars	100	21.7	80	17.4	60	13.0	15	3.3	10	2.2	20	4.3	85	18.5	65	14.1	460	100.0
	3-4 vars	100	29.0	60	17.4	40	11.6	20	5.8	10	2.9	25	7.2	70	20.3	60	17.4	345	100.0
	5+ vars	35	41.2	35	41.2	15	17.6	10	11.8	10	11.8	15	17.6	25	29.4	35	41.2	85	100.0
Sole parent	NA	10	100.0	.	.	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	155	21.2	110	15.1	80	11.0	30	4.1	10	1.4	20	2.7	90	12.3	50	6.8	730	100.0
	1 vars	90	21.2	70	16.5	35	8.2	15	3.5	10	2.4	10	2.4	70	16.5	50	11.8	425	100.0
	2 vars	60	25.0	35	14.6	25	10.4	10	4.2	10	4.2	10	4.2	35	14.6	35	14.6	240	100.0
	3-4 vars	80	26.2	50	16.4	30	9.8	15	4.9	10	3.3	15	4.9	80	26.2	65	21.3	305	100.0
	5+ vars	50	38.5	25	19.2	15	11.5	10	7.7	10	7.7	10	7.7	40	30.8	50	38.5	130	100.0
Not in a family nucleus	NA	10	100.0	10	100.0	10	100.0	10	100.0	.	.	10	100.0	.	.	.	.	10	100.0
	0 vars	355	16.9	640	30.5	405	19.3	190	9.1	95	4.5	90	4.3	230	11.0	145	6.9	2095	100.0
	1 vars	120	20.3	175	29.7	120	20.3	60	10.2	25	4.2	50	8.5	90	15.3	85	14.4	590	100.0
	2 vars	60	24.5	70	28.6	50	20.4	25	10.2	10	4.1	20	8.2	30	12.2	50	20.4	245	100.0
	3-4 vars	65	31.0	50	23.8	50	23.8	20	9.5	10	4.8	20	9.5	50	23.8	75	35.7	210	100.0
	5+ vars	30	46.2	25	38.5	20	30.8	10	15.4	10	15.4	10	15.4	15	23.1	30	46.2	65	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3990</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>455</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18215</b>	<b>100.0</b>

**Table 379: Number of comorbid disease by NZiDep by family structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Family Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
Couple only	NA	10	50.0	10	50.0	10	50.0	15	75.0	20	100.0
	0 vars	1715	37.9	2215	48.9	590	13.0	10	0.2	4530	100.0
	1 vars	195	33.3	285	48.7	105	17.9	.	.	585	100.0
	2 vars	45	29.0	70	45.2	35	22.6	.	.	155	100.0
	3-4 vars	35	33.3	45	42.9	25	23.8	.	.	105	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	.	.	15	100.0
Couple with children	NA	10	25.0	10	25.0	10	25.0	30	75.0	40	100.0
	0 vars	3185	56.3	2240	39.6	225	4.0	.	.	5655	100.0
	1 vars	615	52.3	485	41.3	80	6.8	.	.	1175	100.0
	2 vars	205	44.6	205	44.6	50	10.9	.	.	460	100.0
	3-4 vars	135	39.1	165	47.8	45	13.0	.	.	345	100.0
	5+ vars	15	17.6	40	47.1	25	29.4	.	.	85	100.0
Sole parent	NA	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	390	53.4	295	40.4	45	6.2	.	.	730	100.0
	1 vars	210	49.4	190	44.7	35	8.2	.	.	425	100.0
	2 vars	115	47.9	105	43.8	20	8.3	.	.	240	100.0
	3-4 vars	110	36.1	155	50.8	40	13.1	.	.	305	100.0
	5+ vars	40	30.8	60	46.2	30	23.1	.	.	130	100.0
Not in a family nucleus	NA	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	855	40.8	1005	48.0	235	11.2	10	0.5	2095	100.0
	1 vars	225	38.1	260	44.1	105	17.8	.	.	590	100.0
	2 vars	85	34.7	115	46.9	45	18.4	10	4.1	245	100.0
	3-4 vars	55	26.2	105	50.0	50	23.8	.	.	210	100.0
	5+ vars	10	15.4	30	46.2	20	30.8	.	.	65	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18215</b>	<b>100.0</b>

**Table 380: Chronic diseases by NZiDep by household structure**

		Chronic Diseases (W3)																	
		Asthma		High BP		High Chol		Heart Dis		Stroke		Diabetes		Migraine		Depr-Schiz		Total	
Household Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	10	16.7	10	16.7	10	16.7	.	.	.	.	10	16.7	10	16.7	.	.	60	100.0
	0 vars	1850	17.2	2200	20.5	1920	17.9	635	5.9	195	1.8	390	3.6	1265	11.8	670	6.2	10750	100.0
	1 vars	410	19.4	410	19.4	285	13.5	130	6.1	60	2.8	85	4.0	325	15.4	240	11.3	2115	100.0
	2 vars	195	23.9	155	19.0	125	15.3	35	4.3	25	3.1	45	5.5	150	18.4	130	16.0	815	100.0
	3-4 vars	190	26.6	135	18.9	90	12.6	45	6.3	20	2.8	45	6.3	160	22.4	150	21.0	715	100.0
	5+ vars	80	37.2	60	27.9	35	16.3	20	9.3	10	4.7	20	9.3	65	30.2	85	39.5	215	100.0
Two or more families	NA	.	.	10	100.0	.	.	.	.	.	.	10	100.0	.	.	.	.	10	100.0
	0 vars	50	14.7	55	16.2	50	14.7	10	2.9	10	2.9	20	5.9	35	10.3	20	5.9	340	100.0
	1 vars	25	18.5	30	22.2	20	14.8	10	7.4	10	7.4	10	7.4	15	11.1	10	7.4	135	100.0
	2 vars	10	18.2	15	27.3	10	18.2	10	18.2	10	18.2	10	18.2	10	18.2	10	18.2	55	100.0
	3-4 vars	20	33.3	10	16.7	10	16.7	10	16.7	10	16.7	10	16.7	10	16.7	10	16.7	60	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	.	.	.	.	10	66.7	10	66.7	10	66.7	15	100.0
Other multi-person household	NA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
	0 vars	105	21.6	55	11.3	40	8.2	10	2.1	10	2.1	10	2.1	55	11.3	35	7.2	485	100.0
	1 vars	45	22.5	20	10.0	20	10.0	10	5.0	10	5.0	10	5.0	30	15.0	25	12.5	200	100.0
	2 vars	20	28.6	15	21.4	10	14.3	10	14.3	.	.	10	14.3	10	14.3	15	21.4	70	100.0
	3-4 vars	25	38.5	10	15.4	10	15.4	10	15.4	.	.	10	15.4	15	23.1	10	15.4	65	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	.	.	.	.	.	.	10	66.7	10	66.7	15	100.0
One person household	NA	.	.	10	100.0	10	100.0	10	100.0	.	.	.	.	.	.	.	.	10	100.0
	0 vars	210	14.7	550	38.5	340	23.8	170	11.9	80	5.6	80	5.6	155	10.8	100	7.0	1430	100.0
	1 vars	70	20.9	135	40.3	90	26.9	55	16.4	20	6.0	35	10.4	55	16.4	60	17.9	335	100.0
	2 vars	35	23.3	55	36.7	40	26.7	20	13.3	10	6.7	15	10.0	15	10.0	40	26.7	150	100.0
	3-4 vars	40	32.0	40	32.0	40	32.0	15	12.0	10	8.0	15	12.0	35	28.0	55	44.0	125	100.0
	5+ vars	25	50.0	20	40.0	15	30.0	10	20.0	10	20.0	10	20.0	10	20.0	25	50.0	50	100.0
<b>Total</b>	<b>Total</b>	<b>3420</b>	<b>18.8</b>	<b>3995</b>	<b>21.9</b>	<b>3145</b>	<b>17.3</b>	<b>1160</b>	<b>6.4</b>	<b>450</b>	<b>2.5</b>	<b>810</b>	<b>4.4</b>	<b>2435</b>	<b>13.4</b>	<b>1670</b>	<b>9.2</b>	<b>18220</b>	<b>100.0</b>



**Table 381: Number of comorbid disease by NZiDep by household structure**

		Comorbidity Index (W3)									
		No comorbid		1-2 comorbid		>2 comorbid		NA		Total	
Household Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
One Family	NA	10	16.7	10	16.7	10	16.7	45	75.0	60	100.0
	0 vars	5175	48.1	4725	44.0	850	7.9	10	0.1	10750	100.0
	1 vars	980	46.3	925	43.7	210	9.9	.	.	2115	100.0
	2 vars	345	42.3	365	44.8	105	12.9	.	.	815	100.0
	3-4 vars	270	37.8	340	47.6	105	14.7	.	.	715	100.0
	5+ vars	55	25.6	100	46.5	60	27.9	.	.	215	100.0
Two or more families	NA	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	200	58.8	110	32.4	30	8.8	.	.	340	100.0
	1 vars	70	51.9	50	37.0	10	7.4	.	.	135	100.0
	2 vars	25	45.5	30	54.5	10	18.2	.	.	55	100.0
	3-4 vars	15	25.0	30	50.0	10	16.7	.	.	60	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	.	.	15	100.0
Other multi-person household	NA	10	100.0	.	.	.	.	.	.	10	100.0
	0 vars	265	54.6	200	41.2	15	3.1	.	.	485	100.0
	1 vars	100	50.0	90	45.0	10	5.0	.	.	200	100.0
	2 vars	30	42.9	30	42.9	10	14.3	.	.	70	100.0
	3-4 vars	25	38.5	30	46.2	10	15.4	.	.	65	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	.	.	15	100.0
One person household	NA	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	0 vars	510	35.7	720	50.3	200	14.0	.	.	1430	100.0
	1 vars	95	28.4	155	46.3	80	23.9	.	.	335	100.0
	2 vars	45	30.0	80	53.3	35	23.3	10	6.7	150	100.0
	3-4 vars	20	16.0	65	52.0	40	32.0	.	.	125	100.0
	5+ vars	10	20.0	25	50.0	20	40.0	.	.	50	100.0
<b>Total</b>	<b>Total</b>	<b>8245</b>	<b>45.3</b>	<b>8110</b>	<b>44.5</b>	<b>1810</b>	<b>9.9</b>	<b>55</b>	<b>0.3</b>	<b>18220</b>	<b>100.0</b>

## 12.7 The Association of NZiDep with Smoking Status

Overall, there were higher proportions of current smokers with increasing number of deprivation variables, with high proportions of never smokers reporting no deprivation. This linear increase in the proportion of current smokers with increasing number of deprivation variables was consistent across all age groups and by sex, ethnicity, marital status, family and household structure. The highest proportion of current smokers were in the 15-54 age groups at Wave 1 and reporting three or more deprivation variables. Over 50% of Māori respondents reporting two or more deprivation variables were current smokers at Wave 3.

**Table 382: Smoking status by NZiDep, overall**

NZiDep Group (W3)	Smoking Status (W3)									
	Never smoker		Ex-smoker		Current smoker		NA		Total	
	N	%	N	%	N	%	N	%	N	%
NA	10	14.3	10	14.3	10	14.3	55	78.6	70	100.0
0 vars	7525	57.9	3450	26.5	2025	15.6	10	0.1	13005	100.0
1 vars	1390	50.0	670	24.1	725	26.1	10	0.4	2780	100.0
2 vars	470	42.7	260	23.6	360	32.7	10	0.9	1100	100.0
3-4 vars	345	35.8	215	22.3	405	42.0	10	1.0	965	100.0
5+ vars	60	20.7	60	20.7	170	58.6	.	.	290	100.0
<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 383: Smoking status by NZiDep by age and sex**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
0-14	NA	10	100.0	.	.	.	.	10	100.0	10	100.0
	0 vars	445	88.1	10	2.0	50	9.9	10	2.0	505	100.0
	1 vars	40	80.0	10	20.0	10	20.0	.	.	50	100.0
	2 vars	10	100.0	10	100.0	10	100.0	.	.	10	100.0
	3-4 vars	10	100.0	10	100.0	10	100.0	.	.	10	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	10	100.0
15-24	NA	10	100.0	.	.	.	.	10	100.0	10	100.0
	0 vars	1130	73.6	135	8.8	275	17.9	10	0.7	1535	100.0
	1 vars	305	57.5	50	9.4	170	32.1	.	.	530	100.0
	2 vars	115	52.3	25	11.4	80	36.4	.	.	220	100.0
	3-4 vars	70	37.8	20	10.8	95	51.4	.	.	185	100.0
	5+ vars	10	28.6	10	28.6	20	57.1	.	.	35	100.0
25-34	NA	.	.	.	.	10	100.0	10	100.0	10	100.0
	0 vars	1050	59.8	335	19.1	370	21.1	.	.	1755	100.0
	1 vars	255	50.5	100	19.8	150	29.7	.	.	505	100.0
	2 vars	90	39.1	55	23.9	90	39.1	.	.	230	100.0
	3-4 vars	75	31.9	45	19.1	120	51.1	.	.	235	100.0
	5+ vars	15	17.6	15	17.6	55	64.7	.	.	85	100.0
35-44	NA	.	.	10	66.7	.	.	10	66.7	15	100.0
	0 vars	1475	58.2	590	23.3	470	18.5	.	.	2535	100.0
	1 vars	290	47.5	145	23.8	175	28.7	.	.	610	100.0
	2 vars	110	39.3	60	21.4	105	37.5	10	3.6	280	100.0
	3-4 vars	85	35.4	60	25.0	95	39.6	10	4.2	240	100.0
	5+ vars	25	27.8	15	16.7	50	55.6	.	.	90	100.0
45-54	NA	10	100.0	.	.	.	.	10	100.0	10	100.0
	0 vars	1320	53.5	710	28.8	435	17.6	.	.	2465	100.0
	1 vars	190	46.9	115	28.4	95	23.5	10	2.5	405	100.0
	2 vars	65	41.9	45	29.0	45	29.0	10	6.5	155	100.0
	3-4 vars	55	36.7	35	23.3	50	33.3	.	.	150	100.0
	5+ vars	15	27.3	10	18.2	30	54.5	.	.	55	100.0
55-64	NA	10	100.0	.	.	10	100.0	10	100.0	10	100.0
	0 vars	930	50.7	640	34.9	265	14.4	.	.	1835	100.0
	1 vars	155	40.3	140	36.4	95	24.7	.	.	385	100.0
	2 vars	45	36.0	50	40.0	30	24.0	.	.	125	100.0
	3-4 vars	35	29.2	40	33.3	35	29.2	.	.	120	100.0
	5+ vars	10	33.3	15	50.0	10	33.3	.	.	30	100.0
65+	NA	10	100.0	.	.	10	100.0	10	100.0	10	100.0
	0 vars	1180	49.6	1025	43.1	165	6.9	10	0.4	2380	100.0
	1 vars	150	50.8	115	39.0	25	8.5	.	.	295	100.0
	2 vars	40	53.3	30	40.0	10	13.3	.	.	75	100.0
	3-4 vars	10	40.0	10	40.0	10	40.0	.	.	25	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	10	100.0
Male	NA	10	25.0	10	25.0	10	25.0	30	75.0	40	100.0
	0 vars	3435	53.5	1895	29.5	1085	16.9	10	0.2	6420	100.0
	1 vars	525	46.1	275	24.1	335	29.4	.	.	1140	100.0
	2 vars	160	40.5	100	25.3	140	35.4	10	2.5	395	100.0
	3-4 vars	120	38.7	70	22.6	125	40.3	.	.	310	100.0
	5+ vars	25	31.3	10	12.5	45	56.3	.	.	80	100.0
Female	NA	10	33.3	.	.	10	33.3	25	83.3	30	100.0
	0 vars	4095	62.1	1550	23.5	940	14.3	10	0.2	6590	100.0

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
	1 vars	860	52.3	395	24.0	385	23.4	10	0.6	1645	100.0
	2 vars	315	45.0	170	24.3	220	31.4	10	1.4	700	100.0
	3-4 vars	225	34.4	145	22.1	285	43.5	10	1.5	655	100.0
	5+ vars	40	18.6	50	23.3	125	58.1	.	.	215	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 384: Smoking status by NZiDep by prioritised ethnicity**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Ethnicity (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	10	20.0	10	20.0	10	20.0	35	70.0	50	100.0
	0 vars	6215	57.2	3090	28.5	1555	14.3	10	0.1	10860	100.0
	1 vars	1020	50.7	520	25.9	465	23.1	10	0.5	2010	100.0
	2 vars	335	44.4	195	25.8	225	29.8	10	1.3	755	100.0
	3-4 vars	225	37.5	130	21.7	245	40.8	.	.	600	100.0
	5+ vars	40	22.2	45	25.0	100	55.6	.	.	180	100.0
Māori	NA	10	100.0	.	.	.	.	10	100.0	10	100.0
	0 vars	510	46.4	250	22.7	340	30.9	10	0.9	1100	100.0
	1 vars	130	32.5	100	25.0	175	43.8	.	.	400	100.0
	2 vars	50	24.4	45	22.0	105	51.2	10	4.9	205	100.0
	3-4 vars	50	20.4	60	24.5	135	55.1	10	4.1	245	100.0
	5+ vars	10	11.8	10	11.8	60	70.6	.	.	85	100.0
Pacific	NA	10	66.7	.	.	10	66.7	10	66.7	15	100.0
	0 vars	275	67.9	50	12.3	75	18.5	10	2.5	405	100.0
	1 vars	90	47.4	35	18.4	60	31.6	.	.	190	100.0
	2 vars	50	55.6	15	16.7	25	27.8	.	.	90	100.0
	3-4 vars	40	47.1	20	23.5	20	23.5	.	.	85	100.0
	5+ vars	10	50.0	10	50.0	10	50.0	.	.	20	100.0
Asian	NA	.	.	.	.	10	100.0	10	100.0	10	100.0
	0 vars	525	82.0	55	8.6	60	9.4	.	.	640	100.0
	1 vars	140	77.8	15	8.3	25	13.9	.	.	180	100.0
	2 vars	35	70.0	10	20.0	10	20.0	.	.	50	100.0
	3-4 vars	30	85.7	10	28.6	10	28.6	.	.	35	100.0
	5+ vars	10	100.0	10	100.0	10	100.0	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 385: Smoking status by NZiDep by legal marital status**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Marital Status (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	10	100.0	.	.	.	.	10	100.0	10	100.0
	0 vars	440	87.1	15	3.0	50	9.9	10	2.0	505	100.0
	1 vars	35	70.0	10	20.0	15	30.0	.	.	50	100.0
	2 vars	10	66.7	10	66.7	10	66.7	.	.	15	100.0
	3-4 vars	10	100.0	10	100.0	10	100.0	.	.	10	100.0
	5+ vars	10	100.0	.	.	.	.	.	.	10	100.0
Never Married	NA	10	50.0	.	.	.	.	15	75.0	20	100.0
	0 vars	1975	63.5	465	15.0	665	21.4	10	0.3	3110	100.0
	1 vars	525	51.0	165	16.0	335	32.5	.	.	1030	100.0
	2 vars	180	40.0	75	16.7	195	43.3	.	.	450	100.0
	3-4 vars	145	32.2	75	16.7	230	51.1	.	.	450	100.0
	5+ vars	25	18.5	20	14.8	85	63.0	.	.	135	100.0
Divorced Widowed Separated	NA	.	.	.	.	10	100.0	10	100.0	10	100.0
	0 vars	925	49.5	600	32.1	340	18.2	10	0.5	1870	100.0
	1 vars	235	43.5	160	29.6	140	25.9	10	1.9	540	100.0
	2 vars	80	32.7	75	30.6	90	36.7	10	4.1	245	100.0
	3-4 vars	80	34.0	65	27.7	95	40.4	.	.	235	100.0
	5+ vars	10	11.1	20	22.2	55	61.1	.	.	90	100.0
Married	NA	10	28.6	10	28.6	10	28.6	30	85.7	35	100.0
	0 vars	4185	55.7	2365	31.4	970	12.9	10	0.1	7520	100.0
	1 vars	595	51.1	340	29.2	235	20.2	.	.	1165	100.0
	2 vars	210	53.8	115	29.5	75	19.2	10	2.6	390	100.0
	3-4 vars	110	41.5	75	28.3	75	28.3	10	3.8	265	100.0
	5+ vars	15	23.1	15	23.1	30	46.2	.	.	65	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3695</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 386: Smoking status by NZiDep by family structure**

		Smoking Status (W3)									
Family Structure (W1)	NZiDep Group (W3)	Never smoker		Ex-smoker		Current smoker		NA		Total	
		N	%	N	%	N	%	N	%	N	%
Couple only	NA	10	50.0	.	.	10	50.0	15	75.0	20	100.0
	0 vars	2350	51.9	1575	34.8	600	13.3	10	0.2	4525	100.0
	1 vars	265	44.9	195	33.1	130	22.0	.	.	590	100.0
	2 vars	55	36.7	50	33.3	50	33.3	.	.	150	100.0
	3-4 vars	40	38.1	30	28.6	30	28.6	.	.	105	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	.	.	15	100.0
Couple with children	NA	10	28.6	10	28.6	10	28.6	30	85.7	35	100.0
	0 vars	3590	63.5	1170	20.7	885	15.6	10	0.2	5655	100.0
	1 vars	625	53.2	250	21.3	305	26.0	.	.	1175	100.0
	2 vars	230	50.0	95	20.7	135	29.3	10	2.2	460	100.0
	3-4 vars	130	37.7	80	23.2	125	36.2	10	2.9	345	100.0
	5+ vars	25	29.4	15	17.6	45	52.9	.	.	85	100.0
Sole parent	NA	10	100.0	.	.	.	.	10	100.0	10	100.0
	0 vars	420	57.5	135	18.5	175	24.0	.	.	730	100.0
	1 vars	195	45.9	85	20.0	150	35.3	10	2.4	425	100.0
	2 vars	85	36.2	55	23.4	100	42.6	.	.	235	100.0
	3-4 vars	95	31.1	65	21.3	150	49.2	.	.	305	100.0
	5+ vars	25	20.0	25	20.0	75	60.0	.	.	125	100.0
Not in a family nucleus	NA	10	100.0	.	.	10	100.0	10	100.0	10	100.0
	0 vars	1160	55.4	560	26.7	365	17.4	10	0.5	2095	100.0
	1 vars	305	51.3	145	24.4	140	23.5	.	.	595	100.0
	2 vars	100	40.8	65	26.5	80	32.7	10	4.1	245	100.0
	3-4 vars	75	35.7	35	16.7	100	47.6	.	.	210	100.0
	5+ vars	10	15.4	15	23.1	35	53.8	.	.	65	100.0
<b>Total</b>	<b>Total</b>	<b>9805</b>	<b>53.8</b>	<b>4660</b>	<b>25.6</b>	<b>3690</b>	<b>20.3</b>	<b>65</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

**Table 387: Smoking status by NZiDep by household structure**

		Smoking Status (W3)									
		Never smoker		Ex-smoker		Current smoker		NA		Total	
Household Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%
One Family	NA	10	16.7	10	16.7	10	16.7	45	75.0	60	100.0
	0 vars	6275	58.3	2845	26.5	1630	15.2	10	0.1	10755	100.0
	1 vars	1055	50.0	505	23.9	550	26.1	10	0.5	2110	100.0
	2 vars	360	43.9	195	23.8	260	31.7	10	1.2	820	100.0
	3-4 vars	255	35.4	165	22.9	300	41.7	10	1.4	720	100.0
	5+ vars	50	23.3	40	18.6	120	55.8	.	.	215	100.0
Two or more families	NA	10	100.0	.	.	.	.	10	100.0	10	100.0
	0 vars	190	55.9	75	22.1	80	23.5	.	.	340	100.0
	1 vars	60	46.2	35	26.9	45	34.6	.	.	130	100.0
	2 vars	15	27.3	10	18.2	30	54.5	.	.	55	100.0
	3-4 vars	15	25.0	15	25.0	25	41.7	.	.	60	100.0
	5+ vars	10	66.7	10	66.7	15	100.0	.	.	15	100.0
Other multi-person household	NA	10	100.0	.	.	.	.	.	.	10	100.0
	0 vars	290	60.4	95	19.8	95	19.8	.	.	480	100.0
	1 vars	120	60.0	30	15.0	55	27.5	.	.	200	100.0
	2 vars	30	42.9	15	21.4	25	35.7	.	.	70	100.0
	3-4 vars	30	50.0	10	16.7	25	41.7	.	.	60	100.0
	5+ vars	10	100.0	10	100.0	10	100.0	.	.	10	100.0
One person household	NA	.	.	.	.	.	.	10	100.0	10	100.0
	0 vars	775	54.0	430	30.0	225	15.7	10	0.7	1435	100.0
	1 vars	165	49.3	100	29.9	65	19.4	.	.	335	100.0
	2 vars	60	38.7	40	25.8	50	32.3	10	6.5	155	100.0
	3-4 vars	35	28.0	30	24.0	65	52.0	.	.	125	100.0
	5+ vars	10	20.0	15	30.0	30	60.0	.	.	50	100.0
<b>Total</b>	<b>Total</b>	<b>9800</b>	<b>53.8</b>	<b>4655</b>	<b>25.5</b>	<b>3695</b>	<b>20.3</b>	<b>70</b>	<b>0.4</b>	<b>18220</b>	<b>100.0</b>

### **12.8 The Association of NZiDep with Alcohol Consumption**

Overall, the frequency of alcohol consumed increased with decreasing number of individual deprivation variables. Consequently, there were larger proportions of never drinkers increasing number of deprivation variables. This relationship was relatively consistent across age groups and by sex, marital status, family and household structure. The proportion of respondents binge drinking was relatively stable across the levels of individual deprivation.

**Table 388: Alcohol consumption by NZiDep, overall**

NZiDep Group (W3)	Alcohol drinking frequency (W3)															
	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA	10	14.3	10	14.3	10	14.3	10	14.3	.	.	60	85.7	10	14.3	70	100.0
0 vars	2005	15.4	2120	16.3	3395	26.1	1940	14.9	3525	27.1	30	0.2	2645	20.3	13010	100.0
1 vars	640	23.0	570	20.5	820	29.5	335	12.1	420	15.1	10	0.4	665	23.9	2780	100.0
2 vars	255	23.3	280	25.6	305	27.9	135	12.3	120	11.0	10	0.9	285	26.0	1095	100.0
3-4 vars	265	27.5	285	29.5	265	27.5	75	7.8	70	7.3	10	1.0	230	23.8	965	100.0
5+ vars	85	29.3	100	34.5	75	25.9	20	6.9	15	5.2	.	.	65	22.4	290	100.0
<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3355</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>



**Table 389: Alcohol consumption by NZiDep by age and sex**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0-14	NA	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	180	36.0	170	34.0	120	24.0	25	5.0	10	2.0	10	2.0	65	13.0	500	100.0
	1 vars	20	40.0	15	30.0	10	20.0	10	20.0	.	.	.	.	10	20.0	50	100.0
	2 vars	10	66.7	10	66.7	10	66.7	10	66.7	.	.	.	.	10	66.7	15	100.0
	3-4 vars	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0
	5+ vars	10	100.0	10	100.0	.	.	.	.	.	.	.	.	.	.	.	10
15-24	NA	.	.	.	.	10	100.0	.	.	.	.	10	100.0	10	100.0	10	100.0
	0 vars	245	16.0	345	22.5	565	36.8	260	16.9	120	7.8	10	0.7	600	39.1	1535	100.0
	1 vars	80	15.1	100	18.9	210	39.6	85	16.0	60	11.3	10	1.9	255	48.1	530	100.0
	2 vars	25	11.4	50	22.7	80	36.4	40	18.2	20	9.1	.	.	110	50.0	220	100.0
	3-4 vars	25	13.2	45	23.7	70	36.8	25	13.2	25	13.2	.	.	90	47.4	190	100.0
	5+ vars	10	33.3	15	50.0	10	33.3	10	33.3	10	33.3	.	.	10	33.3	30	100.0
25-34	NA	.	.	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	205	11.7	305	17.4	570	32.5	325	18.5	355	20.2	10	0.6	560	31.9	1755	100.0
	1 vars	75	15.0	110	22.0	180	36.0	55	11.0	75	15.0	10	2.0	155	31.0	500	100.0
	2 vars	50	21.7	70	30.4	70	30.4	25	10.9	15	6.5	.	.	70	30.4	230	100.0
	3-4 vars	45	18.8	75	31.3	80	33.3	20	8.3	20	8.3	.	.	80	33.3	240	100.0
	5+ vars	15	17.6	35	41.2	25	29.4	10	11.8	10	11.8	.	.	25	29.4	85	100.0
35-44	NA	.	.	.	.	10	100.0	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	265	10.5	360	14.2	740	29.2	465	18.3	695	27.4	10	0.4	640	25.2	2535	100.0
	1 vars	125	20.5	120	19.7	180	29.5	100	16.4	95	15.6	.	.	145	23.8	610	100.0
	2 vars	55	19.6	60	21.4	75	26.8	40	14.3	45	16.1	10	3.6	65	23.2	280	100.0
	3-4 vars	65	27.1	80	33.3	60	25.0	15	6.3	15	6.3	.	.	35	14.6	240	100.0
	5+ vars	25	27.8	25	27.8	25	27.8	10	11.1	10	11.1	.	.	25	27.8	90	100.0
45-54	NA	10	100.0	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	300	12.2	315	12.8	570	23.2	420	17.1	855	34.8	10	0.4	460	18.7	2460	100.0
	1 vars	105	26.3	80	20.0	100	25.0	40	10.0	80	20.0	10	2.5	55	13.8	400	100.0
	2 vars	50	31.3	40	25.0	35	21.9	10	6.3	15	9.4	10	6.3	20	12.5	160	100.0
	3-4 vars	60	40.0	40	26.7	30	20.0	10	6.7	10	6.7	10	6.7	15	10.0	150	100.0
	5+ vars	30	54.5	15	27.3	10	18.2	10	18.2	10	18.2	.	.	10	18.2	55	100.0

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Age (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
55-64	NA	10	66.7	.	.	.	.	.	.	.	.	10	66.7	.	.	15	100.0
	0 vars	240	13.1	245	13.4	390	21.3	255	13.9	700	38.1	10	0.5	215	11.7	1835	100.0
	1 vars	120	31.2	80	20.8	85	22.1	40	10.4	60	15.6	10	2.6	35	9.1	385	100.0
	2 vars	45	36.0	30	24.0	25	20.0	10	8.0	10	8.0	.	.	15	12.0	125	100.0
	3-4 vars	45	37.5	35	29.2	25	20.8	10	8.3	10	8.3	.	.	10	8.3	120	100.0
	5+ vars	15	60.0	10	40.0	10	40.0	10	40.0	.	.	.	.	10	40.0	25	100.0
65+	NA	10	100.0	.	.	.	.	10	100.0	.	.	10	100.0	.	.	10	100.0
	0 vars	570	23.9	385	16.2	440	18.5	190	8.0	790	33.2	10	0.4	100	4.2	2380	100.0
	1 vars	115	39.7	60	20.7	50	17.2	15	5.2	50	17.2	10	3.4	10	3.4	290	100.0
	2 vars	35	46.7	20	26.7	10	13.3	10	13.3	10	13.3	.	.	10	13.3	75	100.0
	3-4 vars	15	60.0	10	40.0	10	40.0	10	40.0	10	40.0	.	.	.	.	25	100.0
	5+ vars	.	.	10	100.0	.	.	.	.	.	.	.	.	.	.	.	10
Male	NA	10	25.0	10	25.0	10	25.0	10	25.0	.	.	35	87.5	10	25.0	40	100.0
	0 vars	765	11.9	810	12.6	1645	25.6	1075	16.8	2110	32.9	15	0.2	1725	26.9	6415	100.0
	1 vars	215	18.9	175	15.4	365	32.2	170	15.0	210	18.5	10	0.9	365	32.2	1135	100.0
	2 vars	80	20.3	75	19.0	110	27.8	65	16.5	65	16.5	10	2.5	130	32.9	395	100.0
	3-4 vars	80	25.8	75	24.2	85	27.4	35	11.3	40	12.9	.	.	90	29.0	310	100.0
	5+ vars	25	31.3	25	31.3	20	25.0	10	12.5	10	12.5	.	.	15	18.8	80	100.0
Female	NA	10	28.6	10	28.6	.	.	.	.	.	.	30	85.7	.	.	35	100.0
	0 vars	1245	18.9	1310	19.9	1750	26.6	865	13.1	1415	21.5	15	0.2	920	14.0	6590	100.0
	1 vars	425	25.8	390	23.7	450	27.4	165	10.0	210	12.8	10	0.6	305	18.5	1645	100.0
	2 vars	175	25.0	205	29.3	190	27.1	75	10.7	60	8.6	10	1.4	145	20.7	700	100.0
	3-4 vars	185	28.2	210	32.1	180	27.5	45	6.9	30	4.6	10	1.5	140	21.4	655	100.0
	5+ vars	60	27.9	75	34.9	55	25.6	10	4.7	10	4.7	.	.	50	23.3	215	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 390: Alcohol consumption by NZiDep by prioritised ethnicity**

		Alcohol drinking frequency (W3)															
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Ethnicity (W1)	NZiDep Group (W3)	Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
nM,nP,nA	NA	10	20.0	10	20.0	10	20.0	10	20.0	.	.	40	80.0	10	20.0	50	100.0
	0 vars	1270	11.7	1670	15.4	2840	26.2	1735	16.0	3325	30.6	20	0.2	2210	20.4	10855	100.0
	1 vars	335	16.7	400	20.0	610	30.4	285	14.2	375	18.7	10	0.5	475	23.7	2005	100.0
	2 vars	140	18.5	190	25.2	225	29.8	105	13.9	95	12.6	10	1.3	195	25.8	755	100.0
	3-4 vars	125	20.8	180	30.0	185	30.8	60	10.0	60	10.0	.	.	150	25.0	600	100.0
	5+ vars	45	25.0	65	36.1	45	25.0	15	8.3	10	5.6	.	.	40	22.2	180	100.0
Māori	NA	10	100.0	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	225	20.4	255	23.1	340	30.8	135	12.2	140	12.7	10	0.9	335	30.3	1105	100.0
	1 vars	100	24.7	105	25.9	125	30.9	35	8.6	35	8.6	10	2.5	145	35.8	405	100.0
	2 vars	40	19.5	60	29.3	65	31.7	25	12.2	15	7.3	.	.	80	39.0	205	100.0
	3-4 vars	80	32.7	75	30.6	65	26.5	15	6.1	10	4.1	10	4.1	75	30.6	245	100.0
	5+ vars	15	16.7	35	38.9	35	38.9	10	11.1	10	11.1	.	.	25	27.8	90	100.0
Pacific	NA	10	66.7	.	.	.	.	.	.	.	.	10	66.7	.	.	15	100.0
	0 vars	205	50.6	70	17.3	85	21.0	25	6.2	25	6.2	10	2.5	70	17.3	405	100.0
	1 vars	100	52.6	35	18.4	40	21.1	10	5.3	10	5.3	10	5.3	35	18.4	190	100.0
	2 vars	50	55.6	20	22.2	10	11.1	10	11.1	10	11.1	.	.	10	11.1	90	100.0
	3-4 vars	45	52.9	25	29.4	15	17.6	10	11.8	.	.	.	.	10	11.8	85	100.0
	5+ vars	15	60.0	10	40.0	10	40.0	.	.	10	40.0	.	.	10	40.0	25	100.0
Asian	NA	10	100.0	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	300	46.9	125	19.5	135	21.1	45	7.0	35	5.5	.	.	35	5.5	640	100.0
	1 vars	100	55.6	25	13.9	35	19.4	10	5.6	10	5.6	10	5.6	10	5.6	180	100.0
	2 vars	25	55.6	15	33.3	10	22.2	.	.	10	22.2	.	.	10	22.2	45	100.0
	3-4 vars	25	71.4	10	28.6	10	28.6	10	28.6	.	.	.	.	.	.	35	100.0
	5+ vars	10	100.0	10	100.0	.	.	10	100.0	.	.	.	.	.	.	10	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 391: Alcohol consumption by NZiDep (Wave 31) by legal marital status**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Marital Status (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
NA:DK:REF	NA	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	180	35.3	170	33.3	115	22.5	25	4.9	10	2.0	10	2.0	70	13.7	510	100.0
	1 vars	20	40.0	15	30.0	10	20.0	10	20.0	.	.	.	.	10	20.0	50	100.0
	2 vars	10	100.0	10	100.0	10	100.0	10	100.0	.	.	.	.	10	100.0	10	100.0
	3-4 vars	10	100.0	10	100.0	10	100.0	10	100.0	10	100.0	.	.	10	100.0	10	100.0
	5+ vars	10	100.0	10	100.0	.	.	.	.	.	.	.	.	.	.	.	10
Never Married	NA	10	66.7	.	.	10	66.7	.	.	.	.	15	100.0	10	66.7	15	100.0
	0 vars	395	12.7	605	19.5	1055	33.9	545	17.5	500	16.1	10	0.3	1100	35.4	3110	100.0
	1 vars	160	15.5	190	18.4	375	36.4	170	16.5	135	13.1	10	1.0	405	39.3	1030	100.0
	2 vars	70	15.6	115	25.6	140	31.1	70	15.6	45	10.0	10	2.2	180	40.0	450	100.0
	3-4 vars	90	19.8	120	26.4	145	31.9	50	11.0	45	9.9	.	.	160	35.2	455	100.0
	5+ vars	20	14.8	55	40.7	40	29.6	10	7.4	10	7.4	.	.	35	25.9	135	100.0
Divorced Widowed Separated	NA	.	.	.	.	.	.	.	.	.	.	10	66.7	.	.	15	100.0
	0 vars	335	17.9	290	15.5	455	24.3	255	13.6	535	28.6	10	0.5	310	16.6	1870	100.0
	1 vars	155	28.7	115	21.3	140	25.9	55	10.2	80	14.8	10	1.9	85	15.7	540	100.0
	2 vars	60	25.0	60	25.0	60	25.0	30	12.5	25	10.4	10	4.2	40	16.7	240	100.0
	3-4 vars	70	29.8	75	31.9	60	25.5	20	8.5	15	6.4	10	4.3	40	17.0	235	100.0
	5+ vars	25	27.8	25	27.8	25	27.8	10	11.1	10	11.1	.	.	20	22.2	90	100.0
Married	NA	10	28.6	.	.	10	28.6	10	28.6	.	.	30	85.7	.	.	35	100.0
	0 vars	1095	14.6	1055	14.0	1765	23.5	1115	14.8	2480	33.0	20	0.3	1165	15.5	7525	100.0
	1 vars	305	26.3	245	21.1	295	25.4	105	9.1	205	17.7	10	0.9	160	13.8	1160	100.0
	2 vars	125	31.6	100	25.3	90	22.8	35	8.9	45	11.4	10	2.5	60	15.2	395	100.0
	3-4 vars	95	36.5	85	32.7	65	25.0	10	3.8	15	5.8	.	.	30	11.5	260	100.0
	5+ vars	30	46.2	15	23.1	10	15.4	10	15.4	10	15.4	.	.	10	15.4	65	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2505</b>	<b>13.7</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

**Table 392: Smoking status by NZiDep by family structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Family Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Couple only	NA	10	50.0	.	.	.	.	10	50.0	.	.	20	100.0	.	.	20	100.0
	0 vars	605	13.4	645	14.2	1015	22.4	635	14.0	1625	35.9	10	0.2	700	15.5	4530	100.0
	1 vars	125	21.2	120	20.3	150	25.4	60	10.2	130	22.0	10	1.7	110	18.6	590	100.0
	2 vars	35	22.6	40	25.8	40	25.8	10	6.5	25	16.1	.	.	35	22.6	155	100.0
	3-4 vars	35	33.3	25	23.8	25	23.8	10	9.5	10	9.5	.	.	15	14.3	105	100.0
	5+ vars	10	50.0	10	50.0	10	50.0	10	50.0	10	50.0	.	.	10	50.0	20	100.0
Couple with children	NA	.	.	10	25.0	10	25.0	.	.	.	.	35	87.5	10	25.0	40	100.0
	0 vars	885	15.6	970	17.2	1590	28.1	920	16.3	1280	22.6	10	0.2	1325	23.4	5655	100.0
	1 vars	260	22.1	245	20.9	375	31.9	130	11.1	165	14.0	10	0.9	300	25.5	1175	100.0
	2 vars	105	22.8	125	27.2	120	26.1	60	13.0	50	10.9	10	2.2	125	27.2	460	100.0
	3-4 vars	90	26.5	100	29.4	100	29.4	25	7.4	25	7.4	.	.	85	25.0	340	100.0
	5+ vars	30	35.3	20	23.5	20	23.5	10	11.8	10	11.8	.	.	15	17.6	85	100.0
Sole parent	NA	10	100.0	.	.	10	100.0	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	145	19.9	180	24.7	200	27.4	90	12.3	110	15.1	.	.	180	24.7	730	100.0
	1 vars	100	23.3	95	22.1	125	29.1	50	11.6	50	11.6	10	2.3	125	29.1	430	100.0
	2 vars	50	20.8	65	27.1	75	31.3	30	12.5	20	8.3	.	.	70	29.2	240	100.0
	3-4 vars	85	27.9	105	34.4	85	27.9	20	6.6	15	4.9	.	.	75	24.6	305	100.0
	5+ vars	25	20.0	50	40.0	30	24.0	10	8.0	10	8.0	.	.	35	28.0	125	100.0
Not in a family nucleus	NA	10	100.0	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	380	18.2	325	15.6	585	28.0	290	13.9	505	24.2	10	0.5	440	21.1	2090	100.0
	1 vars	150	25.2	105	17.6	170	28.6	95	16.0	70	11.8	10	1.7	135	22.7	595	100.0
	2 vars	70	28.6	55	22.4	60	24.5	35	14.3	20	8.2	10	4.1	55	22.4	245	100.0
	3-4 vars	60	28.6	50	23.8	60	28.6	20	9.5	20	9.5	10	4.8	55	26.2	210	100.0
	5+ vars	25	38.5	20	30.8	15	23.1	10	15.4	10	15.4	.	.	10	15.4	65	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.7</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.8</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18215</b>	<b>100.0</b>

**Table 393: Alcohol consumption by NZiDep by household structure**

		Alcohol drinking frequency (W3)															
		Never		< monthly		2-4 times month		2-3 times week		4+ times week		NA		Binge Drinkers		Total	
Household Structure (W1)	NZiDep Group (W3)	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
One Family	NA	10	16.7	10	16.7	10	16.7	10	16.7	.	.	50	83.3	10	16.7	60	100.0
	0 vars	1575	14.6	1760	16.4	2775	25.8	1625	15.1	2995	27.8	25	0.2	2175	20.2	10755	100.0
	1 vars	455	21.5	440	20.8	635	30.0	240	11.3	340	16.1	10	0.5	515	24.3	2115	100.0
	2 vars	175	21.3	210	25.6	235	28.7	95	11.6	95	11.6	10	1.2	210	25.6	820	100.0
	3-4 vars	190	26.4	225	31.3	200	27.8	55	7.6	45	6.3	.	.	170	23.6	720	100.0
	5+ vars	60	27.9	70	32.6	60	27.9	15	7.0	10	4.7	.	.	45	20.9	215	100.0
Two or more families	NA	10	100.0	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	110	32.4	65	19.1	80	23.5	35	10.3	50	14.7	.	.	70	20.6	340	100.0
	1 vars	50	37.0	30	22.2	30	22.2	10	7.4	10	7.4	.	.	35	25.9	135	100.0
	2 vars	15	27.3	20	36.4	15	27.3	10	18.2	10	18.2	.	.	20	36.4	55	100.0
	3-4 vars	25	45.5	15	27.3	10	18.2	.	.	10	18.2	10	18.2	10	18.2	55	100.0
	5+ vars	10	66.7	10	66.7	10	66.7	10	66.7	.	.	.	.	10	66.7	15	100.0
Other multi-person household	NA	10	100.0	.	.	.	.	.	.	.	.	.	.	.	.	10	100.0
	0 vars	50	10.4	60	12.5	170	35.4	95	19.8	110	22.9	.	.	200	41.7	480	100.0
	1 vars	30	15.0	30	15.0	70	35.0	50	25.0	20	10.0	10	5.0	80	40.0	200	100.0
	2 vars	10	14.3	15	21.4	25	35.7	20	28.6	10	14.3	.	.	30	42.9	70	100.0
	3-4 vars	10	15.4	15	23.1	20	30.8	10	15.4	10	15.4	.	.	25	38.5	65	100.0
	5+ vars	10	100.0	10	100.0	10	100.0	.	.	10	100.0	.	.	10	100.0	10	100.0
One person household	NA	.	.	.	.	.	.	.	.	.	.	10	100.0	.	.	10	100.0
	0 vars	280	19.5	230	16.0	365	25.4	185	12.9	370	25.8	10	0.7	205	14.3	1435	100.0
	1 vars	105	31.3	65	19.4	80	23.9	40	11.9	50	14.9	10	3.0	40	11.9	335	100.0
	2 vars	55	35.5	40	25.8	30	19.4	15	9.7	15	9.7	10	6.5	20	12.9	155	100.0
	3-4 vars	45	34.6	30	23.1	35	26.9	10	7.7	10	7.7	.	.	20	15.4	130	100.0
	5+ vars	20	40.0	15	30.0	10	20.0	10	20.0	10	20.0	.	.	10	20.0	50	100.0
<b>Total</b>	<b>Total</b>	<b>3260</b>	<b>17.9</b>	<b>3350</b>	<b>18.4</b>	<b>4855</b>	<b>26.6</b>	<b>2510</b>	<b>13.8</b>	<b>4145</b>	<b>22.7</b>	<b>100</b>	<b>0.5</b>	<b>3895</b>	<b>21.4</b>	<b>18220</b>	<b>100.0</b>

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## Chapter 14 Appendix A – Health Questionnaires

### KESSLER-10 QUESTIONNAIRE

How have you been feeling during the **past 4 weeks**?

**(Circle One Number on Each Line)**

	<u>All</u> of the <u>Time</u>	<u>Most</u> of the <u>Time</u>	<u>Some</u> of the <u>Time</u>	<u>A Little</u> of the <u>Time</u>	<u>None</u> of the <u>Time</u>
1. How much of the time have you felt tired out for no good reason? .....	1	2	3	4	5
2. How often did you feel nervous? .....	1	2	3	4	5
3. How often did you feel so nervous that nothing could calm you down? .....	1	2	3	4	5
4. How often did you feel hopeless? .....	1	2	3	4	5
5. How often did you feel restless or fidgety? .....	1	2	3	4	5
6. How often did you feel so restless or fidgety that you could not sit still? .....	1	2	3	4	5
7. How often did you feel depressed? .....	1	2	3	4	5
8. How often did you feel so depressed that nothing could cheer you up? .....	1	2	3	4	5
9. How often did you feel everything was an effort? .....	1	2	3	4	5
10. How often did you feel worthless? .....	1	2	3	4	5

**APPENDIX: SF-36 QUESTIONNAIRE ITEMS**

1. In general, would you say your health is:

**(Circle One Number)**

- Excellent ..... 1
- Very good..... 2
- Good..... 3
- Fair ..... 4
- Poor ..... 5

2. **Compared to 12 months ago**, how would you rate your health in general **now**?

**(Circle One Number)**

- Much better now than 12 months ago..... 1
- Somewhat better now than 12 months ago ..... 2
- About the same ..... 3
- Somewhat worse now than 12 months ago..... 4
- Much worse now than 12 months ago ..... 5

The following items are about activities you might do during a typical day. Does **your health now limit you** in these activities? If so, how much?

**(Circle One Number on Each Line)**

	Yes, Limited <u>a Lot</u>	Yes, Limited <u>a Little</u>	No, Not Limited <u>at All</u>
3. <b>Vigorous activities</b> , such as running, lifting heavy objects, participating in strenuous sports .....	1	2	3
4. <b>Moderate activities</b> , such as moving a table, pushing a vacuum cleaner, bowling, or playing golf.....	1	2	3
5. Lifting or carrying groceries .....	1	2	3
6. Climbing <b>one</b> flight of stairs .....	1	2	3
7. Climbing <b>several</b> flights of stairs .....	1	2	3
8. Bending, kneeling, or stooping.....	1	2	3
9. Walking <b>100 metres</b> .....	1	2	3
10. Walking <b>half a kilometre</b> .....	1	2	3
11. Walking <b>more than a kilometre</b> .....	1	2	3

- |      |                         |   |   |   |
|------|-------------------------|---|---|---|
| 12.a | Bathing yourself.....   | 1 | 2 | 3 |
| 12.b | Dressing yourself ..... | 1 | 2 | 3 |

During the **past 4 weeks**, as a result of **your physical health**:

**(Circle One Number on Each Line)**

- |     | All<br>of the<br><u>Time</u>   | Most<br>of the<br><u>Time</u> | Some<br>of the<br><u>Time</u> | A Little<br>of the<br><u>Time</u> | None<br>of the<br><u>Time</u> |
|-----|--|-------------------------------|-------------------------------|-----------------------------------|-------------------------------|
| 11. | How often did you <b>cut down</b> the amount of time you spent on your usual daily activities? .....               |                               |                               |                                   |                               |
|     | 1  | 2                             | 3                             | 4                                 | 5                             |
| 12. | How often did you <b>get less done</b> than you would like?1   |                               |                               |                                   |                               |
|     | 1  | 2                             | 3                             | 4                                 | 5                             |
| 13. | How often were you limited in the <b>type</b> of activities you could do?.....                                     |                               |                               |                                   |                               |
|     | 1  | 2                             | 3                             | 4                                 | 5                             |
| 14. | How often did you have <b>difficulty</b> doing you usual daily activities (for example, it took extra effort)? ... |                               |                               |                                   |                               |
|     | 1  | 2                             | 3                             | 4                                 | 5                             |

During the **past 4 weeks**, as a result of any **emotional problems** such as feeling depressed or anxious?

**(Circle One Number on Each Line)**

- |     | All<br>of the<br><u>Time</u>   | Most<br>of the<br><u>Time</u> | Some<br>of the<br><u>Time</u> | A Little<br>of the<br><u>Time</u> | None<br>of the<br><u>Time</u> |
|-----|--|-------------------------------|-------------------------------|-----------------------------------|-------------------------------|
| 15. | How often did you <b>cut down</b> the amount of time you spent on your usual daily activities? ..... |                               |                               |                                   |                               |
|     | 1  | 2                             | 3                             | 4                                 | 5                             |
| 16. | How often did you <b>get less done</b> than you would like?1   |                               |                               |                                   |                               |
|     | 1  | 2                             | 3                             | 4                                 | 5                             |
| 17. | How often did you do you daily activities less carefully Than usual? .....                           |                               |                               |                                   |                               |
|     | 1  | 2                             | 3                             | 4                                 | 5                             |

20. During the **past 4 weeks**, to what extent have any physical or emotional problems interfered with your usual social activities?

(Circle One Number)

- Not at all..... 1
- A little bit ..... 2
- Moderately ..... 3
- Quite a bit..... 4
- Extremely ..... 5

21. During the **past 4 weeks**, how much **bodily** pain have you had?

(Circle One Number)

- None ..... 1
- Very mild ..... 2
- Mild..... 3
- Moderate ..... 4
- Severe..... 5
- Very severe ..... 6

22. During the **past 4 weeks**, how much did **pain** interfere with your usual daily activities?

(Circle One Number)

- Not at all..... 1
- A little bit ..... 2
- Moderately ..... 3
- Quite a bit..... 4
- Extremely ..... 5

The following questions are about how you feel and how things have been with you **during the past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the **past 4 weeks** . . .

(Circle One Number on Each Line)

	<u>All</u> of the <u>Time</u>	<u>Most</u> of the <u>Time</u>	<u>Some</u> of the <u>Time</u>	<u>A Little</u> of the <u>Time</u>	<u>None</u> of the <u>Time</u>
23. Did you feel full of life?.....	1	2	3	4	5
24. Have you been very nervous? .....	1	2	3	4	5
25. Have you felt so down that nothing could cheer you up? .....	1	2	3	4	5
26. Have you felt calm and peaceful? .....	1	2	3	4	5



27. Did you have a lot of energy? ..... 1 2 3 4 5
28. Have you felt downhearted and depressed? 1 2 3 4 5
29. Did you feel worn out? ..... 1 2 3 4 5
30. Have you been happy? ..... 1 2 3 4 5
31. Did you feel tired? ..... 1 2 3 4 5
32. During the **past 4 weeks**, how much of the time has your **physical or emotional problems** interfered with your social activities (like visiting with friends, relatives, etc.)?  
**(Circle One Number)**
- All of the time ..... 1  
Most of the time ..... 2  
Some of the time ..... 3  
A little of the time ..... 4  
None of the time ..... 5

How **TRUE** or **FALSE** is each of the following statements for you.

**(Circle One Number on Each Line)**

- |  |   | <u>Definitely true</u> | <u>Mostly true</u> | <u>Neither true nor false</u> | <u>Mostly false</u> | <u>Definitely false</u> |
|--|---|------------------------|--------------------|-------------------------------|---------------------|-------------------------|
| 33. I seem to get sick a little easier than other people.....  | 1 |                        | 2                  | 3                             | 4                   | 5                       |
| 34. I am as healthy as anybody I know.....                     | 1 |                        | 2                  | 3                             | 4                   | 5                       |
| 35. I expect my health to get worse in the next 12 months..... | 1 |                        | 2                  | 3                             | 4                   | 5                       |
| 36. My health is excellent.....                                | 1 |                        | 2                  | 3                             | 4                   | 5                       |



10. When they were open, could you quickly get advice over the phone if you needed it? ..... 1 2 3 4
11. If you called them could you talk to the person that knows you best? ..... 1 2 3 4
12. If you got sick when they were closed, does PCP have a Phone number you could call for advice?.... 1 2 3 4
13. Do you think they know you very well as a person? 1 2 3 4
14. Do you think they know what medical problems are most important to you? ..... 1 2 3 4
15. If you wanted a check up would you go to PCP rather than anywhere else? ..... 1 2 3 4
16. In the last 12 months have you put off going to see your doctor when you needed to, because you could not afford to pay the cost of a visit?  
 Yes ..... 1  
 No..... 2
17. If yes, About how many times have you done this in the last 12 months?  
 \_\_\_\_\_ Record number of times (*use lowest number if range given*)
18. In the last 12 months has there been any times when a doctor gave you a prescription, but you didn't collect one or more of the items from the chemist because you could not afford the cost?  
 Yes ..... 1  
 No..... 2
19. If yes, about how many times have you done this in the last 12 months?  
 \_\_\_\_\_ Record number of times (*use lowest number if range given*)
20. In the last 12 months have you put off going to see a dentist when you needed to, because you could not afford the cost of the visit?  
 Yes ..... 1  
 No..... 2