**

By Te Rōpū Rangahau Hauora a Eru Pōmare, University of Otago, Wellington

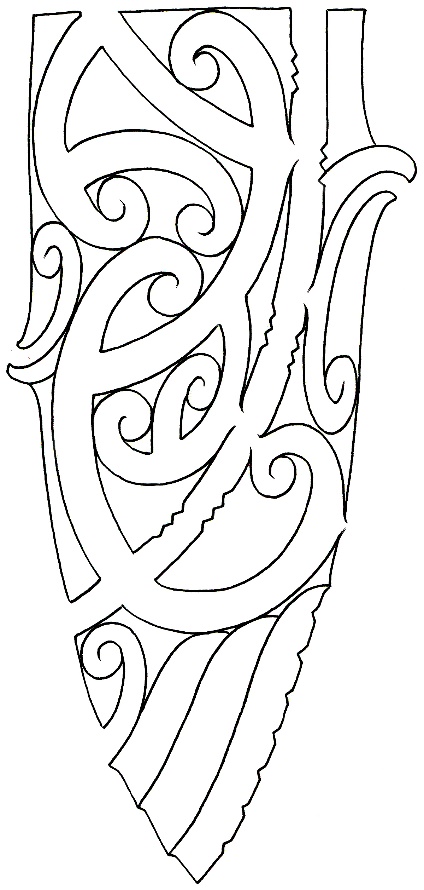
For the Ministry of Health

Taranaki

District Health Board

Māori Health

Profile 2015

Te Rei Puta

The cover design represents the journey of data from its production to its use by the health sector. The overall shape of the design is the prized rei puta. This signifies the importance of information and the acknowledgement that knowledge is a taonga.

At the centre of the design interwoven kowhaiwhai represent the complexity of data that underpins the reports. The ngutu kākā represents the verbal mechanisms for passing on knowledge and the mangopare design symbolises strength and the application of knowledge.

The reports focus on the health status of Māori, and in particular where there are inequalities compared to non-Māori. Niho taniwha represents the strength required to meet adversity and persist through to a successful end, the koru symbolises the growth that results from access to information. The retention of knowledge is embodied in the pātaka kai.

Design by Graham Tipene

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Further information on Te Rōpū Rangahau Hauora a Eru Pōmare can be found [here.](http://www.otago.ac.nz/wellington/departments/publichealth/research/erupomare/)





# He Mihi

Tūi Tuia i Te Herenga Tangata

Te tangi a Te Rōpū Rangahau Hauora a Eru Pōmare.

Tui Tui Tui Tuia

E ngā maunga whakahii, ngā pū kōrero huri noa

Tēnā koutou, tēnā koutou, tēnā tātou katoa.

Ngā mate huhua e hinga mai nei i runga i o tātou marae maha

Haere atu rā, okioki ai.

Ngā whakaaro, ngā kōrero aroha, ngā tautoko i awhi nei i te kaupapa

Anei te mihi ki ngā kaimahi hauora

Whakapiki te kaha

Whakapiki te ora

Whakapiki te māramatanga

Kia eke tātou katoa ki Te Pae Ora.

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Ngā mihi nui ki a koutou katoa.

Nā,

Te Rōpū Rangahau Hauora a Eru Pōmare (Eru Pōmare Māori Health Research Centre)  
University of Otago Wellington



Tiro whānui

− Taranaki at a glance

Taranaki population

* In 2013, 20,400 Māori lived in the Taranaki District Health Board region, 18% of the District’s total population.
* The Taranaki Māori population is youthful, but showing signs of ageing. The median age in 2013 was 23.5 years. Thirty percent of the District’s children aged 0–14 years and 26% of the youth aged 15–24 years were Māori.
* The Māori population aged 65 years and over will increase by 48% between 2013 and 2020.

Whānau ora – Healthy families

* In 2013, most Taranaki Māori adults (86%) reported that their whānau was doing well, but 5% felt their whānau was doing badly. Eight percent found it hard to access whānau support in times of need, but most found it easy (79%).
* Being involved in Māori culture was important (very, quite, or somewhat) to two-thirds of Māori adults (68%), as was spirituality (64%).
* Practically all (99%) Taranaki Māori had been to a marae at some time. Over half (58%) had been to their ancestral marae, with 61% stating they would like to go more often.
* One in seven had taken part in traditional healing or massage in the previous 12 months.
* Eighteen percent of Taranaki Māori could have a conversation about a lot of everyday things in te reo Māori in 2013.

Wai ora – Healthy environments

Education

* In 2013, 93% of Taranaki Māori children who started school had participated in early childhood education.
* In 2013, 43% of Māori adults aged 18 years and over had at least a Level 2 Certificate, an increase since 2006 (36%). The proportion of non-Māori with this level of qualification was 60%.

Work

* In 2013, 10% of Māori adults aged 15 years and over were unemployed, twice the non-Māori rate (5%).
* Most Māori adults in Taranaki (88%) do voluntary work.
* In 2013, Māori were more likely than non-Māori to look after someone who was disabled or ill, within or outside of the home.

Income and standard of living

* In 2013, two out of five children and one in three adults in Māori households (defined as households with at least one Māori resident) were in households with low equivalised household incomes (under $15,172), compared with one in five children and adults in other households.
* In 2013, 12% of Taranaki Māori adults reported having put up with feeling the cold a lot to keep costs down during the previous 12 months, 6% had often gone without fresh fruit and vegetables a lot, and 12% had postponed or put off visits to the doctor.
* Residents of Māori households were more likely than residents of other households to have no access to a motor vehicle (8% compared to 3%).
* People in Māori households were less likely to have access to telecommunications than those living in other households: 31% had no internet, 26% no telephone, 12% no mobile phone, and 3% had no access to any telecommunications in the home.

Housing

* In 2013, the most common housing problems reported as a big problem by Māori adults were finding it hard to keep warm (14%), needing repairs (14%), and damp (11%).
* Over half of children in Taranaki Māori households (54%) were living in rented accommodation, twice the proportion of children in other households (25%).
* Taranaki residents of Māori households were 3.3 times as likely as others to be in crowded homes (i.e. requiring at least one additional bedroom).

Area deprivation

* Using the NZDep2013 index of small area deprivation, 14% of Taranaki Māori lived in the most deprived decile areas (decile 10) compared to 4% of non-Māori in 2013. Non-Māori were more likely than Māori to live in the least deprived nieghbourhoods.

Mauri ora – Healthy individuals

Pepi, tamariki – Infants and children

* On average, 531 Māori infants were born per year during 2009–2013, 34% of all live births in the DHB. Six percent of Māori babies had low birth weight, 2% had high birth weight and 7% were born preterm.
* In 2013, 68% of Māori babies in Taranaki were fully breastfed at 6 weeks.
* Almost two-thirds of Māori infants were enrolled with a Primary Health Organisation by three months of age.
* In 2014, 85% of Māori children were fully immunised at 8 months of age, 92% at 24 months.
* In 2013, three out of five Taranaki Māori children aged 5 years and two out of five non-Māori children had caries. At Year 8 of school, one of two Māori children and two out of five non-Māori children had caries. Māori males under 15 years were 32% more likely than non-Māori to be hospitalised for tooth and gum disease during 2011–2013.
* During 2011–2013, on average there were 53 hospital admissions per year for grommet insertions among Māori children. The rate for Māori boys was 37% higher than for non-Māori boys.
* The rate of admission for serious skin infections was 2.4 times as high for Māori as for non-Māori children, with an average of 30 admissions per year.
* One Māori child per year on average was admitted to hospital with acute rheumatic fever between 2011 and 2013.
* On average, 313 hospitalisations per year of Māori children were potentially avoidable through population-based health promotion and intersectoral actions, at a rate 51% higher than that of non-Māori children.
* An average of 218 hospitalisations per year of Māori children were potentially avoidable through preventive or treatment intervention in primary care (ambulatory care sensitive hospitalisations, or ASH), with a rate 45% higher than for non-Māori children.

Rangatahi – Young adults

* There has been a significant increase in the proportion of Taranaki Māori aged 14 and 15 years who have never smoked, and a decrease in the proportion of Māori aged 15–24 years who smoke regularly.
* By September 2014, between 49% and 62% of Māori girls aged 14 to 17 years in 2014 had received all three doses of the human papilloma virus (HPV) vaccine. Coverage among Māori girls was lowest for those aged 17 years with 49% fully immunised and highest among those aged 14 years (62%).
* Eleven Māori aged 15–24 years, and eight aged 25–44 years were admitted to hospital per year for injury from intentional self-harm during 2011–2013. In the younger age group, rates were higher for females than for males.

Pakeke – Adults

* Almost half of Māori adults in Taranaki reported having excellent or very good health in 2013, and a third reported being in good health. Eighteen percent reported having fair or poor health.
* Smoking rates are decreasing, but remain twice as high for Māori as for non-Māori.

Circulatory system diseases

* Māori adults aged 25 years and over were 54% more likely than non-Māori to be hospitalised for circulatory system diseases (including heart disease and stroke) during 2011–2013.
* Taranaki Māori were 39% more likely than non-Māori to be admitted with acute coronary syndrome, 45% more likely to have angiography, and just as likely to have either angioplasty or a coronary artery bypass and graft.
* Heart failure admission rates were 3 times as high for Māori as for non-Māori.
* Stroke admission rates were 76% higher for Māori than for non-Māori.
* Admissions for hypertensive disease were 7.7 times as high for Māori women as for non-Māori women.
* Chronic rheumatic heart disease admissions were 6 times as common for Māori as for non-Māori. Heart valve replacements were higher for Māori women than for non-Māori women.
* Māori under 75 years were almost 3 times as likely as non-Māori to die from circulatory system diseases in 2007–2011.

Diabetes

* In 2013, 5% of Māori and 7% of non-Māori were estimated to have diabetes. Nearly half of Māori aged 25 years and over who had diabetes were regularly receiving metformin or insulin, 81% were having their blood sugar monitored regularly, and 62% were being screened regularly for renal disease.
* In 2011–2013 Māori women with diabetes were 3.3 times as likely as non-Māori women to have a lower limb amputated.

Cancer

* Cancer incidence was similar between Māori and non-Māori, but cancer mortality was 52% higher for Māori, among both females and males.
* Breast, lung, colorectal, uterine, and cervical cancers were the most commonly registered among Taranaki Māori women during 2008–2012. The rate of lung cancer was 4 times as high for Māori as for non-Māori women.
* Breast screening coverage of Māori women aged 45–69 years was 59% compared to 75% of non-Māori women during the two years to the end of 2014.
* Cervical screening coverage of Māori women aged 25–69 years was 65% over 3 years and 80% over five years (compared to 83% and 95% of non-Māori respectively).
* Prostate, lung, non-Hodgkin’s lymphoma, leukaemias, colorectal, and liver cancers were the most common cancers among Taranaki Māori males. Lung cancer rates were 2.5 times as high for Māori as for non-Māori men. Liver cancer rates were 8 times as high.
* The most common causes of death from cancer among Māori women during 2007–2011 were cancers of the lung, digestive organs, breast, and genital organs. Lung cancer mortality was 4 times as high for Māori as for non-Māori women.
* Among Māori men, cancers of the digestive organs, lung, and prostate were the leading causes of cancer death. Lung cancer mortality was 2.8 times as high for Māori as for non-Māori men. Mortality rates for cancers of the digestive organs were twice as high.

Respiratory disease

* Māori aged 45 years and over were almost 5 times as likely as non-Māori to be admitted to hospital for chronic obstructive pulmonary disease (COPD).
* Asthma hospitalisation rates were higher for Māori than non-Māori in each age group, notably 7.9 times as high among those aged 35–64 years.
* Māori under 75 years had 4.6 times the non-Māori rate of death from respiratory disease in 2007–2011.

Mental disorders

* Māori were almost 50% more likely than non-Māori to be admitted to hospital for a mental disorder during 2011–2013. Schizophrenia type disorders were the most common disorders followed by mood disorders.

Gout

* In 2011 the prevalence of gout among Taranaki Māori was estimated to be 6%, almost 90% more than the prevalence in non-Māori (3%).
* Forty-one percent of Māori with gout regularly received allopurinol, a preventive therapy to lower urate levels. Of those who received allopurinol, only 26% had a lab test for serum urate levels in the following six months.
* During 2011–2013 the rate of hospitalisations for gout was 14 times as high for Māori as for non-Māori, indicating a higher rate of flare-ups.

All ages

Hospitalisations

* The all-cause rate of hospital admissions was 13% higher for Māori than for non-Māori during 2011–2013.
* On average 1,188 Māori hospital admissions per year were potentially avoidable, with the rate 37% higher for Māori than for non-Māori. The ASH rate was 58% higher.

Mortality

* During 2012–2014 life expectancy at birth was 78.1 years for Māori females in the Taranaki Region (5.3 years lower than for non-Māori females) and 73.6 years for Māori males (6.1 years lower than for non-Māori males).
* The all-cause mortality rate for Taranaki Māori was 77% higher than the non-Māori rate during 2008–2012.
* Leading causes of death for Māori females during 2007–2011were ischaemic heart disease (IHD), lung cancer, COPD, breast cancer, and stroke. Leading causes of death for Māori males were IHD, COPD, lung cancer, diabetes, accidents, and suicide.
* Potentially avoidable mortality and mortality amenable to health care were both around 2.1 times as high for Māori as for non-Māori in Taranaki.

Injuries

* The rate of hospitalisation due to injury was 12% higher for Māori than for non-Māori in 2011–2013.
* The most common causes of injury resulting in hospitalisations among Māori were falls, exposure to mechanical forces, transport accidents, and complications of medical and surgical care.
* Rates of hospital admission for injury caused by assault were 4.6 times as high for Māori females as for non-Māori females, and 55% higher for Māori males than for non-Māori males. Males had higher rates of admission than females.
* On average, nine Taranaki Māori died from injury per year, with the mortality rate higher for males than for females.

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# Introduction

T

he Ministry of Health commissioned Te Rōpū Rangahau Hauora a Eru Pōmare to produce a Māori Health Profile for each District Health Board (DHB) in Aotearoa New Zealand. Each profile report is accompanied by an Excel© data file. The profiles are intended to be used by the health sector for planning purposes. They build on and update the previous Health Needs Assessments produced by Massey University in 2012 which can be viewed [here](http://www.health.govt.nz/our-work/populations/maori-health/dhb-maori-health-plans-and-health-needs-assessments#hna).

The overall aim of the Māori Health Strategy, He Korowai Oranga, is Pae Ora or Healthy Futures. Pae Ora is a holistic concept that includes three interconnected elements; whānau ora, wai ora and mauri ora. Further detail on He Korowai Oranga can be found [here](http://www.health.govt.nz/our-work/populations/maori-health/he-korowai-oranga/pae-ora-healthy-futures). Health indicators contained in the Māori Health Profiles are arranged according to these three elements. Whānau ora, healthy families, includes indicators of whānau wellbeing and support, participation in Māori culture and reo. Wai ora, or healthy environments, encompasses indicators on education, work, income, housing and deprivation. Mauri ora, healthy individuals, includes individual level indicators of health status. Mauri ora indicators are ordered according to life stage from pepi and tamariki to rangatahi then pakeke, and also a section on indicators that affect individuals of all ages.

This document presents data for residents of **Te Poari Hauora ā Rohe o Taranaki** **(Taranaki District Health Board).**

## Data sources and key methods

The main data sources for this report are: the 2013 Census of Population and Dwellings, Te Kupenga 2013 (the Māori Social Survey), mortality registrations, public hospital discharges, cancer registrations, the national immunisation register, the community oral health service, the Health Quality and Safety Commission’s Atlas of Healthcare Variation, Action on Smoking and Health (ASH) Year 10 Snapshot Survey of tobacco smoking among 14 and 15 year olds, and data from the Well Child/Tamariki Ora Quality Improvement Framework indicators.

Most data are presented for Māori and non-Māori residents of Taranaki DHB. Accompanying Excel tables also include data for the total Taranaki DHB population and the total New Zealand population for reo speakers, socioeconomic indicators, mortality, cancer registrations, and hospital discharges.

The unequal distribution of the social determinants of health is an important driver of health inequities between Māori and non-Māori. Information from the 2013 Census on living conditions that influence health has been analysed by individual, household, and neighbourhood. A household was classified as Māori if there was at least one Māori resident. The 2013 NZ Deprivation Index was used for classifying neighbourhoods. The index combines eight dimensions of deprivation, including access to telecommunications and internet, income, employment, qualifications, home ownership, support, living space, and access to transport.

Māori models of health encompass cultural vitality and whānau wellbeing. Indicators of these dimensions of health have been included in these Profiles, sourced from Te Kupenga 2013, the Māori Social Survey conducted in 2013 by Statistics New Zealand (SNZ). Further information on Te Kupenga can be found [here](http://www.stats.govt.nz/tekupenga). Data from Te Kupenga is presented for Māori only.

Hospitalisation, cancer registration, and mortality rates and Census data were age–sex-standardised to the 2001 Māori population[[1]](#footnote-1).

Ninety-five percent confidence intervals (95% CI) were calculated for crude and age-standardised hospitalisation and mortality rates and ratios using the log-transformation method (Clayton and Hills 1993). Confidence intervals for data from Te Kupenga were calculated by Statistics New Zealand. Confidence intervals have not been calculated for data from other sources.

For ambulatory care sensitive admissions and admission rates for specific causes, transfers are only included as an admission if the principal diagnosis is not in the same diagnostic group as the initial admission.

Average numbers of events per year have been rounded to the nearest whole number.

Further technical notes and methods are provided in Appendix 2.

## Further sources of data

Risk factors common to several chronic conditions such as diabetes, cardiovascular disease, cancer, respiratory disease, or vascular dementia, include smoking, alcohol and drug use, nutrition, body size, and physical activity. Improvements in these indicators require public health and intersectoral action to support healthy environments and living conditions for Māori communities, as well as primary care interventions designed for individuals and whānau. The 2012/13 New Zealand Health Survey provides evidence of inequities between Māori and non-Māori in the prevalence of these risks factors at the national level ([Ministry of Health 2013](http://www.health.govt.nz/publication/new-zealand-health-survey-annual-update-key-findings-2012-13)).

Other useful data sources include the Ministry of Health’s [publications](http://www.health.govt.nz/our-work/populations/maori-health/maori-health-publications) on Māori health, the Health Quality and Safety Commission’s [Atlas of Healthcare Variation](http://www.hqsc.govt.nz/our-programmes/health-quality-evaluation/projects/atlas-of-healthcare-variation/), the [DHB](http://dnmeds.otago.ac.nz/departments/womens/paediatrics/research/nzcyes/dhb-2011-2013.html) reports and [Te Ohonga Ake](http://dnmeds.otago.ac.nz/departments/womens/paediatrics/research/nzcyes/maori.html) reports of the New Zealand Child and Youth Epidemiology Service, the [Trendly](http://www.trendly.co.nz/) health performance monitoring website, and the Māori Health Plan Indicator reports provided to DHBs.

# Te Tatauranga o te Iwi

− Key demographics

I

n 2013, approximately 3% (20,400) of the country’s total Māori population lived in the Taranaki District Health Board area. The total population of the DHB (113,800) made up 3% of the national population. In 2015, the Māori population is estimated to be 21,200 and the total population 117,800. [[2]](#footnote-2)

Table 1: Population by age group, Taranaki DHB, 2013

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age group (years)** | **Māori** | | | **Non-Māori** | | Total DHB  Number |
| Number | Age distribution | % of DHB | Number | Age distribution |
| 0–14 | 7,140 | 35% | 30 | 16,960 | 18% | 24,100 |
| 15–24 | 3,550 | 17% | 26 | 10,220 | 11% | 13,770 |
| 25–44 | 4,970 | 24% | 18 | 22,630 | 24% | 27,600 |
| 45–64 | 3,670 | 18% | 12 | 26,410 | 28% | 30,080 |
| 65+ | 1,130 | 6% | 6 | 17,100 | 18% | 18,230 |
| Total | 20,400 | 100% | 18 | 93,400 | 100% | 113,800 |

Source: Statistics NZ Population projections for the Ministry of Health (2013 Census base) 2014 update

In 2013, Māori residents comprised 18% of the DHB population. The Māori population is relatively young, with a median age in 2013 of 23.5 years, compared with 39.5 years for the total DHB population. Just over half of the Māori population was under 25 years (52%). Māori made up 30% of the DHB’s children aged 0–14 years and 26% of those aged 15–24 years.

Table 2: Population projections, Taranaki DHB, 2013 to 2033

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Māori** | | | | | | | **Total DHB** | | | NZ Māori | Total NZ |
| Residents | %  of DHB | %  of NZ Māori | %  0–14 years | %  15–64 years | %  65+ years | Median age | Residents | Median age | % of NZ pop |
| 2013 | 20,400 | 18 | 3 | 35 | 60 | 6 | 23.5 | 113,800 | 39.5 | 3 | 692,300 | 4,442,100 |
| 2018 | 22,100 | 18 | 3 | 34 | 60 | 7 | 24.4 | 120,200 | 39.8 | 3 | 734,500 | 4,726,200 |
| 2023 | 23,800 | 19 | 3 | 32 | 60 | 8 | 25.4 | 122,600 | 40.7 | 3 | 773,500 | 4,935,200 |
| 2028 | 25,500 | 21 | 3 | 30 | 60 | 10 | 26.4 | 124,400 | 42.1 | 2 | 811,700 | 5,139,700 |
| 2033 | 27,200 | 22 | 3 | 30 | 59 | 11 | 27.3 | 125,300 | 43.7 | 2 | 850,700 | 5,327,700 |

Source: Statistics NZ Population projections for the Ministry of Health (2013 Census base) 2014 update  
Note: Detailed population projections are provided in Appendix 1.

The proportion of Māori who were aged 65 years and over in 2013 was 6% but is projected to increase to 11% in 2033. Between 2013 and 2020 the number of Māori aged 65 and over will increase by 48% from 1,130 to 1,670 (see Appendix 1). In 2013, there were 370 Māori aged 75 years and over in Taranaki, with 105 living alone (see accompanying Excel tables).

# Whānau ora

− Healthy families

T

he refreshed Māori health strategy, He Korowai Oranga (Ministry of Health, 2014) defines whānau ora as Māori families supported to achieve their maximum health and wellbeing. It aims to support families to be self-managing, leading healthy lifestyles, confidently participating in te ao Māori and society. This section reports selected findings from Te Kupenga 2013 on whānau well-being and support and engagement with Māori culture and reo.

## Whānau well-being

Table 3: Whānau well-being reported by Māori aged 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **How the whānau is doing** | **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Well / Extremely well | 15,500\*\*\* | 85.6\*\* | (79.8, | 91.4) | 83.4 | (82.5, | 84.4) |
| Neither well nor badly | 1,500\*\* | 9.1\*\* | (4.1, | 14.1) | 10.3 | (9.4, | 11.2) |
| Badly / Extremely badly | 1,000\*\* | 5.3\*\* | (2.1, | 8.5) | 6.3 | (5.6, | 7.0) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.   
Note: Two asterisks (\*\*) shows the sampling error is 50% or more but less than 100%.

In 2013, 86% of Taranaki Māori adults reported that their whānau was doing well or extremely well. However, 5% felt their whānau was doing badly or extremely badly.

Table 4: Whānau composition reported by Māori aged 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Whānau description** | **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| **Size of whānau** | | | | | | | |
| 10 or less | 9,500\* | 51.2\* | (43.0, | 59.4) | 53.7 | (52.1, | 55.3) |
| 11 to 20 | 3,500\* | 19.8\* | (13.3, | 26.4) | 22.6 | (21.3, | 24.0) |
| More than 20 | 5,500\* | 29.0\* | (20.6, | 37.3) | 23.6 | (22.4, | 24.8) |
| **Groups included in whānau** | | | | | | | |
| Parents, partner, children, brothers & sisters | 18,000\*\* | 98.4 | (96.4, | 100.3) | 94.6 | (94.0, | 95.2) |
| Aunts & uncles, cousins, nephews & nieces, other in-laws | 7,000\*\* | 38.0 | (30.7, | 45.3) | 41.3 | (39.8, | 42.8) |
| Grandparents, grandchildren | 8,500\*\* | 45.8 | (36.9, | 54.7) | 41.9 | (40.5, | 43.4) |
| Friends, others | 1,000\*\* | 6.1\*\* | (2.8, | 9.4) | 12.4 | (11.5, | 13.3) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.  
Notes: \* Sampling error is 30% or more but less than 50%. \*\* Sampling error is 50% or more but less than 100%.

Table 4 shows the size and composition of whānau, with almost 30% reporting whānau sizes of more than 20 people. Six percent included friends in their description of whānau.

## Whānau support

Table 5: Access to whānau support, Māori aged 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **How easy is it to get help** | **Taranaki DHB** | | | | | **New Zealand** | | |
| Estimated number | | % | (95% CI) | | % | (95% CI) | |
| **Support in times of need** | | | | | | |  |  |
| Easy, very easy | 14,500\*\* | 79.3\*\* | | (72.9, | 85.7) | 81.2 | (80.1, | 82.4) |
| Sometimes easy, sometimes hard | 2,500\*\* | 12.6\*\* | | (7.8, | 17.5) | 12.7 | (11.7, | 13.6) |
| Hard / very hard | 1,500\*\* | 8.1\*\* | | (3.3, | 12.8) | 6.1 | (5.4, | 6.8) |
| **Help with Māori cultural practices such as going to a tangi, speaking at a hui, or blessing a taonga** | | | | | | | | |
| Easy, very easy | 11,500\*\* | | 60.9\* | (52.9, | 68.9) | 64.1 | (62.7, | 65.6) |
| Sometimes easy, sometimes hard | 3,500\* | | 19.8\* | (12.9, | 26.7) | 16.9 | (15.9, | 18.0) |
| Hard / very hard | 3,500\* | | 18.9\* | (11.9, | 25.9) | 14.7 | (13.5, | 15.9) |
| Don't need help | S | | S |  |  | 4.2 | (3.7, | 4.7) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.   
Notes: \* Sampling error is 30% or more but less than 50%. \*\* Sampling error is 50% or more but less than 100%. S indicates data are suppressed.

In 2013, the majority of Māori adults in Taranaki (80%) reported having easy access to whānau support in times of need. However, an estimated 1,500 (8%) had difficulty getting help. A smaller proportion found it easy to get help with Māori cultural practices (61%), with 19% finding it hard or very hard.

## Importance of participation in Māori culture

Table 6: Importance of Māori culture and spirituality, Māori aged 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| **Importance of being involved in Māori culture** | | | | | |  |  |
| Very / quite | 7,500 | 41.8 | (33.4, | 50.1) | 46.3 | (44.9, | 47.6) |
| Somewhat | 5,000 | 26.5 | (19.3, | 33.8) | 24.2 | (22.9, | 25.6) |
| A little / not at all | 6,000 | 31.7 | (24.6, | 38.7) | 29.5 | (28.3, | 30.7) |
| **Importance of spirituality** | | | | | | | |
| Very / quite | 8,500 | 47.0 | (38.2, | 55.8) | 48.7 | (47.4, | 49.9) |
| Somewhat | 3,000\* | 16.9\* | (11.4, | 22.3) | 17.0 | (16.0, | 18.0) |
| A little / not at all | 6,500 | 36.2 | (27.8, | 44.5) | 34.3 | (33.1, | 35.5) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.  
Note: \* Sampling error is 30% or more but less than 50%.

Being involved in Māori culture was important to 42% of Taranaki Māori adults, and somewhat important to a further 27%. Spirituality was important (very, quite, or somewhat) to almost two-thirds of Taranaki Māori (64%).

## Te Reo Māori

Table 7: People who can have a conversation about a lot of everyday things in te reo Māori, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in proportion |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| 3,216 | 17.9 | (17.3, | 18.4) | 609 | 0.8 | (0.7, | 0.9) | **22.39** | **(20.32,** | **24.67)** | 17.1 |

Source: 2013 Census, Statistics New Zealand  
Notes: Percentages are age-standardised. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

According to the 2013 Census, 18% of all Māori in Taranaki and less than 1% of non-Māori could have a conversation about a lot of everyday things in te reo Māori.

Table 8: Use of te reo Māori in the home, Māori aged 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Language spoken at home** | **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Māori is main language | S | S |  |  | 2.6 | (2.2, | 3.0) |
| Māori is used regularly | 2,500\* | 16.0\* | (10.5, | 21.4) | 20.5 | (19.2, | 21.8) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.   
Note: \* Sampling error is 30% or more but less than 50%. S indicates data suppressed.

In 2013, 16% of Māori adults reported that te reo Māori was used regularly in the home.

## Access to marae

Table 9: Access to marae, Māori aged 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Been to marae** | **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| At some time | 18,500 | 98.6 | (96.9, | 100) | 96.0 | (95.5, | 96.6) |
| In previous 12 months(1) | 10,500 | 56.8 | (48.7, | 65.0) | 58.2 | (56.6, | 59.7) |
| Ancestral marae at some time(2) | 10,500 | 57.6 | (50.4, | 64.7) | 62.3 | (60.9, | 63.7) |
| Ancestral marae in previous 12 months(3) | 6,000 | 33.5 | (26.7, | 40.4) | 33.6 | (32.3, | 34.9) |
| Like to go to ancestral marae more often(2) | 7,500 | 61.0 | (51.7, | 70.4) | 58.7 | (56.7, | 60.7) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.  
Notes: (1) Those who had been to a marae at some time.  
(2) Both those who knew and did not know their ancestral marae.  
(3) Those who had been to any of their ancestral marae in the last 12 months.

In 2013, almost all Māori in Taranaki (99%) had been to a marae, with a majority (57%) having been in the last 12 months. Fifty-eight percent had been to at least one of their ancestral marae, with a third having been in the last 12 months, and two-thirds reporting that they would like to go more often.

## Traditional healing or massage

Table 10: Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Taranaki DHB, 2013

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| 2,500\* | 14.7\* | (9.4, | 19.9) | 10.9 | (10.0, | 11.7) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.  
Note: \* Sampling error is 30% or more but less than 50%.

In 2013, an estimated 2,500 Māori adults (15%) in Taranaki had taken part in traditional healing or massage during the previous 12 months.

# Wai ora

− Healthy environments

T

his section focuses on those aspects of social and physical environments that influence our health and well-being. Data is presented on individuals, households, and individuals living in households. A household that includes at least one Māori usual resident on Census night is categorised as a Māori household, and other households are categorised as non-Māori.

## Education

Table 11: Adults aged 18 years and over with a Level 2 Certificate or higher Taranaki DHB, 2006 and 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| 2006 | 3,144 | 36.2 | (35.2, | 37.2) | 29,583 | 53.9 | (53.4, | 54.3) | **0.67** | **(0.65,** | **0.69)** | -17.7 |
| 2013 | 4,368 | 43.2 | (42.2, | 44.1) | 33,741 | 60.1 | (59.7, | 60.5) | **0.72** | **(0.70,** | **0.74)** | -16.9 |

Source: 2006 and 2013 Censuses, Statistics New Zealand  
Notes: Percentages are age-standardised. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

The proportion of Māori adults aged 18 years and over with at least a Level 2 Certificate increased from 36% to 43% between 2006 and 2013. There was little change in the gap between Māori and non-Māori, as the proportion of non-Māori with this level of qualification also increased.

## Work

Table 12: Labour force status, 15 years and over, Taranaki DHB, 2006 and 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Labour force status** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| **2006** | | | | | | | | | | | | |
| Employed full-time | 4,681 | 47.6 | (46.7, | 48.5) | 34,185 | 57.3 | (56.9, | 57.7) | **0.83** | **(0.81,** | **0.85)** | -9.7 |
| Employed part-time | 1,433 | 13.8 | (13.2, | 14.5) | 10,530 | 16.8 | (16.5, | 17.1) | **0.82** | **(0.78,** | **0.87)** | -3.0 |
| Unemployed | 813 | 8.3 | (7.8, | 8.9) | 1,686 | 3.6 | (3.4, | 3.8) | **2.31** | **(2.12,** | **2.50)** | 4.7 |
| Not in the labour force | 3,225 | 30.4 | (29.6, | 31.3) | 21,948 | 22.3 | (21.9, | 22.6) | **1.37** | **(1.32,** | **1.41)** | 8.1 |
| **2013** | | | | | | | | | | | | |
| Employed full-time | 5,268 | 46.1 | (45.3, | 47.0) | 34,674 | 55.4 | (55.0, | 55.7) | **0.83** | **(0.82,** | **0.85)** | -9.2 |
| Employed part-time | 1,653 | 14.1 | (13.5, | 14.8) | 10,764 | 16.4 | (16.1, | 16.7) | **0.86** | **(0.82,** | **0.91)** | -2.2 |
| Unemployed | 1,059 | 9.7 | (9.2, | 10.3) | 2,058 | 4.6 | (4.4, | 4.8) | **2.11** | **(1.96,** | **2.26)** | 5.1 |
| Not in the labour force | 3,735 | 30.0 | (29.2, | 30.8) | 22,872 | 23.7 | (23.3, | 24.1) | **1.27** | **(1.23,** | **1.30)** | 6.3 |

Source: 2006 and 2013 Censuses, Statistics New Zealand  
Notes Percentages are age-standardised. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.  
Employed part-time includes people working 1 hour per week or more. Employed full-time includes people who usually work 30 or more hours per week. Unemployed people are without a paid job, available for work and actively seeking work. People not in the labour force includes people in the working age population who are neither employed nor unemployed.

Between 2006 and 2013 there was an increase in the number of Māori employed full time (from 4,681 to 5,286) but the proportion was reasonably static at just under 50%. The proportion of Māori in part-time employment remained the same (14%), as did the proportion of Māori not in the labour force (30%). The number and proportion of unemployed Māori increased over this time period (from 8% to 10%). In 2013, Māori were twice as likely as non-Māori to be unemployed, with an absolute gap of 5% in unemployment rates.

Table 13: Leading industries in which Māori were employed, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ANZSIC Industry** | **Taranaki DHB** | | | | | | **New Zealand** | |
| **Māori** | | | **Non-Māori** | | |
| Number | % | Rank | Number | % | Rank | % | Rank |
| **Females** | | | | | | | | |
| Health Care and Social Assistance | 522 | 19.1 | 1 | 3,717 | 18.2 | 1 | 17.1 | 1 |
| Manufacturing | 438 | 16.1 | 2 | 1,404 | 6.9 | 5 | 6.0 | 6 |
| Education and Training | 348 | 12.8 | 3 | 2,454 | 12.0 | 3 | 12.9 | 2 |
| Retail Trade | 345 | 12.7 | 4 | 2,550 | 12.5 | 2 | 11.6 | 3 |
| Accommodation and Food Services | 300 | 11.0 | 5 | 1,395 | 6.8 | 6 | 7.3 | 5 |
| **Males** | | | | | | | | |
| Manufacturing | 1,065 | 32.4 | 1 | 4,191 | 18.2 | 1 | 13.4 | 1 |
| Construction | 543 | 16.5 | 2 | 3,042 | 13.2 | 3 | 13.2 | 2 |
| Agriculture, Forestry and Fishing | 348 | 10.6 | 3 | 3,846 | 16.7 | 2 | 8.7 | 4 |
| Transport, Postal and Warehousing | 219 | 6.7 | 4 | 1,164 | 5.0 | 6 | 5.9 | 7 |
| Retail Trade | 171 | 5.2 | 5 | 1,635 | 7.1 | 4 | 8.3 | 5 |

Source: 2013 Census, Statistics New Zealand  
Australian and New Zealand Standard Industrial Classification (ANZSIC)

Service industries were the main employers of Māori women in Taranaki, including health care and social assistance; manufacturing; education and training; retail; and accommodation and food services. For Māori men, leading industries were manufacturing; construction; agriculture, forestry and fishing; transport, postal and warehousing; and retail trade.

Table 14: Leading occupations of employed Māori, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ANZSCO Occupation** | **Taranaki DHB** | | | | | | | | | | | **New Zealand** | |
| **Māori** | | | | | | **Non-Māori** | | | | |
| Number | | % | | Rank | | Number | | % | | Rank | % | Rank |
| **Females** | | | | | | | | | | | | | | |
| Labourers | 642 | 22.5 | | 1 | | 2,136 | | 10.6 | | 6 | | 8.3 | 6 |
| Professionals | 525 | 18.4 | | 2 | | 4,512 | | 22.4 | | 1 | | 26.7 | 1 |
| Community and Personal Service Workers | 465 | 16.3 | | 3 | | 2,616 | | 13.0 | | 4 | | 12.9 | 4 |
| Clerical and Administrative Workers | 375 | 13.2 | | 4 | | 3,768 | | 18.7 | | 2 | | 19.5 | 2 |
| Managers | 342 | 12.0 | | 5 | | 3,522 | | 17.5 | | 3 | | 14.4 | 3 |
| Sales Workers | 333 | 11.7 | | 6 | | 2,199 | | 10.9 | | 5 | | 11.7 | 5 |
| Technicians and Trades Workers | 147 | 5.2 | | 7 | | 1,137 | | 5.7 | | 7 | | 5.0 | 7 |
| Machinery Operators and Drivers | 21 | 0.7 | | 8 | | 231 | | 1.1 | | 8 | | 1.5 | 8 |
| **Males** | | | | | | | | | | | | | |
| Labourers | 1,113 | 32.8 | | 1 | | 3,678 | | 16.5 | | 3 | | 13.6 | 4 |
| Technicians and Trades Workers | 642 | 18.9 | | 2 | | 4,740 | | 21.3 | | 2 | | 18.5 | 3 |
| Machinery Operators and Drivers | 525 | 15.5 | | 3 | | 2,052 | | 9.2 | | 5 | | 9.1 | 5 |
| Managers | 483 | 14.2 | | 4 | | 6,063 | | 27.2 | | 1 | | 22.7 | 1 |
| Professionals | 261 | 7.7 | | 5 | | 3,045 | | 13.7 | | 4 | | 18.6 | 2 |
| Sales Workers | 135 | 4.0 | | 6 | | 1,173 | | 5.3 | | 6 | | 7.1 | 6 |
| Community and Personal Service Workers | 129 | 3.8 | | 7 | | 756 | | 3.4 | | 8 | | 5.4 | 7 |
| Clerical and Administrative Workers | 102 | 3.0 | | 8 | | 795 | | 3.6 | | 7 | | 5.1 | 8 |

Source: 2013 Census, Statistics New Zealand  
Australian and New Zealand Standard Classification of Occupations (ANZSCO), major grouping

Among employed Māori women, the leading occupational groupings were labourers (23%); professionals (18%) community and personal service workers (16%); clerical and administrative workers (13%); managers (12%); and sales workers (12%).

Māori men were most likely to be employed as labourers (33%); technicians and trade workers (19%); machinery operators and drivers (16%); and managers (14%).

Table 15: Unpaid work, 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Unpaid work** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| Any unpaid work | 9,495 | 88.4 | (87.8, | 89.0) | 58,743 | 89.7 | (89.4, | 90.0) | **0.99** | **(0.98,** | **0.99)** | -1.3 |
| Looking after disabled/ill household member | 1,275 | 11.9 | (11.3, | 12.5) | 4,446 | 6.5 | (6.2, | 6.7) | **1.84** | **(1.73,** | **1.95)** | 5.4 |
| Looking after disabled/ill non-household member | 1,244 | 11.2 | (10.6, | 11.8) | 5,991 | 7.3 | (7.1, | 7.6) | **1.52** | **(1.43,** | **1.62)** | 3.8 |

Source: 2013 Census, Statistics New Zealand  
Notes Percentages are age-standardised. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

In 2013, 88% of Māori adults worked without pay. Māori were 84% more likely than non-Māori to look after someone who was disabled or ill within the home, and 52% more likely to look after someone living elsewhere.

## Income and standard of living

Table 16: Unmet need reported by Māori aged 15 years and over to keep costs down in the last 12 months, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Actions taken a lot to keep costs down** | **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Put up with feeling the cold | 2,000\* | 11.5\* | (6.4, | 16.5) | 11.0 | (10.2, | 11.8) |
| Go without fresh fruit and vegetables | 1,000\*\* | 5.7\* | (2.9, | 8.5) | 5.4 | (4.8, | 6.0) |
| Postpone or put off visits to the doctor | 2,500\* | 12.3\* | (7.2, | 17.5) | 8.8 | (7.9, | 9.6) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.  
Note: \* Sampling error is 30% or more but less than 50%. \*\* Sampling error is 50% or more but less than 100%.

In 2013, an estimated 2,000 Māori adults (12%) reported putting up with feeling cold a lot to keep costs down during the previous 12 months, 1,000 (6%) had gone without fresh fruit and vegetables, and 2,500 (12%) had often postponed or put off visits to the doctor.

Table 17: Children aged 0–17 years living in families where the only income is means-tested benefits, Taranaki DHB, 2006 and 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Māori families** | | | | **Non-Māori families** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| 2006 | 1,461 | 20.4 | (19.5, | 21.3) | 990 | 5.7 | (5.4, | 6.1) | **3.57** | **(3.30,** | **3.85)** | 14.7 |
| 2013 | 1,602 | 19.4 | (18.6, | 20.3) | 951 | 5.5 | (5.2, | 5.9) | **3.52** | **(3.26,** | **3.79)** | 13.9 |

Source: 2006 and 2013 Censuses, Statistics New Zealand  
Notes: Māori families include at least one Māori member. Non-Māori families have no Māori members.   
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

There was an increase in the number of children living in Māori families where the only income was means-tested benefits between 2006 and 2013, although the actual proportion stayed similar at one in five children. Children in Māori families were 3.5 times as likely as non-Māori children in Taranaki to be in this situation.

Table 18: Children and adults living in households with low incomes, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **Māori households** | | | | **Non-Māori households** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| Children 0–17 years | 2,610 | 38.1 | (37.0, | 39.3) | 2,952 | 18.5 | (17.9, | 19.1) | **2.06** | **(1.97,** | **2.15)** | 19.6 |
| Adults 18 years & over | 3,834 | 31.0 | (30.2, | 31.8) | 8,874 | 18.9 | (18.4, | 19.3) | **1.64** | **(1.59,** | **1.70)** | 12.1 |

Source: 2013 Census, Statistics New Zealand  
Notes: % is age-standardised. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.  
A Māori household is a household with at least one Māori resident. Non-Māori households have no Māori residents.  
Household income is equivalised using the revised Jensen scale. Low income is defined as an equivalised household income under $15,172.

Just under 40% of the children in Māori households (over 2,600) were in households with low equivalised household incomes, twice the proportion of other children. Over 30% of adults in Māori households (over 3,830) lived in low income households, two-thirds higher than the proportion of other adults.

Table 19: Households with no access to a motor vehicle, Taranaki DHB, 2006 and 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Measure | **Māori households** | | | | **Non-Māori households** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| **Households** | | | | | | | | | | | | |
| 2006 | 777 | 11.8 | (11.0, | 12.6) | 2,241 | 7.1 | (6.8, | 7.4) | **1.67** | **(1.54,** | **1.80)** | 4.7, |
| 2013 | 876 | 11.2 | (10.5, | 12.0) | 2,127 | 6.4 | (6.2, | 6.7) | **1.75** | **(1.62,** | **1.89)** | 4.8 |
| **People (% age-standardised)** | | | | | | | | | | | | |
| 2006 | 1,917 | 9.3 | (8.9, | 9.7) | 2,949 | 2.5 | (2.3, | 2.6) | **3.78** | **(3.54,** | **4.04)** | 6.8 |
| 2013 | 2,028 | 8.4 | (8.1, | 8.8) | 2,889 | 2.6 | (2.5, | 2.8) | **3.20** | **(3.00,** | **3.42)** | 5.8 |

Source: 2006 and 2013 Censuses, Statistics New Zealand  
Notes: A Māori household is a household with at least one Māori resident. Non-Māori households have no Māori residents.   
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

In 2013, 11% of Māori households had no access to a motor vehicle, compared to 6% of non-Māori households. The proportion of residents in Māori households (8%) without access to a vehicle was 3.2 times the proportion of residents in non-Māori households (3%).

Table 20: People in households with no access to telephone, mobile/cell phone, internet, or any telecommunications, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mode of tele-communication** | **Māori households** | | | | **Non-Māori households** | | | | | | | Māori/non-Māori  ratio (95% CI) | | | | Difference in percentage | |
| Number | % | (95% CI) | | Number | | % | | (95% CI) | | |
| No mobile/cell phone | 2,976 | 11.7 | (11.3, | 12.1) | | 10,377 | | 9.2 | | (9.0, | 9.5) | | **1.26** | **(1.21,** | **1.32)** | | 2.4 | |
| No telephone | 5,901 | 25.8 | (25.3, | 26.4) | | 6,750 | | 11.0 | | (10.7, | 11.3) | | **2.35** | **(2.27** | **2.43)** | | 14.8 | |
| No internet | 7,413 | 30.7 | (30.1, | 31.3) | | 14,589 | | 13.6 | | (13.3, | 13.8) | | **2.26** | **(2.20** | **2.33)** | | 17.1 | |
| No tele-communications | 696 | 2.9 | (2.7, | 3.2) | | 705 | | 1.0 | | (0.9, | 1.1) | | **2.95** | **(2.64** | **3.31)** | | 1.9 | |

Source: 2013 Census, Statistics New Zealand  
Notes: A Māori household is a household with at least one Māori resident. Non-Māori households have no Māori residents.   
% is age–sex-standardised to the 2001 Māori population.  
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

In 2013, 31% of residents of Māori households had no access to the internet, 26% did not have a telephone, 12% had no cell phone, and 3% had no access to any telecommunications in the home. The largest absolute gap between Taranaki residents of Māori and non-Māori households was in access to the internet (a difference of 17 percentage points).

## Housing

Table 21: Housing problems reported by Māori aged 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Housing problem (a big problem)** | **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Too small | 500\*\* | 2.7\*\* | (0.2, | 5.2) | 5.3 | (4.7, | 5.9) |
| Damp | 2,000\* | 10.8\* | (5.9, | 15.8) | 11.3 | (10.5, | 12.2) |
| Hard to keep warm | 2,500\* | 14.4\* | (7.9, | 20.9) | 16.5 | (15.4, | 17.7) |
| Needs repairs | 2,500\* | 14.4\* | (8.9, | 19.9) | 13.8 | (12.7, | 14.9) |
| Pests in the house | 5,00\*\* | 3.1\*\* | (0.5, | 5.7) | 5.8 | (5.1, | 6.5) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.   
Notes: \* Sampling error is 30% or more but less than 50%. \*\* Sampling error is 50% or more but less than 100%.

Housing problems reported as a big problem by Taranaki Māori adults in 2013 included difficulty keeping the house warm (14%), needing repairs (14%), and damp (11%). Three percent felt their house was too small, and 3% stated that pests were a big problem in their house.

### Housing security

Table 22: Children and adults living in households where rent payment are made, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Measure | **Māori households** | | | | **Non-Māori households** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| Households | 3,570 | 46.2 | (45.1, | 47.3) | 6,762 | 20.8 | (20.3, | 21.2) | **2.22** | **(2.15,** | **2.30)** | 25.4 |
| Children under 18 years (% age-standardised) | 4,545 | 53.5 | (52.4, | 54.5) | 4,434 | 25.3 | (24.7, | 26.0) | **2.11** | **(2.05,** | **2.18)** | 28.2 |
| Adults 18 years and over (% age-standardised) | 6,558 | 45.5 | (44.7, | 46.3) | 11,316 | 26.8 | (26.3, | 27.2) | **1.70** | **(1.66,** | **1.74)** | 18.7 |

Source: 2013 Census, Statistics New Zealand  
Notes: A Māori household is a household with at least one Māori resident. Non-Māori households have no Māori residents.   
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

In 2013, 3,570 Māori households were rented, 46% of all Māori households compared to 21% of non-Māori households.

Among children living in a Māori household, 54% (4,545 children) were living in rented homes, compared to 25% (4,434 children) in non-Māori households.

Forty-six percent of adults living in Māori households were in rented accommodation (around 6,558), compared to 27% of adults in non-Māori households.

### Household crowding

Table 23: People living in crowded households (requiring at least one more bedroom), Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Measure | **Māori households** | | | | **Non-Māori households** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| Households | 600 | 7.7 | (7.1, | 8.3) | 468 | 1.4 | (1.3, | 1.5) | **5.45** | **(4.84,** | **6.14)** | 6.3 |
| People (% age standardised) | 3,165 | 14.1 | (13.6, | 14.6) | 2,268 | 4.3 | (4.1, | 4.4) | **3.31** | **(3.14,** | **3.49)** | 9.8 |

Source: 2013 Census, Statistics New Zealand  
Notes: Crowding was defined as needing at least one additional bedroom according to the Canadian National Occupancy Standard (based on the age, sex and number of people living in the dwelling).  
A Māori household is a household with at least one Māori resident. Non-Māori households have no Māori residents.   
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

In 2013, Māori households were 5 times as likely as non-Māori households to be classified as crowded using the Canadian National Occupancy Standard, with around 600 homes needing at least one additional bedroom, affecting 3,165 people. Residents of Māori households were 3 times as likely as residents of other households to be living in crowded conditions (14% compared to 4%).

### Fuel poverty

Table 24: People living in households where no heating fuels are used, Taranaki DHB, 2013

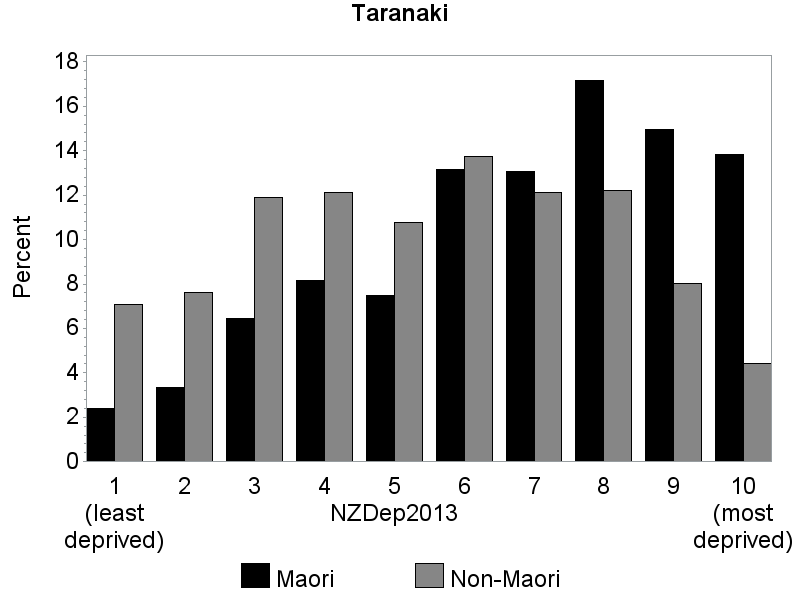
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Measure | **Māori households** | | | | **Non-Māori households** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| Households | 246 | 3.2 | (2.8, | 3.6) | 489 | 1.5 | (1.4, | 1.6) | **2.14** | **(1.84,** | **2.49)** | 1.7 |
| People (% age standardised) | 618 | 2.6 | (2.4, | 2.9) | 927 | 1.4 | (1.3, | 1.5) | **1.87** | **(1.68,** | **2.09)** | 1.2 |

Source: 2013 Census, Statistics New Zealand  
Notes: No form of heating used in the dwelling (including electricity, coal, mains or bottled gas, wood, solar heating equipment, other heating).  
A Māori household is a household with at least one Māori resident. Non-Māori households have no Māori residents.   
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

In 2013, 3% of Māori households (246 homes) had no heating, twice the proportion of non-Māori households (489 homes).

## Area deprivation

Figure 1: Distribution by NZDep 2013 decile, Taranaki DHB, 2013



Source: 2013 Census, Statistics New Zealand. Atkinson J, Salmond C, Crampton P. 2014. NZDep2013 Index of Deprivation. University of Otago Wellington.

Using the NZDep2013 index of small area deprivation, Māori are more likely than non-Māori to live in the three most deprived decile areas (46% compared to 25% in deciles 8–10). Non-Māori are more likely than Māori to live in less deprived areas.

# Mauri ora: Pepi, tamariki

− Infants and children

T

his section presents information on infants and children. Indicators include birth-weight and gestation, immunisations, breastfeeding and other well-child/tamariki ora indicators, oral health, skin infections, middle ear disease, acute rheumatic fever, and potentially preventable hospitalisations.

Infant mortality, including perinatal mortality and sudden unexpected death in infants (SUDI), are also important indicators of Māori health need. Although the numbers are too small to present at a DHB level, the national data shows that Māori infant mortality and SUDI rates are improving, but significant inequities still remain. The reports of the Perinatal and Maternal Mortality Review Committee ([PMMRC](http://www.hqsc.govt.nz/our-programmes/mrc/pmmrc/)) and the Child and Youth Mortality Review Committee ([CYMRC](http://www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/1311/)) provide useful information and recommendations on preventing infant and child deaths.

Other useful sources of information include the DHB reports by the Child and Youth Epidemiology Service (CYES) on health status (2011), the determinants of health (2012), chronic conditions and disability (2013). The [*Te Ohonga Ake*](http://dnmeds.otago.ac.nz/departments/womens/paediatrics/research/nzcyes/maori.html) reports by the CYES also include in-depth information on Māori child and youth health at a national level.

## Births

Table 25: Birth-weight and gestation, Taranaki DHB, 2009–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Indicator | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori ratio (95% CI) | | | Rate difference |
| Ave. no. per year | % of live births  (95% CI) | | | Ave. no. per year | % of live births  (95% CI) | | |
| Low birth-weight | 32 | 6.0 | (5.1, | 6.9) | 59 | 5.7 | (5.1, | 6.4) | 1.04 | (0.86, | 1.26) | 0.2 |
| High birth-weight | 12 | 2.3 | (1.8, | 2.9) | 32 | 3.1 | (2.6, | 3.6) | **0.74** | **(0.55,** | **0.99)** | -0.8 |
| Preterm | 37 | 7.0 | (6.1, | 8.1) | 80 | 7.7 | (7.0, | 8.4) | 0.92 | (0.77, | 1.08) | -0.7 |

Source: Birth registrations, Ministry of Health  
Notes: Low birth-weight less than 2500g, High birth-weight greater than or equal to 4500g, Preterm less than 37 weeks gestation

From 2009 to 2013 there were 531 Māori infants born per year on average, 34% of all live births in the DHB (1,570 per year). On average, 32 Māori babies per year were born with low birth-weight, at a rate of 6% of live births; 12 per year (2%) were born with high birth-weight (lower than the non-Māori rate of 3%); and 37 per year (7%) were born preterm.

## Well child/Tamariki ora indicators

Table 26: Selected Well Child/Tamariki Ora indicators for Māori children, Taranaki DHB

|  |  |  |  |
| --- | --- | --- | --- |
| Indicator | Period | **Māori** | |
| Count | % |
| 1. Babies enrolled with a Primary Health Organisation (PHO) by three months old | 20 Aug to 19 Nov 2013 | 62 | 64 |
| 11. Babies exclusively or fully breastfed at 2 weeks | January to June 2013 | 130 | 78 |
| 12. Babies exclusively or fully breastfed at 6 weeks | 135 | 68 |
| 19. Mothers smoke-free two weeks postnatal | 105 | 60 |
| 5. Children under 5 years enrolled with oral health services (PHO enrolled children) | 2012 | 1,537 | 59 |
| 7. Children starting school who have participated in ECE | 2013 | 443 | 93 |
| 15. Children with a healthy weight at 4 years, DHB of service | July to Dec 2013 | 131 | 73 |

Source: Well Child/Tamariki Ora Quality Indicators, Ministry of Health, March 2014  
Notes: Since the production of this table, the Ministry of Health (2015) has published more recent Well Child/Tamariki Ora Quality Indicators for March 2015 which can be viewed [here](http://www.health.govt.nz/publication/indicators-well-child-tamariki-ora-quality-improvement-framework-march-2015).  
Indicator 1: Source: PHO Enrolment Collection (numerator), National Immunisation Register enrolment (denominator)  
Indicator 11: Source: National Maternity Collection. Number of babies with breastfeeding recorded (denominator)  
Indicator 12: Source: National Maternity Collection. Number of babies with breastfeeding recorded (denominator)  
Indicator 19: Source: National Maternity Collection. Number of mother with tobacco use recorded at 2 weeks postnatal (denominator)  
Indicator 5: Source Community Oral Health Services (numerator); PHO enrolments (denominator)  
Indicator 7: Source: ENROL Ministry of Education  
Indicator 15: Source: B4 School Check Information System. Children who have a BMI recorded at their B4 School Check (denominator)

During late 2013, 64% of Māori babies were enrolled with a PHO by three months of age. In the first half of 2013, 78% of Māori babies were breastfed at two weeks of age and 68% at six weeks. Sixty percent of Māori mothers were smoke-free two weeks after giving birth.

Among pre-school children enrolled with a PHO, just under 60% of Māori were enrolled with oral health services in 2012. Most Māori children who started school in 2013 had participated in early childhood education (93%). Almost three-quarters of Māori children who had their BMI recorded at their B4 School Check had a healthy weight.

Table 27: Children fully immunised by the milestone age, Taranaki DHB, 1 Jan 2014 to 31 Dec 2014

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Milestone age** | **Māori** | | **Non-Māori** | | Māori/non-Māori ratio | Difference in percentage |
| No. fully immunised for age | % fully immunised | No. fully immunised for age | % fully immunised |
| 6 months | 312 | 69 | 897 | 82 | 0.83 | -14 |
| 8 months | 384 | 85 | 1,004 | 92 | 0.93 | -7 |
| 12 months | 437 | 91 | 1,027 | 93 | 0.98 | -2 |
| 18 months | 378 | 78 | 963 | 88 | 0.89 | -10 |
| 24 months | 446 | 92 | 1,047 | 92 | 1.00 | 0 |
| 5 years | 423 | 82 | 1,050 | 85 | 0.97 | -3 |

Source: National Immunisation Register

In the 12 months up to 31 December 2014, 69% of Māori infants aged six months were fully immunised, compared to 82% of non-Māori infants. However, 85% of Māori children aged eight months and 92% of those aged 24 months had completed their appropriate immunisations. At five years 82% of Māori children were fully immunised.

## Oral health

Table 28: Oral health status of children aged 5 or in Year 8 at school, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **Māori** | | | | | **Non-Māori** | | | | | Māori/non-Māori ratio % with caries (95% CI) | | | Difference in percentage |
| Total | % with caries (95% CI) | | | Mean DMFT | Total | % with caries (95% CI) | | | Mean DMFT |
| Age 5 | 300 | 60 | (54, | 65) | 3.0 | 1,132 | 38 | (35, | 41) | 1.4 | **1.57** | **(1.40,** | **1.77)** | 22 |
| Year 8 | 326 | 52 | (47, | 58) | 1.3 | 1,087 | 41 | (38, | 44) | 0.8 | **1.27** | **(1.12,** | **1.44)** | 11 |

Source: Community Oral Health Service, Ministry of Health  
Notes: DMFT is Decayed, missing or filled teeth  
Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, 60% of Māori children aged five years in 2013 had caries, 57% higher than the proportion of non-Māori children (38%). The mean number of decayed, missing or filled teeth (DMFT) was 3.0 for Māori and 1.4 for non-Māori. Of those in School Year 8, 52% of Māori children and 41% of non-Māori children had caries, with a mean DMFT of 1.3 compared to 0.8.

Table 29: Hospitalisations for tooth and gum disease, children aged 0–14 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Rate per 100,000 (95% CI) | | | Ave. no. per year | Rate per 100,000 (95% CI) | | |
| Female | 26 | 731.4 | (584.8, | 914.7) | 61 | 752.2 | (650.6, | 869.6) | 0.97 | (0.74, | 1.27) | -20.8 |
| Male | 33 | 933.9 | (767.2, | 1,136.7) | 61 | 707.6 | (612.1, | 818.0) | **1.32** | **(1.03,** | **1.68)** | 226.3 |
| Total | 59 | 832.6 | (718.3, | 965.1) | 122 | 729.9 | (658.7, | 808.7) | 1.14 | (0.95, | 1.37) | 102.7 |

Source: National Minimum Data Set (NMDS).  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

During 2011–2013, there were 59 hospital admissions per year on average for tooth and gum disease among Māori children under 15 years of age. Māori boys had a 32% higher rate of admission than non-Māori boys.

## Middle ear disease

Table 30: Hospitalisations for grommet insertions, children aged 0–14 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Rate per 100,000 (95% CI) | | | Ave. no. per year | Rate per 100,000 (95% CI) | | |
| Female | 18 | 534.1 | (409.9, | 695.8) | 49 | 616.1 | (524.1, | 724.3) | 0.87 | (0.64, | 1.18) | -82.1 |
| Male | 34 | 967.9 | (797.5, | 1,174.7) | 60 | 705.0 | (609.2, | 815.9) | **1.37** | **(1.08,** | **1.75)** | 262.9 |
| Total | 53 | 751.0 | (642.3, | 878.0) | 109 | 660.6 | (592.7, | 736.3) | 1.14 | (0.94, | 1.38) | 90.4 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, there were 53 admissions per year for grommet insertions among Māori children per year. The rate for Māori boys was 37% higher than for non-Māori boys.

## Healthy skin

Table 31: Hospitalisations for serious skin infections, children aged 0–14 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Rate per 100,000 (95% CI) | | | Ave. no. per year | Rate per 100,000 (95% CI) | | |
| Female | 12 | 326.1 | (234.1, | 454.4) | 13 | 155.8 | (113.3, | 214.2) | **2.09** | **(1.32,** | **3.32)** | 170.3 |
| Male | 18 | 485.7 | (371.7, | 634.6) | 16 | 185.8 | (140.0, | 246.6) | **2.61** | **(1.77,** | **3.86)** | 299.9 |
| Total | 30 | 405.9 | (329.6, | 499.9) | 29 | 170.8 | (138.2, | 211.0) | **2.38** | **(1.77,** | **3.20)** | 235.1 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average there were 30 admissions per year for serious skin infections among Māori children. The rate was 2.4 times as high as for non-Māori children, or 235 more admissions per 100,000 children.

## Acute rheumatic fever

Table 32: Individuals admitted to hospital for acute rheumatic fever, aged 0–14 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group and Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Rate per 100,000 (95% CI) | | | Ave. no. per year | Rate per 100,000 (95% CI) | | |
| Female | 1 | 19.9 | (5.0, | 79.6) | 0 | 0.0 | . | . | . | . | . | 19.9 |
| Male | <1 | 10.0 | (1.4, | 70.9) | 0 | 0.0 | . | . | . | . | . | 10.0 |
| Total | 1 | 14.9 | (4.8, | 46.3) | 0 | 0.0 | . | . | . | . | . | 14.9 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

Among Taranaki Māori children aged 14 years and under, one child per year on average was hospitalised at least once for acute rheumatic fever. There were no admissions for acute rheumatic fever among non-Māori children during 2011–2013.

## Potentially preventable hospitalisations

Potentially preventable hospitalisations can be categorised into those which are considered potentially avoidable and those more likely to be unavoidable. Potentially avoidable hospitalisations are those resulting from diseases preventable through population-based health promotion strategies and those related to the social determinants of health. Addressing these can require actions beyond the health care system, including intersectoral actions.

A subgroup of potentially avoidable hospitalisations, ambulatory care sensitive hospitalisations (ASH) reflect hospitalisations for conditions considered sensitive to preventive or treatment interventions in primary care. It is also recognised that while access to effective primary care is important in reducing ASH, addressing the factors which drive the underlying burden of disease such as housing, or second hand smoke exposures, is also important.

Table 33: Potentially avoidable hospitalisations for children aged 1 month to 14 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | | Rate per 100,000 (95% CI) | | | Ave. no. per year | Rate per 100,000 (95% CI) | | |
| Female | 148 | 4,162.9 | | (3,792.6, | 4,569.2) | 210 | 2,632.0 | (2,434.4, | 2,845.7) | **1.58** | **(1.40,** | **1.79)** | 1,530.8 |
| Male | 165 | 4,448.8 | | (4,073.0, | 4,859.2) | 260 | 3,060.9 | (2,853.4, | 3,283.5) | **1.45** | **(1.30,** | **1.63)** | 1,387.9 |
| Total | 313 | 4,305.8 | | (4,038.6, | 4,590.7) | 470 | 2,846.4 | (2,701.6, | 2,999.1) | **1.51** | **(1.39,** | **1.64)** | 1,459.4 |

Source: NMDS   
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, there were 313 potentially avoidable hospitalisations per year among Māori children aged 14 years and under, at a rate 51% higher than the non-Māori rate, or 1,459 more admissions per 100,000.

Table 34: Ambulatory care sensitive hospitalisations for children aged 1 month to 14 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Rate per 100,000 (95% CI) | | | Ave. no. per year | Rate per 100,000 (95% CI) | | |
| Female | 104 | 2,959.6 | (2,648.4, | 3,307.5) | 159 | 1,988.8 | (1,818.0, | 2,175.7) | **1.49** | **(1.29,** | **1.72)** | 970.8 |
| Male | 114 | 3,122.6 | (2,808.1, | 3,472.3) | 188 | 2,215.6 | (2,040.2, | 2,406.1) | **1.41** | **(1.23,** | **1.61)** | 907.0 |
| Total | 218 | 3,041.1 | (2,816.4, | 3,283.8) | 347 | 2,102.2 | (1,978.3, | 2,233.9) | **1.45** | **(1.31,** | **1.60)** | 938.9 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average there were 218 admissions per year for ambulatory care sensitive conditions among Māori children, at a rate 45% higher than the rate for non-Māori children, or around 940 more admissions per 100,000 children.

# Mauri ora: Rangatahi

− Young adults

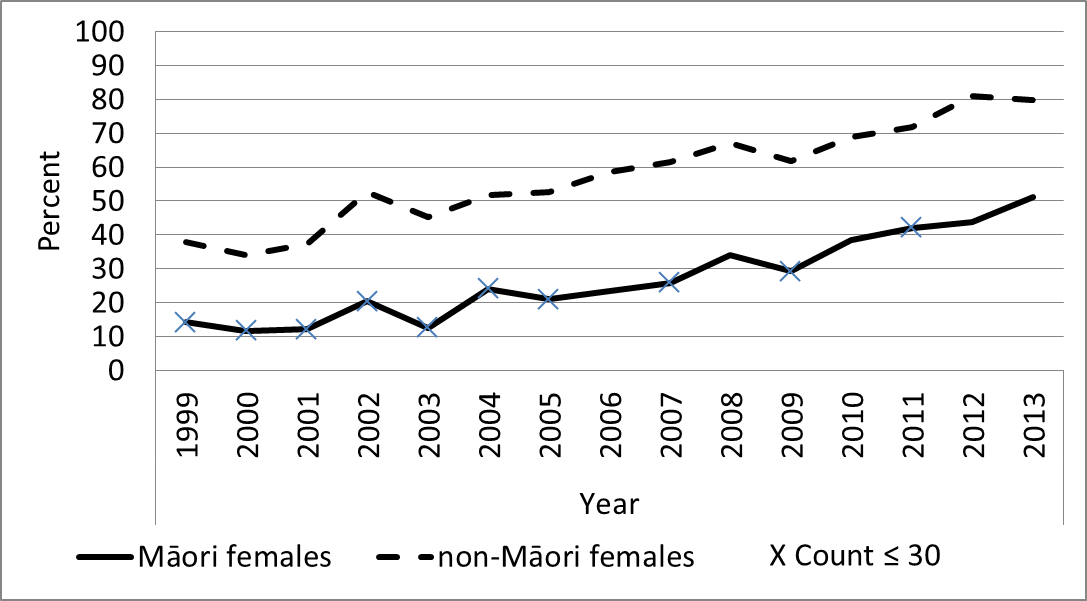
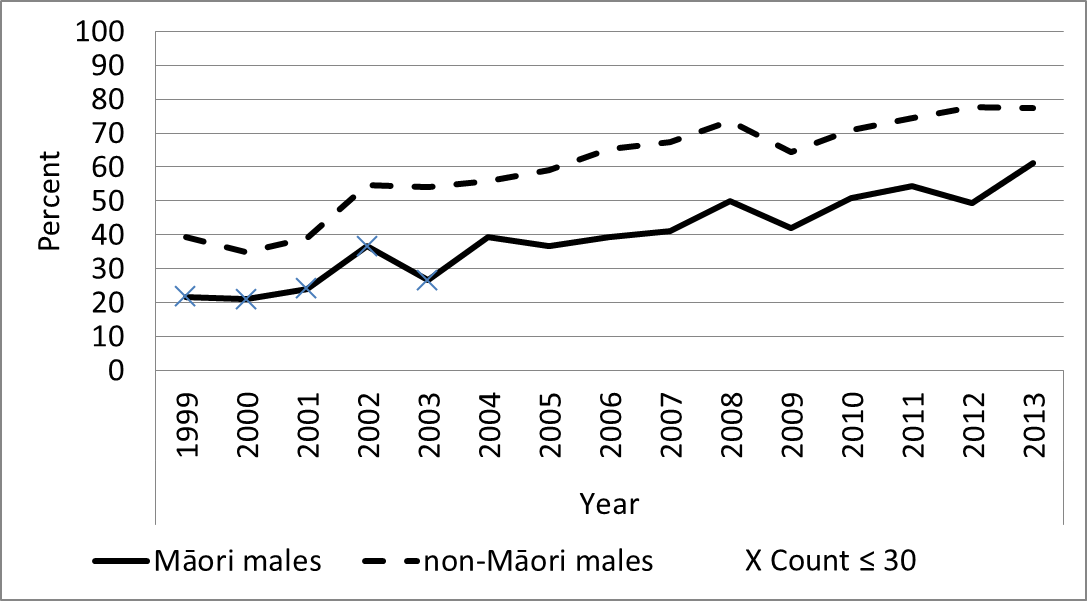
T

his section presents data on smoking, immunisations, and self-harm as an indicator of mental health. Nationally, leading causes of hospitalisation among Māori aged 15 to 24 years include pregnancy and childbirth, injury, digestive system diseases, symptoms and signs (unknown causes), and mental disorders. Major causes of death for Māori in this age group include accidents, suicide, cancer, and homicide ([Robson and Harris 2007).](http://www.hauora.maori.nz)

Challenges faced by rangatahi Māori that can affect their health and wellbeing include socioeconomic factors, perceived positive school climate, access to healthcare, exposure to violence, and risky health behaviours including suicide attempts [(Crengle et al, 2013](https://www.fmhs.auckland.ac.nz/en/faculty/adolescent-health-research-group/publications-and-reports/publications-by-year.html)). Other data related to youth can be found in the CYES reports on child and youth health. The [Child and Youth Health Compass](file:///C:\Users\brrobso\Downloads\http:\compass.hiirc.org.nz\section\31015\9-youth-health-services\) provides exemplars of youth specific services.

## Smoking

Figure 2: Trends in the proportion of students aged 14–15 years who have never smoked, by gender, Taranaki DHB, 1999–2013

Source: ASH Year 10 Snapshot Survey, 2013

Over the last 15 years there has been a significant increase in the number of Māori aged 14 or 15 who have never smoked cigarettes (Figure 2). In 2013, 54% had never smoked.

Figure 3: Regular smokers, ages 15–17, 18–19, 20–24 years, Taranaki DHB, 2013

Source: 2013 Census, Statistics New Zealand  
Note: Regular smoker defined as smoking at least one cigarette daily.

Smoking rates have decreased significantly among young Māori and non-Māori adults in Taranaki since 2006. However, the rates among those aged 18–24 years indicate a sizeable group starts smoking in this age group. At ages 20–24 years, 44% of Māori were smoking regularly in 2013. Non-Māori in each age group were significantly less likely than Māori to smoke regularly.

## Immunisations

Table 35: Human papilloma virus immunisations (HPV) by birth cohorts, Taranaki DHB, 1 September 2008 to 30 September 2014

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Birth cohort | **Age in 2014** | Offered HPV vaccine in (year) | **Māori** | | **Non-Māori** | | Māori/non-Māori ratio | Māori % minus non-Māori % |
| Fully immunised | % fully immunised | Fully immunised | % fully immunised |
| 2000 | 14 | 2013 | 123 | 61.5 | 326 | 62.7 | 0.98 | -1.2 |
| 1999 | 15 | 2012 | 100 | 55.6 | 297 | 54.0 | 1.03 | 1.6 |
| 1998 | 16 | 2011 | 109 | 57.4 | 270 | 48.2 | 1.19 | 9.2 |
| 1997 | 17 | 2010 | 89 | 49.4 | 244 | 45.2 | 1.09 | 4.3 |

Source: National Immunisation Register.   
Three doses are required to be fully immunised. Young women are eligible for free vaccination up to the age of 20.

Just over 60% of Māori girls aged 14 years in 2014 had received all three dose of the human papilloma virus vaccine by September 2014. Coverage of Māori girls was lowest in the cohort aged 17 years with 49% fully immunised.

## Mental health

Table 36: Hospitalisations for injury from intentional self-harm, 15–24 and 25–44 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group and gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| **15–24 years** | | | | | | | | | | | | |
| Female | 9 | 514.3 | (350.1, | 755.3) | 21 | 424.1 | (331.2, | 543.1) | 1.21 | (0.77, | 1.91) | 90.1 |
| Male | 2 | 127.9 | (60.9, | 268.2) | 12 | 215.1 | (154.4, | 299.7) | 0.59 | (0.26, | 1.34) | -87.3 |
| Total | 11 | 321.1 | (228.2, | 451.7) | 33 | 319.6 | (262.1, | 389.8) | 1.00 | (0.68, | 1.49) | 1.4 |
| **25–44 years** | | | | | | | | | | | | |
| Female | 4 | 171.7 | (99.5, | 296.1) | 25 | 223.3 | (177.4, | 281.2) | 0.77 | (0.43, | 1.39) | -51.7 |
| Male | 4 | 173.5 | (98.5, | 305.8) | 15 | 134.7 | (99.8, | 181.8) | 1.29 | (0.68, | 2.45) | 38.8 |
| Total | 8 | 172.6 | (116.5, | 255.7) | 40 | 179.0 | (149.1, | 214.9) | 0.96 | (0.62, | 1.49) | -6.4 |

Source: NMDS.  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, 11 Māori aged 15–24 years were admitted to hospital each year between 2011 and 2013 for injury from intentional self-harm, most of them female. In the 25–44 year age group, eight Māori were admitted per year on average (half male and half female). The rates were similar to those of non-Māori.

# Mauri ora: Pakeke

− Adults

T

his section focuses mainly on long term conditions among adults, including heart disease and stroke, cancer, diabetes, respiratory disease (asthma, chronic obstructive pulmonary disease), mental disorders, and gout. Information is also presented on hip fractures, hip replacements and cataract surgery. Self-assessed health status and smoking status are also included.

Information on other causes of hospitalisation or deaths in Taranaki can be found in the accompanying Excel© tables labelled ‘Death registrations’ and ‘Hospitalisations by principal diagnosis’. For example, the hospitalisations table shows disparities between Taranaki Māori and non-Māori in rates of admission for epilepsy, perforated tympanic membrane, atrial fibrillation or flutter, acute bronchitis and bronchiolitis, bronchiectasis, and renal failure.

The New Zealand Health Survey provides other information on long term conditions and risk factors that have been shown to be more common for Māori adults than other adults at a national level, including medicated blood pressure, obesity, chronic pain, arthritis, oral disease, and mental distress ([Ministry of Health 2014](http://www.health.govt.nz/publication/health-maori-adults-and-children-2011-2013)).

## Self-assessed health

Table 37: Health status reported by Māori aged 15 years and over, Taranaki DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Health status** | **Taranaki DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Excellent | 3,000\* | 16.6\* | (10.7, | 22.4) | 18.1 | (16.8, | 19.3) |
| Very good | 6,000\* | 32.4\* | (25.2, | 39.7) | 37.0 | (35.5, | 38.5) |
| Good | 6,000\* | 33.5\* | (26.3, | 40.6) | 28.5 | (27.3, | 29.7) |
| Fair / poor | 3,000\* | 17.5\* | (11.9, | 23.1) | 16.4 | (15.3, | 17.5) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.  
Note: An asterisk (\*) shows the sampling error is 30% or more but less than 50%.

In 2013, half of Taranaki Māori adults (49%) reported having excellent or very good health and another third described their health as good. Eighteen percent (3,000) reported having fair or poor health status.

## Smoking status

Table 38: Cigarette smoking status, 15 years and over, Taranaki DHB, 2006 and 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Smoking status** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percent |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| **2006** | | | | | | | | | | | | |
| Regular smoker | 3,918 | 43.7 | (42.7, | 44.7) | 12,525 | 23.1 | (22.7, | 23.5) | **1.89** | **(1.84,** | **1.95)** | 20.6 |
| Ex-smoker | 1,788 | 18.9 | (18.1, | 19.6) | 15,471 | 18.9 | (18.5, | 19.2) | 1.00 | (0.96, | 1.04) | 0.0 |
| Never smoked | 3,477 | 37.3 | (36.4, | 38.3) | 36,291 | 58.1 | (57.6, | 58.5) | **0.64** | **(0.63,** | **0.66)** | -20.7 |
| **2013** | | | | | | | | | | | | |
| Regular smoker | 3,837 | 35.9 | (35.0, | 36.8) | 10,056 | 17.4 | (17.0, | 17.7) | **2.06** | **(2.00,** | **2.13)** | 18.5 |
| Ex-smoker | 2,562 | 21.6 | (20.8, | 22.4) | 16,932 | 19.3 | (18.9, | 19.6) | **1.12** | **(1.08,** | **1.16)** | 2.3 |
| Never smoked | 4,671 | 42.5 | (41.6, | 43.5) | 40,206 | 63.3 | (62.9, | 63.7) | **0.67** | **(0.66,** | **0.69)** | -20.8 |

Source: 2006 and 2013 Census, Statistics New Zealand  
Notes: % is age-standardised to the 2001 Māori population.   
Regular smokers smoke one or more cigarettes per day.

Between 2006 and 2013 the proportion of Taranaki Māori adults who smoked cigarettes regularly decreased from 44% to 36%. There was a corresponding increase in those who have never smoked from 37% to 43% and an increase in the proportion of ex-smokers. However, Māori remained twice as likely as non-Māori to smoke regularly.

## Heart disease and stroke

Table 39: Hospitalisations for circulatory system diseases, 25 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 122 | 1,883.2 | (1,694.2, | 2,093.3) | 897 | 1,056.9 | (1,001.8, | 1,115.1) | **1.78** | **(1.58,** | **2.01)** | 826.3 |
| Male | 129 | 2,159.1 | (1,950.8, | 2,389.5) | 1091 | 1,567.0 | (1,500.2, | 1,636.9) | **1.38** | **(1.23,** | **1.54)** | 592.0 |
| Total | 251 | 2,021.1 | (1,878.4, | 2,174.7) | 1989 | 1,312.0 | (1,268.4, | 1,357.1) | **1.54** | **(1.42,** | **1.67)** | 709.1 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

During 2011–2013, on average 251 Taranaki Māori per year were admitted to hospital for diseases of the circulatory system (including heart disease and stroke), at a rate 54% higher than non-Māori, or 709 more admissions per 100,000 per year.

Table 40: Ischaemic heart disease indicators, 25 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| **Ischaemic heart disease admissions** | | | | | | | | | | | | |
| Female | 43 | 655.3 | (550.0, | 780.7) | 311 | 351.5 | (323.9, | 381.4) | **1.86** | **(1.54,** | **2.26)** | 303.8 |
| Male | 51 | 847.1 | (721.8, | 994.1) | 472 | 666.9 | (627.3, | 708.9) | **1.27** | **(1.07,** | **1.51)** | 180.2 |
| Total | 94 | 751.2 | (667.4, | 845.4) | 783 | 509.2 | (484.8, | 534.8) | **1.48** | **(1.30,** | **1.68)** | 242.0 |
| **Angiography procedures** | | | | | | | | | | | | |
| Female | 26 | 420.6 | (336.0, | 526.5) | 157 | 234.5 | (211.2, | 260.5) | **1.79** | **(1.40,** | **2.30)** | 186.1 |
| Male | 34 | 590.9 | (485.8, | 718.6) | 289 | 463.7 | (428.9, | 501.3) | **1.27** | **(1.03,** | **1.57)** | 127.2 |
| Total | 61 | 505.7 | (436.3, | 586.2) | 446 | 349.1 | (327.9, | 371.7) | **1.45** | **(1.23,** | **1.70)** | 156.6 |
| **Angioplasty procedures** | | | | | | | | | | | | |
| Female | 3 | 42.5 | (21.2, | 85.2) | 22 | 28.6 | (21.6, | 37.7) | 1.49 | (0.70, | 3.15) | 14.0 |
| Male | 5 | 85.3 | (51.1, | 142.4) | 64 | 103.7 | (87.9, | 122.3) | 0.82 | (0.48, | 1.41) | -18.4 |
| Total | 8 | 63.9 | (42.3, | 96.6) | 86 | 66.1 | (57.3, | 76.3) | 0.97 | (0.62, | 1.50) | -2.2 |
| **Coronary Artery Bypass Graft (CABG)** | | | | | | | | | | | | |
| Female | 1 | 15.7 | (5.1, | 48.6) | 11 | 15.3 | (10.3, | 22.8) | 1.02 | (0.31, | 3.39) | 0.3 |
| Male | 5 | 78.5 | (46.3, | 133.1) | 41 | 60.9 | (49.9, | 74.2) | 1.29 | (0.73, | 2.27) | 17.6 |
| Total | 6 | 47.1 | (29.2, | 76.0) | 52 | 38.1 | (31.9, | 45.5) | 1.24 | (0.74, | 2.06) | 9.0 |
| **Acute coronary syndrome admissions** | | | | | | | | | | | | |
| Female | 24 | 353.3 | (278.8, | 447.8) | 179 | 178.0 | (159.4, | 198.7) | **1.99** | **(1.53,** | **2.58)** | 175.4 |
| Male | 26 | 430.5 | (344.0, | 538.9) | 276 | 386.7 | (356.4, | 419.6) | 1.11 | (0.88, | 1.41) | 43.8 |
| Total | 50 | 391.9 | (332.9, | 461.4) | 455 | 282.3 | (264.4, | 301.5) | **1.39** | **(1.16,** | **1.66)** | 109.6 |

Source: NMDS.   
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, 94 Māori aged 25 years and over were admitted per year to hospital for ischaemic heart disease in Taranaki, at a rate 48% higher than non-Māori. Of these, 50 were admitted with acute coronary syndrome (with the rate 39% higher than for non-Māori).

On average, 61 angiography procedures were conducted for Māori patients per year, at a rate 45% higher than non-Māori. Eight Māori per year had an angioplasty and six per year had a coronary artery bypass and graft on average.

Table 41: Hospitalisations for heart failure, stroke, and hypertensive disease, 25 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| **Heart failure** | | | | | | | | | | | | |
| Female | 14 | 194.9 | (143.5, | 264.7) | 113 | 70.5 | (60.7, | 82.0) | **2.76** | **(1.97,** | **3.89)** | 124.4 |
| Male | 20 | 318.2 | (246.9, | 410.1) | 112 | 99.0 | (86.1, | 113.9) | **3.21** | **(2.41,** | **4.29)** | 219.2 |
| Total | 35 | 256.6 | (211.0, | 312.0) | 225 | 84.8 | (76.5, | 94.0) | **3.03** | **(2.43,** | **3.77)** | 171.8 |
| **Stroke** | | | | | | | | | | | | |
| Female | 9 | 144.8 | (97.4, | 215.0) | 104 | 93.2 | (79.6, | 109.3) | **1.55** | **(1.01,** | **2.38)** | 51.5 |
| Male | 12 | 191.1 | (136.4, | 267.8) | 83 | 97.5 | (83.3, | 114.1) | **1.96** | **(1.35,** | **2.84)** | 93.6 |
| Total | 21 | 167.9 | (129.9, | 217.1) | 187 | 95.4 | (85.3, | 106.6) | **1.76** | **(1.33,** | **2.33)** | 72.6 |
| **Hypertensive disease** | | | | | | | | | | | | |
| Female | 7 | 132.0 | (86.7, | 201.0) | 11 | 17.1 | (10.6, | 27.7) | **7.70** | **(4.07,** | **14.58)** | 114.8 |
| Male | 1 | 10.5 | (2.6, | 42.2) | 7 | 12.7 | (7.6, | 21.2) | 0.83 | (0.19, | 3.66) | -2.1 |
| Total | 8 | 71.3 | (47.6, | 106.6) | 17 | 14.9 | (10.5, | 21.2) | **4.78** | **(2.80,** | **8.17)** | 56.4 |

Source: NMDS.   
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

There were 35 admissions per year on average for Māori with heart failure, at 3 times the rate for non-Māori, or 172 more admissions per 100,000.

On average, 21 Māori per year were admitted for stroke, at a rate 76% than non-Māori, or 73 more admissions per 100,000.

There were eight Māori admissions per year on average for hypertensive disease, at 4.8 times the rate of non-Māori, or 56 more admissions per 100,000.

Table 42: Hospitalisations for chronic rheumatic heart disease and heart valve replacements, 25 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| **Chronic rheumatic heart disease** | | | | | | | | | | | | |
| Female | 2 | 45.0 | (21.1, | 96.0) | 3 | 3.6 | (1.0, | 12.7) | **12.65** | **(2.88,** | **55.46)** | 41.5 |
| Male | 1 | 17.1 | (5.5, | 53.1) | 6 | 6.6 | (3.9, | 11.1) | 2.61 | (0.75, | 9.09) | 10.5 |
| Total | 3 | 31.1 | (16.5, | 58.4) | 9 | 5.1 | (2.9, | 8.9) | **6.14** | **(2.63,** | **14.29)** | 26.0 |
| **Heart valve replacements** | | | | | | | | | | | | |
| Female | 2 | 34.1 | (14.9, | 77.9) | 8 | 9.6 | (5.4, | 17.0) | **3.56** | **(1.30,** | **9.74)** | 24.5 |
| Male | 1 | 23.0 | (8.6, | 61.3) | 15 | 19.6 | (13.4, | 28.6) | 1.17 | (0.41, | 3.36) | 3.4 |
| Total | 3 | 28.5 | (15.2, | 53.7) | 23 | 14.6 | (10.6, | 20.0) | 1.96 | (0.97, | 3.97) | 14.0 |

Source: NMDS.   
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, there were 3 hospital admissions per year for Māori with chronic rheumatic heart disease, at a rate 6 times that of non-Māori.

Heart valve replacements were conducted on 3 Māori per year on average. The rate for Māori women was 3.6 times the non-Māori rate.

Table 43: Early deaths from circulatory system disease, Taranaki DHB, 2007–2011

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 7 | 55.8 | (39.9, | 77.9) | 21 | 15.2 | (12.2, | 19.0) | **3.67** | **(2.46,** | **5.48)** | 40.6 |
| Male | 10 | 89.2 | (67.7, | 117.5) | 41 | 34.7 | (29.6, | 40.7) | **2.57** | **(1.87,** | **3.53)** | 54.4 |
| Total | 17 | 72.5 | (58.6, | 89.7) | 63 | 25.0 | (21.9, | 28.4) | **2.90** | **(2.26,** | **3.73)** | 47.5 |

Source: Mortality data, Ministry of Health  
Notes: “Early deaths” are defined as those occurring under 75 years of age.  
Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average 17 Māori per year died early from circulatory system disease, at a rate 2.9 times as high as for non-Māori, or 48 more deaths per 100,000.

## Diabetes

Table 44: Diabetes prevalence, medication use, monitoring of blood glucose levels, screening for renal disease, Taranaki DHB, 2013

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indicator | **Māori** | | **Non-Māori** | | Māori/non-Māori ratio | Difference in percentage |
| Count | % (crude) | Count | % (crude) |
| Prevalence of diabetes (all ages) | 1,000 | 5.2 | 6,352 | 7.0 | 0.74 | 1,000 |
| People with diabetes regularly receiving metformin or insulin, 25+ | 482 | 48.2 | 2,818 | 44.4 | 1.09 | 482 |
| People with diabetes having regular Hb1Ac monitoring, 25+ | 808 | 80.8 | 5,429 | 83.0 | 0.97 | 808 |
| People with diabetes having regular screening for renal disease, 25+ | 620 | 62.0 | 4,272 | 67.3 | 0.92 | 620 |

Source: NZ Atlas of Healthcare Variation  
Note: The ‘crude’ percentage is not adjusted for differences in the age structure of the Māori and non-Māori populations.

In 2013, 1,000 Taranaki Māori were estimated to have diabetes, giving a crude prevalence of 5%. The prevalence among non-Māori was 7%. The prevalence has not been adjusted for age and Māori rates may be higher than non-Māori if age differences were taken into account. Just under half of Māori with diabetes were regularly receiving metformin or insulin in 2013; 81% were having regular monitoring of blood glucose levels; and 62% were being screened for renal disease.

Table 45: Hospitalisations for lower limb amputations for people with concurrent diabetes, 15 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 2 | 20.0 | (8.2, | 48.7) | 8 | 6.1 | (3.7, | 10.1) | **3.30** | **(1.19,** | **9.17)** | 14.0 |
| Male | 1 | 7.6 | (1.9, | 30.4) | 13 | 11.5 | (8.1, | 16.1) | 0.66 | (0.16, | 2.77) | -3.9 |
| Total | 2 | 13.8 | (6.5, | 29.2) | 22 | 8.8 | (6.6, | 11.6) | 1.58 | (0.71, | 3.51) | 5.0 |

Source: NMDS  
Note Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

During 2011–2013, on average two Māori individuals per year with diabetes had lower limbs amputated. The rate for Māori women was 3.3 times the rate for non-Māori women.

## Cancer

Table 46: Most common cancer registrations for Māori by site, all ages, Taranaki DHB, 2008–2012

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender and site** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| **Female** | | | | | | | | | | | | |
| All cancers | 28 | 221.6 | (187.0, | 262.6) | 279 | 202.4 | (188.5, | 217.4) | 1.09 | (0.91, | 1.32) | 19.1 |
| Breast | 9 | 72.0 | (53.1, | 97.7) | 77 | 63.0 | (55.9, | 71.0) | 1.14 | (0.82, | 1.59) | 9.0 |
| Lung | 7 | 49.1 | (34.6, | 69.7) | 20 | 11.7 | (9.2, | 15.0) | **4.18** | **(2.72,** | **6.42)** | 37.4 |
| Colorectal | 2 | 15.6 | (8.4, | 29.1) | 41 | 20.6 | (17.3, | 24.6) | 0.76 | (0.40, | 1.45) | -5.0 |
| Uterus | 1 | 11.9 | (5.6, | 25.2) | 9 | 6.6 | (4.7, | 9.3) | 1.81 | (0.79, | 4.13) | 5.3 |
| Cervix | 1 | 11.3 | (5.0, | 25.7) | 3 | 4.5 | (2.5, | 8.2) | 2.52 | (0.92, | 6.91) | 6.8 |
| **Male** | | | | | | | | | | | | |
| All cancers | 24 | 195.7 | (163.3, | 234.5) | 294 | 201.2 | (188.3, | 215.0) | 0.97 | (0.80, | 1.18) | -5.5 |
| Prostate | 4 | 32.8 | (21.4, | 50.4) | 83 | 50.2 | (45.2, | 55.8) | 0.65 | (0.42, | 1.02) | -17.4 |
| Lung | 4 | 30.6 | (19.7, | 47.5) | 26 | 12.5 | (10.2, | 15.3) | **2.45** | **(1.51,** | **3.98)** | 18.1 |
| Non-Hodgkin’s lymphoma | 2 | 18.2 | (10.0, | 33.2) | 12 | 9.3 | (6.4, | 13.6) | 1.96 | (0.96, | 3.99) | 8.9 |
| Leukaemia | 2 | 18.6 | (9.9, | 34.8) | 9 | 9.9 | (6.2, | 15.6) | 1.88 | (0.87, | 4.10) | 8.7 |
| Colorectal | 2 | 14.3 | (7.4, | 27.6) | 43 | 22.9 | (19.6, | 26.8) | 0.62 | (0.32, | 1.22) | -8.6 |
| Liver | 2 | 12.8 | (6.4, | 25.7) | 2 | 1.6 | (0.8, | 2.9) | **8.24** | **(3.25,** | **20.87)** | 11.3 |

Source: Cancer Registry, Ministry of Health  
Note Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

During 2008–2012, there were 28 cancer registrations per year on average among Taranaki Māori females, at a rate similar to non-Māori. The most common cancers registered for Māori females were breast, lung, colorectal, uterine, and cervical cancers. The lung cancer rate was 4.2 times as high for Māori as for non-Māori women.

Among Taranaki Māori males there were 24 cancer registrations per year on average, at a rate similar to non-Māori. Prostate, lung, prostate, non-Hodgkin’s lymphoma, leukaemias, colorectal, and liver cancer were the most common cancers registered for Māori males. Māori registrations rates were higher than those of non-Māori for lung cancer (2.5 times) and liver cancer (8.2 times).

Table 47: Most common cancer deaths for Māori by site, all ages, Taranaki DHB, 2007–2011

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender and site** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| **Female** | | | | | | | | | | | | |
| All cancers | 13 | 98.9 | (77.2, | 126.7) | 127 | 65.2 | (58.3, | 73.0) | **1.52** | **(1.16,** | **1.99)** | 33.7 |
| Lung | 5 | 39.0 | (26.4, | 57.8) | 19 | 9.4 | (7.4, | 11.9) | **4.16** | **(2.63,** | **6.58)** | 29.6 |
| Digestive organs | 3 | 19.1 | (10.9, | 33.3) | 42 | 18.1 | (15.1, | 21.8) | 1.05 | (0.58, | 1.89) | 0.9 |
| Breast | 2 | 18.6 | (10.5, | 33.0) | 19 | 12.0 | (9.2, | 15.5) | 1.56 | (0.83, | 2.92) | 6.7 |
| Genital organs | 1 | 9.6 | (4.3, | 21.5) | 12 | 7.3 | (5.2, | 10.3) | 1.32 | (0.55, | 3.16) | 2.3 |
| **Male** | | | | | | | | | | | | |
| All cancers | 12 | 103.6 | (80.6, | 133.1) | 130 | 68.0 | (61.7, | 75.0) | **1.52** | **(1.16,** | **1.99)** | 35.5 |
| Digestive organs | 5 | 39.2 | (26.0, | 59.0) | 36 | 19.8 | (16.6, | 23.7) | **1.98** | **(1.26,** | **3.09)** | 19.4 |
| Lung | 4 | 30.7 | (19.6, | 48.3) | 23 | 10.9 | (8.8, | 13.5) | **2.82** | **(1.71,** | **4.64)** | 19.8 |
| Prostate | 1 | 11.2 | (5.3, | 23.7) | 20 | 7.5 | (6.0, | 9.5) | 1.49 | (0.68, | 3.25) | 3.7 |

Source: Death registrations, Ministry of Health  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

For Māori females, deaths from cancer accounted for a third of all deaths, with a rate 52% higher than that of non-Māori. Lung cancer was the most common cause of cancer death at a rate 4 times as high as for non-Māori women. Cancers of the digestive organs, breast, and genital organs were the next most common causes of death from cancer for Māori women.

For Māori males, cancer deaths accounted for a quarter of all deaths, with a rate 52% higher than for non-Māori males. Cancers of the digestive organs were the most common causes of death from cancer, at twice the rate of non-Māori. Lung cancer was the next most common, with a mortality rate 2.8 times the non-Māori rate, followed prostate cancer.

### Breast and cervical cancer screening

Table 48: BreastScreen Aotearoa breast screening coverage, women aged 45–69 years, Taranaki DHB, 24 months to 31 December 2014

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Māori** | | | **Non-Māori** | | |
| Number screened | Eligible population | % screened | Number screened | Eligible population | % screened |
| 1,246 | 2,115 | 58.9% | 12,188 | 16,288 | 74.8% |

Source: National Screening Unit, Ministry of Health

BreastScreen Aotearoa provides free mammography screening for breast cancer to women aged 45 to 69 years, with a target of at least 70% of eligible women screened every two years. During the two years up to the end of 2014, 59% of Māori women and 75% of non-Māori women in Taranaki had been screened.

Table 49: Cervical screening coverage, women aged 25–69 years, Taranaki DHB, 3 years and 5 years to 31 December 2014

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Māori** | | | | | | **Non-Māori** | | | | |
| Eligible population | Women screened in last 5 years | 5-year coverage % | Women screened in last 3 years | | 3-year coverage % | Eligible population | Women screened in last 5 years | 5-year coverage % | Women screened in last 3 years | 3-year coverage % |
| 4,316 | 3,457 | 80.1% | 2,821 | 65.4% | | 25,040 | 23,777 | 95.0% | 20,724 | 82.8% |

Source: National Screening Unit, Ministry of Health  
Note: Population is adjusted for hysterectomy.

Among women aged 25 to 69 years, 80% of Māori women and 95% of non-Māori women had had a cervical smear test during the five years prior to 31 December 2014. The three year cervical screening coverage was 65% for Māori women and 83% for non-Māori women. The National Cervical Screening Programme has a three-year screening coverage target of 80% of eligible women aged 25 to 69 years.

## Respiratory disease

Table 50: Hospitalisations for asthma, by age group, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender and age group** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| **0–14 years** | | | | | | | | | | | | |
| Female | 18 | 532.6 | (408.8, | 693.9) | 19 | 232.6 | (179.0, | 302.3) | **2.29** | **(1.58,** | **3.32)** | 300.0 |
| Male | 22 | 585.9 | (459.1, | 747.7) | 32 | 372.2 | (304.7, | 454.7) | **1.57** | **(1.15,** | **2.16)** | 213.7 |
| Total | 40 | 559.3 | (467.4, | 669.2) | 51 | 302.4 | (257.9, | 354.6) | **1.85** | **(1.46,** | **2.35)** | 256.9 |
| **15–34 years** | | | | | | | | | | | | |
| Female | 9 | 292.8 | (199.1, | 430.7) | 10 | 95.6 | (66.3, | 137.8) | **3.06** | **(1.80,** | **5.21)** | 197.2 |
| Male | 4 | 123.2 | (67.8, | 224.0) | 10 | 92.8 | (64.5, | 133.6) | 1.33 | (0.66, | 2.67) | 30.4 |
| Total | 12 | 208.0 | (150.4, | 287.6) | 19 | 94.2 | (72.8, | 121.9) | **2.21** | **(1.46,** | **3.34)** | 113.8 |
| **35–64 years** | | | | | | | | | | | | |
| Female | 14 | 490.6 | (362.6, | 663.8) | 22 | 112.1 | (85.8, | 146.5) | **4.38** | **(2.92,** | **6.55)** | 378.5 |
| Male | 18 | 624.7 | (477.9, | 816.6) | 5 | 29.1 | (16.9, | 50.4) | **21.44** | **(11.65,** | **39.44)** | 595.6 |
| Total | 33 | 557.7 | (456.3, | 681.5) | 27 | 70.6 | (55.5, | 89.8) | **7.90** | **(5.77,** | **10.80)** | 487.0 |
| **65 years and over** | | | | | | | | | | | | |
| Female | 3 | 541.5 | (269.8, | 1,086.9) | 14 | 176.2 | (1,26.1, | 246.3) | **3.07** | **(1.42,** | **6.66)** | 365.3 |
| Male | 1 | 150.1 | (37.5, | 600.0) | 2 | 26.2 | (11.9, | 57.8) | **5.72** | **(1.16,** | **28.21)** | 123.8 |
| Total | 3 | 345.8 | (185.5, | 644.7) | 16 | 101.2 | (74.3 | 137.9) | **3.42** | **(1.70,** | **6.85)** | 244.6 |

Source: NMDS.   
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

There were 40 admissions for asthma per year among Māori children aged 0–14 years, at a rate 85% higher than that of non-Māori. Young Māori adults were admitted at a rate 2.2 times that of non-Māori, with an average of 12 admissions per year. Among Māori adults aged 35–64 years, there were 33 admissions per year on average, at 7.9 times the rate of non-Māori. Māori aged 65 years and over were admitted at a rate 3.4 times the non-Māori rate, with three admissions per year on average.

Table 51: Hospitalisations for chronic obstructive pulmonary disease (COPD), 45 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 45 | 1,774.5 | (1,495.0, | 2,106.3) | 142 | 369.5 | (329.6, | 414.2) | **4.80** | **(3.91,** | **5.90)** | 1,405.1 |
| Male | 37 | 1,583.2 | (1,312.8, | 1,909.4) | 115 | 312.0 | (275.8, | 353.0) | **5.07** | **(4.05,** | **6.35)** | 1,271.2 |
| Total | 82 | 1,678.9 | (1,479.4, | 1,905.3) | 257 | 340.7 | (313.3, | 370.5) | **4.93** | **(4.23,** | **5.73)** | 1,338.1 |

Source: NMDS.  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

There were 82 hospitalisations per year on average for Māori with COPD, at a rate almost 5 times that of non-Māori, or 1,338 more admissions per 100,000.

Table 52: Early deaths from respiratory disease, Taranaki DHB, 2007–2011

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 4 | 33.0 | (20.6, | 52.7) | 10 | 8.0 | (5.6, | 11.7) | **4.09** | **(2.25,** | **7.45)** | 24.9 |
| Male | 3 | 27.7 | (16.9, | 45.3) | 6 | 5.1 | (3.1, | 8.2) | **5.48** | **(2.75,** | **10.90)** | 22.6 |
| Total | 7 | 30.3 | (21.6, | 42.6) | 15 | 6.6 | (4.9, | 8.8) | **4.63** | **(2.95,** | **7.26)** | 23.8 |

Source: Mortality data, Ministry of Health  
Notes: “Early deaths” defined as those occurring under 75 years of age.  
Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, seven Taranaki Māori per year died early from respiratory disease, at a rate 4.6 times the non-Māori rate, or 24 more deaths per 100,000 per year.

## Mental disorders

Table : Hospitalisations for mental disorders, all ages, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Disorder** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate (95% CI) | | | Ave. no. per year | Age-standardised  rate (95% CI) | | |
| **Female** | | | | | | | | | | | | |
| All disorders | 82 | 807.7 | (711.4, | 916.9) | 264 | 489.6 | (450.7, | 531.8) | **1.65** | **(1.42,** | **1.92)** | 318.1 |
| Schizophrenia | 23 | 232.2 | (182.8, | 295.1) | 39 | 57.7 | (46.7, | 71.2) | **4.03** | **(2.93,** | **5.54)** | 174.6 |
| Mood (affective) | 31 | 298.4 | (242.9, | 366.6) | 94 | 180.5 | (157.9, | 206.3) | **1.65** | **(1.29,** | **2.11)** | 118.0 |
| —Bipolar | 10 | 91.5 | (63.5, | 131.9) | 30 | 56.7 | (45.1, | 71.4) | **1.61** | **(1.05,** | **2.48)** | 34.8 |
| —Depressive   episode | 14 | 141.6 | (104.7, | 191.4) | 48 | 93.7 | (77.5, | 113.2) | **1.51** | **(1.06,** | **2.16)** | 47.9 |
| Substance use | 11 | 119.5 | (85.1, | 167.8) | 43 | 100.4 | (83.1, | 121.1) | 1.19 | (0.81, | 1.76) | 19.2 |
| —Alcohol | 8 | 85.0 | (57.2, | 126.2) | 36 | 79.5 | (64.5, | 98.0) | 1.07 | (0.68, | 1.67) | 5.4 |
| Anxiety,  stress-related | 12 | 122.0 | (88.1, | 169.1) | 42 | 79.6 | (64.7, | 97.9) | **1.53** | **(1.04,** | **2.26)** | 42.5 |
| **Males** | | | | | | | | | | | | |
| All disorders | 71 | 696.5 | (607.1, | 798.9) | 254 | 519.6 | (479.1, | 563.5) | **1.34** | **(1.14,** | **1.57)** | 176.9 |
| Schizophrenia | 37 | 367.3 | (304.0, | 443.9) | 59 | 129.7 | (110.5, | 152.2) | **2.83** | **(2.21,** | **3.63)** | 237.7 |
| Mood (affective) | 12 | 120.9 | (86.8, | 168.4) | 68 | 138.8 | (118.6, | 162.4) | 0.87 | (0.60, | 1.26) | -17.9 |
| —Bipolar | 3 | 31.3 | (16.6, | 59.0) | 20 | 44.3 | (33.3, | 58.9) | 0.71 | (0.35, | 1.42) | -13.0 |
| —Depressive   episode | 7 | 75.5 | (49.5, | 115.3) | 39 | 77.8 | (63.2, | 95.9) | 0.97 | (0.61, | 1.56) | -2.3 |
| Substance use | 11 | 105.3 | (74.1, | 149.5) | 58 | 132.2 | (112.2, | 155.6) | 0.80 | (0.54, | 1.17) | -26.9 |
| —Alcohol | 8 | 82.4 | (55.4, | 122.6) | 41 | 86.8 | (71.2, | 105.8) | 0.95 | (0.61, | 1.48) | -4.4 |
| Anxiety,  stress-related | 7 | 68.6 | (44.0, | 107.0) | 36 | 80.4 | (65.4, | 98.8) | 0.85 | (0.52, | 1.39) | -11.7 |
| **Total** | | | | | | | | | | | | |
| All disorders | 153 | 752.1 | (685.2, | 825.5) | 518 | 504.6 | (476.2, | 534.7) | **1.49** | **(1.34,** | **1.66)** | 247.5 |
| Schizophrenia | 60 | 299.8 | (258.4, | 347.8) | 98 | 93.7 | (82.4, | 106.5) | **3.20** | **(2.63,** | **3.90)** | 206.1 |
| Mood (affective) | 43 | 209.7 | (176.0, | 249.7) | 161 | 159.6 | (144.2, | 176.8) | **1.31** | **(1.07,** | **1.61)** | 50.0 |
| —Bipolar | 13 | 61.4 | (44.7, | 84.3) | 50 | 50.5 | (42.2, | 60.4) | 1.22 | (0.84, | 1.75) | 10.9 |
| —Depressive  episode | 22 | 108.6 | (84.9, | 138.8) | 87 | 85.8 | (74.5, | 98.6) | 1.27 | (0.95, | 1.68) | 22.8 |
| Substance use | 22 | 112.4 | (88.0, | 143.5) | 101 | 116.3 | (102.8, | 131.5) | 0.97 | (0.74, | 1.27) | -3.9 |
| —Alcohol | 17 | 83.7 | (63.2, | 110.8) | 77 | 83.2 | (72.0, | 96.0) | 1.01 | (0.73, | 1.38) | 0.5 |
| Anxiety,   stress-related | 19 | 95.3 | (73.3, | 124.0) | 78 | 80.0 | (69.1, | 92.5) | 1.19 | (0.88, | 1.61) | 15.4 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

Rates of hospitalisation for mental disorders were 49% higher for Māori than for non-Māori.

Among Māori females, the most common causes of admission were mood disorders, with 31 admissions per year on average, at a rate two-thirds higher than that of non-Māori females. Schizophrenia related disorders were the next most common with 23 admissions per year, at a rate 4 times as high as for non-Māori females. Māori women also had a higher rate of admission for anxiety/stress-related disorders.

Among Māori males, the overall admission rate was one third higher than the non-Māori rate. Admissions for schizophrenia type disorders were the most common, at a rate 2.8 times the non-Māori rate. Mood disorders and substance use disorders were the next most common causes of admission for Māori males.

## Gout

Table 54: Gout prevalence and treatment, 20–79 years, Taranaki DHB, 2011

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indicator | **Māori** | | **Non-Māori** | | Māori/non-Māori ratio | Difference in percentage |
| Count | % | Count | % |
| Gout prevalence | 678 | 6.3 | 2182 | 3.4 | 1.87 | 2.9 |
| People with gout who received allopurinol regularly | 276 | 40.7 | 939 | 43.0 | 0.95 | -2.3 |
| Colchicine use by people with gout not dispensed allopurinol | 63 | 9.3 | 174 | 8.0 | 1.17 | 1.3 |
| NSAID use by people with gout | 323 | 47.6 | 831 | 38.1 | 1.25 | 9.6 |
| Serum urate test within six months following allopurinol dispensing | 102 | 26.4 | 298 | 24.9 | 1.06 | 1.6 |

Source: NZ Atlas of Healthcare Variation, Ministry of Health.   
Notes: Denominator is people in contact with health services (using Health Tracker). Prevalence may be underestimated by up to 20%. Prevalence rates are not age adjusted. NSAID is non-steroidal anti-inflammatory medication.

In 2011, 678 Taranaki Māori were estimated to have gout in 2011, a prevalence of 6%, 87% higher than the prevalence in non-Māori. Forty-one percent of Māori with gout regularly received allopurinol, a preventive therapy to lower urate levels. Of those who received allopurinol, 26% had a lab test for serum urate levels within the following six months.

Table 55: Hospitalisations for gout, 25 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 6 | 73.6 | (44.6, | 121.5) | 5 | 3.4 | (1.7, | 6.7) | **21.71** | **(9.35,** | **50.41)** | 70.3 |
| Male | 14 | 237.9 | (174.8, | 323.8) | 13 | 18.9 | (12.8, | 28.0) | **12.58** | **(7.63,** | **20.72)** | 219.0 |
| Total | 20 | 155.8 | (119.7, | 202.7) | 18 | 11.2 | (7.9, | 15.8) | **13.97** | **(9.02,** | **21.62)** | 144.6 |

Source: NMDS  
Note: Ratios in bold show that Māori rates were significantly different from non-Māori rates in the DHB.

During 2011–2013, there were 20 hospital admissions for gout per year on average among Taranaki Māori, more frequent among males than females. The rate of admission for Māori was notably 14 times as high as for non-Māori, or 145 more admissions per 100,000 per year.

## Hip fractures

Table 56: Hospitalisations for hip fractures, 65 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 3 | 429.1 | (211.6, | 870.4) | 74 | 395.1 | (334.5, | 466.6) | 1.09 | (0.53, | 2.25) | 34.0 |
| Male | 1 | 179.3 | (57.8, | 556.2) | 26 | 207.8 | (162.4, | 265.8) | 0.86 | (0.27, | 2.75) | -28.5 |
| Total | 4 | 304.2 | (166.9, | 554.3) | 100 | 301.4 | (262.5, | 346.1) | 1.01 | (0.55, | 1.87) | 2.8 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, four Māori per year aged 65 and over were admitted to hospital for hip fractures, at a rate of just over 300 per 100,000. The rate was similar to the rate for non-Māori.

## Elective surgery

Table 57: Hospitalisations for hip replacements, 50 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 5 | 261.6 | (156.2, | 438.0) | 59 | 229.5 | (193.7, | 271.9) | 1.14 | (0.66, | 1.96) | 32.1 |
| Male | 6 | 344.2 | (213.8, | 554.2) | 61 | 272.8 | (232.7, | 319.7) | 1.26 | (0.76, | 2.08) | 71.4 |
| Total | 11 | 302.9 | (213.4, | 430.0) | 120 | 251.1 | (223.6, | 282.0) | 1.21 | (0.83, | 1.74) | 51.8 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, 11 Māori aged 50 years and over were admitted to hospital per year for a hip replacement.

Table 58: Publicly funded hospitalisations for cataract surgery, 45 years and over, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 19 | 721.0 | (555.4, | 936.0) | 228 | 461.1 | (420.2, | 505.9) | **1.56** | **(1.19,** | **2.06)** | 259.9 |
| Male | 20 | 839.2 | (650.8, | 1082.1) | 153 | 386.0 | (346.4, | 430.2) | **2.17** | **(1.65,** | **2.87)** | 453.2 |
| Total | 39 | 780.1 | (650.1, | 936.1) | 381 | 423.5 | (394.7, | 454.5) | **1.84** | **(1.51,** | **2.24)** | 356.6 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, 39 Taranaki Māori aged 45 years and over were admitted to hospital per year for cataract surgery. The rate for Māori was 84% higher than for non-Māori, or 357 more admissions per 100,000.

# Mauri ora: All ages

T

his section presents information on overall hospitalisations, potentially avoidable and ambulatory sensitive hospitalisations, overall mortality rates, potentially avoidable mortality and mortality amenable to health care, and injuries. ICD codes for these classifications are provided in Appendix 2. Life expectancy at birth is provided for the Taranaki Region.

## Hospitalisations

Table 59: All-cause hospitalisations, all ages, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 2,923 | 28,169.9 | (27,572.1, | 28,780.6) | 13,731 | 24,007.7 | (23,705.0, | 24,314.3) | **1.17** | **(1.14,** | **1.20)** | 4,162.2 |
| Male | 1,998 | 18,295.3 | (17,828.3, | 18,774.5) | 10,880 | 17,009.2 | (16,756.7, | 17,265.5) | **1.08** | **(1.04,** | **1.11)** | 1,286.1 |
| Total | 4,920 | 23,232.6 | (22,852.1, | 23,619.4) | 24,611 | 20,508.4 | (20,310.9, | 20,707.8) | **1.13** | **(1.11,** | **1.15)** | 2,724.1 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, there were 4,920 Māori hospital admissions per year during 2011–2013, and around 24,600 non-Māori admissions. All-cause admission rates were 13% higher for Māori than for non-Māori.

Data on hospital admissions by principal diagnosis are available in the accompanying Excel tables.

### Potentially avoidable hospitalisations

Table 60: Potentially avoidable hospitalisations, 0–74 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 1,00,000 (95% CI) | | |
| Female | 626 | 5,833.8 | (5,570.2, | 6,109.8) | 2,094 | 3,977.9 | (3,855.5, | 4,104.2) | **1.47** | **(1.39,** | **1.55)** | 1,855.8 |
| Male | 562 | 5,294.9 | (5,043.9, | 5,558.4) | 2,231 | 4,173.2 | (4,048.8, | 4,301.4) | **1.27** | **(1.20,** | **1.34)** | 1,121.7 |
| Total | 1,188 | 5,564.3 | (5,381.1, | 5,753.8) | 4,326 | 4,075.6 | (3,987.9, | 4,165.1) | **1.37** | **(1.31,** | **1.42)** | 1,488.8 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB. Table revised April 2016.

On average 1,188 Māori hospital admissions per year were potentially avoidable through population based prevention strategies. The rate of admission was 37% higher for Māori than for non-Māori, or 1,476 more admissions per 100,000.

Table 61: Ambulatory care sensitive hospitalisations, 0–74 years, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 323 | 3,018.4 | (2,830.2, | 3,219.0) | 961 | 1,867.2 | (1,782.7, | 1,955.6) | **1.62** | **(1.49,** | **1.75)** | 1,151.2 |
| Male | 300 | 2,808.4 | (2,627.6, | 3,001.6) | 1,012 | 1,828.9 | (1,747.3, | 1,914.3) | **1.54** | **(1.42,** | **1.66)** | 979.5 |
| Total | 623 | 2,907.1 | (2,775.7, | 3,044.7) | 1,973 | 1,844.0 | (1,785.1, | 1,904.9) | **1.58** | **(1.49,** | **1.67)** | 1,063.1 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, there were 623 ambulatory care sensitive hospitalisations per year among Māori, at a rate 58% higher than the non-Māori rate, or 1,063 more admissions per 100,000.

Mortality

Table : Life expectancy at birth, Taranaki Region, 2012–2014

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | **Non-Māori** | | | Difference in years |
| Years (95% credible interval) | | | Years (95% credible interval) | | |
| Female | 78.1 | (76.9, | 79.3) | 83.4 | (83.1, | 83.8) | -5.3 |
| Male | 73.6 | (72.3, | 74.9) | 79.7 | (79.3, | 80.1) | -6.1 |

Source: Statistics New Zealand Subnational Period Life Tables: 2012–14  
Notes: This data is for the Taranaki Region. A map of Regional Council boundaries can be found [here](http://www.lgnz.co.nz/home/nzs-local-government/new-zealands-councils/). The credible interval is the 2.5th percentile and the 97.5th percentile, the years of expected life at birth is the 50th percentile. Further information on the regional life tables and methods can be found [here](http://www.stats.govt.nz/browse_for_stats/health/life_expectancy/SubnationalPeriodLifeTables_HOTP12-14/Commentary.aspx).

Life expectancy at birth is a summary measure of age-specific mortality rates during a specific period. During 2012–2014, among residents of the Taranaki Region, life expectancy at birth was 78.1 years for Māori females, 5.3 years lower than for non-Māori females (83.4 years). For Māori males, life expectancy was 73.6 years, 6.1 years lower than that of non-Māori males (79.7 years).

Table 63: All-cause deaths, all ages, Taranaki DHB, 2008–2012

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 37 | 298.3 | (268.5, | 331.4) | 429 | 165.0 | (156.0, | 174.5) | **1.81** | **(1.60,** | **2.04)** | 133.3 |
| Male | 47 | 424.9 | (387.6, | 465.8) | 408 | 243.6 | (232.2, | 255.5) | **1.74** | **(1.57,** | **1.93)** | 181.3 |
| Total | 84 | 361.6 | (337.4, | 387.5) | 837 | 204.3 | (197.0, | 211.8) | **1.77** | **(1.64,** | **1.91)** | 157.3 |

Source: Mortality dataset, Ministry of Health.   
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

There were 84 Māori deaths per year on average in Taranaki from 2008 to 2012. The Māori mortality rate was 77% higher than the non-Māori rate, or 157 more deaths per 100,000.

Table 64: Leading causes of death for Māori, all ages, Taranaki DHB, 2007–2011

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender and cause** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| **Female** | | | | | | | | | | | | |
| IHD | 6 | 36.5 | (25.1, | 53.1) | 86 | 16.9 | (14.8, | 19.3) | **2.16** | **(1.45,** | **3.21)** | 19.6 |
| Lung cancer | 5 | 39.0 | (26.4, | 57.8) | 19 | 9.4 | (7.4, | 11.9) | **4.16** | **(2.63,** | **6.58)** | 29.6 |
| COPD | 4 | 29.9 | (19.3, | 46.3) | 26 | 8.5 | (6.7, | 10.8) | **3.52** | **(2.14,** | **5.79)** | 21.4 |
| Breast cancer | 2 | 18.6 | (10.5, | 33.0) | 19 | 12.0 | (9.2, | 15.5) | 1.56 | (0.83, | 2.92) | 6.7 |
| Stroke | 2 | 13.3 | (7.0, | 25.4) | 39 | 8.1 | (6.6, | 9.8) | 1.65 | (0.84, | 3.24) | 5.3 |
| **Male** | | | | | | | | | | | | |
| IHD | 9 | 78.1 | (58.5, | 104.2) | 97 | 39.8 | (35.6, | 44.5) | **1.96** | **(1.44,** | **2.67)** | 38.3 |
| COPD | 5 | 34.4 | (22.8, | 51.9) | 24 | 7.4 | (6.0, | 9.2) | **4.63** | **(2.92,** | **7.35)** | 27.0 |
| Lung cancer | 4 | 30.7 | (19.6, | 48.3) | 23 | 10.9 | (8.8, | 13.5) | **2.82** | **(1.71,** | **4.64)** | 19.8 |
| Diabetes | 4 | 30.6 | (19.2, | 48.7) | 12 | 5.8 | (4.3, | 8.0) | **5.23** | **(2.98,** | **9.17)** | 24.7 |
| Accidents | 3 | 29.0 | (17.3, | 48.7) | 23 | 34.8 | (27.5, | 44.1) | 0.83 | (0.47, | 1.47) | -5.8 |
| Suicide | 3 | 32.6 | (19.6, | 54.3) | 10 | 19.4 | (14.1, | 26.6) | 1.68 | (0.92, | 3.06) | 13.2 |
| **Total** | | | | | | | | | | | | |
| IHD | 15 | 57.3 | (45.5, | 72.1) | 183 | 28.4 | (26.0, | 30.9) | **2.02** | **(1.58,** | **2.58)** | 28.9 |
| Lung cancer | 9 | 34.9 | (25.9, | 46.9) | 42 | 10.1 | (8.7, | 11.9) | **3.44** | **(2.46,** | **4.81)** | 24.7 |
| COPD | 9 | 32.2 | (23.9, | 43.4) | 50 | 8.0 | (6.8, | 9.4) | **4.04** | **(2.87,** | **5.67)** | 24.2 |
| Diabetes | 5 | 20.9 | (14.1, | 31.1) | 22 | 4.3 | (3.3, | 5.5) | **4.90** | **(3.06,** | **7.84)** | 16.6 |
| Accidents | 5 | 21.5 | (14.1, | 32.7) | 34 | 21.3 | (17.2, | 26.3) | 1.01 | (0.63, | 1.61) | 0.2 |

Source: Mortality dataset, Ministry of Health

Notes: IHD is ischaemic heart disease, COPD is chronic obstructive pulmonary disease.  
Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

The leading causes of death for Taranaki Māori women were ischaemic heart disease (IHD), lung cancer, chronic obstructive pulmonary disease (COPD), breast cancer and stroke. Mortality rates for IHD were twice as high for Māori as for non-Māori women, lung cancer 4 times as high, and COPD 3.5 times as high.

For Taranaki Māori men, the leading causes of death were IHD, COPD, lung cancer, diabetes, accidents and suicide. Mortality rates for IHD were twice as high for Māori men as for non-Māori men, COPD 4.6 times as high, lung cancer 2.8 times as high, and diabetes 5.2 times as high.

Data on leading causes of death by ICD chapter are available in the accompanying Excel tables.

Potentially avoidable mortality

Avoidable mortality includes deaths occurring among those less than 75 years old that could potentially have been avoided through population-based interventions (including actions to address the social determinants of health) or through preventive and curative interventions at an individual level.

Amenable mortality is a subset of avoidable mortality and is restricted to deaths from conditions that are amenable to health care.

Table 65: Potentially avoidable mortality, 0–74 years, Taranaki DHB, 2007–2011

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 21 | 182.3 | (150.3, | 221.1) | 83 | 87.8 | (76.9, | 100.2) | **2.08** | **(1.64,** | **2.62)** | 94.5 |
| Male | 30 | 272.7 | (231.9, | 320.6) | 109 | 127.7 | (114.7, | 142.2) | **2.13** | **(1.76,** | **2.59)** | 145.0 |
| Total | 51 | 227.5 | (200.9, | 257.5) | 192 | 107.8 | (99.1, | 117.1) | **2.11** | **(1.82,** | **2.45)** | 119.7 |

Source: Mortality, Ministry of Health  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average, there were 51 potentially avoidable Māori deaths per year in Taranaki, at a rate 2.1 times the non-Māori rate, or 119 more deaths per 100,000 per year.

Table 66: Amenable mortality, 0–74 years, Taranaki DHB, 2007–2011

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 15 | 126.5 | (100.4, | 159.5) | 53 | 52.4 | (44.7, | 61.4) | **2.42** | **(1.82,** | **3.20)** | 74.2 |
| Male | 22 | 199.1 | (164.7, | 240.8) | 81 | 99.3 | (87.6, | 112.5) | **2.01** | **(1.60,** | **2.52)** | 99.8 |
| Total | 37 | 162.8 | (140.6, | 188.6) | 134 | 75.8 | (68.7, | 83.7) | **2.15** | **(1.80,** | **2.56)** | 87.0 |

Source: Mortality, Ministry of Health  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

Amenable mortality rates were over twice as high for Māori as for non-Māori, or 87 more deaths per 100,000. On average, 37 Māori deaths per year were amenable to health care.

## Injuries

A table on the causes of hospital admissions for injuries can be found in the accompanying Excel tables. The most common causes of injury hospitalisations among Taranaki Māori were falls, exposure to mechanical forces, transport accidents, and complications of medical and surgical care.

Table : Hospitalisations for injuries, all ages, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 175 | 1,695.0 | (1,552.8, | 1,850.2) | 969 | 1,435.9 | (1,362.8, | 1,512.9) | **1.18** | **(1.07,** | **1.31)** | 259.1 |
| Male | 265 | 2,645.8 | (2,465.3, | 2,839.5) | 1213 | 2,455.4 | (2,360.2, | 2,554.4) | 1.08 | (0.99, | 1.17) | 190.4 |
| Total | 441 | 2,170.4 | (2,054.2, | 2,293.1) | 2182 | 1,945.6 | (1,885.2, | 2,008.0) | **1.12** | **(1.05,** | **1.19)** | 224.8 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average there were 441 hospitalisations for injury per year among Māori, at a rate 12% higher than non-Māori or 225 more admissions per 100,000. Males had higher rates of admission than females.

Table 68: Hospitalisations for assault, all ages, Taranaki DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 9 | 91.5 | (62.5, | 133.8) | 7 | 20.0 | (12.8, | 31.3) | **4.57** | **(2.54,** | **8.23)** | 71.5 |
| Male | 18 | 188.2 | (143.3, | 247.1) | 43 | 121.7 | (101.8, | 145.4) | **1.55** | **(1.12,** | **2.14)** | 66.5 |
| Total | 27 | 139.8 | (112.0, | 174.5) | 50 | 70.8 | (60.0, | 83.6) | **1.97** | **(1.50,** | **2.60)** | 69.0 |

Source: NMDS  
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average 27 Māori per year were admitted to hospital for injury caused by assault, at a rate twice the non-Māori rate, or 69 more admissions per 100,000. Males had higher admission rates than females.

Table 69: Deaths from injury, all ages, Taranaki DHB, 2007–2011

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate difference |
| Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | | Ave. no. per year | Age-standardised  rate per 100,000 (95% CI) | | |
| Female | 2 | 19.3 | (10.4, | 35.7) | 13 | 11.0 | (7.4, | 16.4) | 1.76 | (0.84, | 3.66) | 8.3 |
| Male | 7 | 68.8 | (48.6, | 97.2) | 33 | 54.2 | (44.9, | 65.5) | 1.27 | (0.85, | 1.88) | 14.6 |
| Total | 9 | 44.0 | (32.5, | 59.6) | 46 | 32.6 | (27.5, | 38.7) | 1.35 | (0.95, | 1.91) | 11.4 |

Source: Mortality dataset, Ministry of Health.   
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB.

On average nine Taranaki Māori per year died from injuries during 2007–2011. Injury mortality rates were higher for males than for females.

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# Appendix 1: Population projections

Table 70: Māori population projections, single year by age group, Taranaki DHB, 2013 to 2020

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Projected Māori Ethnic Group Population by Age and Sex at 30 June 2014–33 (2013-Base)** | | | | | | | | | | | | | | |
| **\*\*\* Medium Projection : Assuming Medium Fertility, Medium Mortality, Medium Inter-Ethnic Mobility, and Medium Migration \*\*\*** | | | | | | | | | | | | | | | | | | |
| **Age** | | **Male** | **Female** | **Total** |  | | **Male** | **Female** | | **Total** |  | **Male** | **Female** | **Total** |  | | **Male** | **Female** | **Total** |
|  | | **2013(Base)** | | |  | |  | **2014** | |  |  |  | **2015** |  |  | |  | **2016** |  |
| 0 | | 250 | 240 | 490 |  | | 260 | 240 | | 500 |  | 250 | 240 | 500 |  | | 250 | 240 | 500 |
| 1-4 | | 1,080 | 1,010 | 2,090 |  | | 1,030 | 990 | | 2,030 |  | 1,020 | 950 | 1,970 |  | | 1,010 | 960 | 1,970 |
| 5-9 | | 1,190 | 1,180 | 2,360 |  | | 1,260 | 1,210 | | 2,470 |  | 1,320 | 1,290 | 2,610 |  | | 1,380 | 1,310 | 2,690 |
| 10,14 | | 1,120 | 1,070 | 2,200 |  | | 1,120 | 1,100 | | 2,210 |  | 1,100 | 1,090 | 2,190 |  | | 1,070 | 1,070 | 2,140 |
| 15-19 | | 1,020 | 940 | 1,960 |  | | 1,030 | 1,000 | | 2,030 |  | 1,060 | 1,050 | 2,100 |  | | 1,100 | 1,070 | 2,170 |
| 20-24 | | 820 | 770 | 1,590 |  | | 890 | 740 | | 1,630 |  | 900 | 730 | 1,620 |  | | 910 | 750 | 1,660 |
| 25-29 | | 630 | 690 | 1,320 |  | | 650 | 700 | | 1,350 |  | 670 | 730 | 1,410 |  | | 710 | 740 | 1,450 |
| 30-34 | | 580 | 590 | 1,170 |  | | 570 | 610 | | 1,180 |  | 580 | 630 | 1,200 |  | | 560 | 650 | 1,210 |
| 35-39 | | 570 | 640 | 1,210 |  | | 590 | 620 | | 1,220 |  | 580 | 600 | 1,170 |  | | 590 | 590 | 1,180 |
| 40-44 | | 630 | 640 | 1,270 |  | | 630 | 650 | | 1,280 |  | 640 | 670 | 1,300 |  | | 620 | 660 | 1,280 |
| 45-49 | | 570 | 560 | 1,140 |  | | 540 | 570 | | 1,110 |  | 560 | 600 | 1,160 |  | | 570 | 630 | 1,210 |
| 50-54 | | 540 | 570 | 1,120 |  | | 570 | 570 | | 1,140 |  | 580 | 570 | 1,150 |  | | 580 | 540 | 1,120 |
| 55-59 | | 390 | 410 | 800 |  | | 420 | 450 | | 870 |  | 420 | 480 | 890 |  | | 450 | 510 | 950 |
| 60-64 | | 300 | 310 | 610 |  | | 320 | 310 | | 630 |  | 340 | 330 | 670 |  | | 350 | 350 | 700 |
| 65-69 | | 210 | 230 | 440 |  | | 240 | 250 | | 490 |  | 250 | 250 | 500 |  | | 260 | 280 | 530 |
| 70,74 | | 150 | 170 | 320 |  | | 140 | 170 | | 310 |  | 150 | 180 | 320 |  | | 160 | 190 | 350 |
| 75-79 | | 80 | 110 | 200 |  | | 90 | 120 | | 210 |  | 110 | 140 | 250 |  | | 120 | 140 | 250 |
| 80-84 | | 40 | 60 | 110 |  | | 50 | 80 | | 130 |  | 60 | 70 | 130 |  | | 60 | 80 | 140 |
| 85-89 | | 20 | 30 | 40 |  | | 20 | 30 | | 40 |  | 20 | 30 | 50 |  | | 20 | 40 | 60 |
| 90+ | | 10 | 10 | 20 |  | | 10 | 10 | | 20 |  | 10 | 20 | 20 |  | | 10 | 20 | 20 |
| **All Ages** | | 10,200 | 10,200 | 20,400 |  | | 10,400 | 10,400 | | 20,800 |  | 10,600 | 10,600 | 21,200 |  | | 10,800 | 10,800 | 21,600 |
|  | |  | **2017** |  |  | |  | **2018** | |  |  |  | **2019** |  |  | |  | **2020** |  |
| 0 | | 250 | 240 | 500 |  | | 260 | 240 | | 500 |  | 260 | 240 | 500 |  | | 260 | 240 | 500 |
| 1-4 | | 1,020 | 970 | 1,990 |  | | 1,020 | 970 | | 1,990 |  | 1,020 | 970 | 1,980 |  | | 1,020 | 970 | 1,990 |
| 5-9 | | 1,380 | 1,280 | 2,670 |  | | 1,340 | 1,260 | | 2,590 |  | 1,290 | 1,240 | 2,540 |  | | 1,280 | 1,200 | 2,470 |
| 10,14 | | 1,120 | 1,110 | 2,220 |  | | 1,180 | 1,170 | | 2,350 |  | 1,250 | 1,200 | 2,450 |  | | 1,310 | 1,270 | 2,580 |
| 15-19 | | 1,110 | 1,060 | 2,170 |  | | 1,090 | 1,020 | | 2,100 |  | 1,070 | 1,040 | 2,110 |  | | 1,050 | 1,020 | 2,070 |
| 20-24 | | 900 | 800 | 1,700 |  | | 930 | 830 | | 1,760 |  | 930 | 890 | 1,820 |  | | 960 | 930 | 1,890 |
| 25-29 | | 730 | 730 | 1,470 |  | | 760 | 730 | | 1,490 |  | 830 | 700 | 1,540 |  | | 840 | 680 | 1,530 |
| 30-34 | | 590 | 650 | 1,240 |  | | 610 | 690 | | 1,300 |  | 620 | 700 | 1,320 |  | | 650 | 730 | 1,380 |
| 35-39 | | 580 | 590 | 1,170 |  | | 570 | 590 | | 1,160 |  | 560 | 600 | 1,170 |  | | 570 | 620 | 1,190 |
| 40-44 | | 600 | 640 | 1,240 |  | | 560 | 630 | | 1,200 |  | 580 | 620 | 1,200 |  | | 560 | 590 | 1,160 |
| 45-49 | | 590 | 630 | 1,220 |  | | 620 | 640 | | 1,250 |  | 610 | 640 | 1,250 |  | | 630 | 650 | 1,280 |
| 50-54 | | 560 | 550 | 1,120 |  | | 560 | 550 | | 1,110 |  | 520 | 560 | 1,080 |  | | 540 | 580 | 1,120 |
| 55-59 | | 490 | 510 | 1,000 |  | | 520 | 560 | | 1,080 |  | 550 | 560 | 1,100 |  | | 560 | 550 | 1,110 |
| 60-64 | | 370 | 400 | 770 |  | | 370 | 400 | | 760 |  | 400 | 430 | 830 |  | | 390 | 460 | 840 |
| 65-69 | | 260 | 280 | 540 |  | | 280 | 290 | | 570 |  | 290 | 300 | 590 |  | | 310 | 320 | 630 |
| 70,74 | | 180 | 200 | 370 |  | | 190 | 210 | | 390 |  | 210 | 230 | 440 |  | | 220 | 230 | 450 |
| 75-79 | | 110 | 140 | 250 |  | | 130 | 150 | | 270 |  | 120 | 150 | 260 |  | | 120 | 150 | 270 |
| 80-84 | | 70 | 80 | 160 |  | | 70 | 90 | | 160 |  | 80 | 100 | 170 |  | | 90 | 110 | 200 |
| 85-89 | | 30 | 40 | 70 |  | | 30 | 50 | | 80 |  | 40 | 50 | 90 |  | | 40 | 50 | 90 |
| 90+ | | 10 | 20 | 20 |  | | 10 | 20 | | 30 |  | 10 | 20 | 30 |  | | 10 | 20 | 30 |
| **All Ages** | | **10,900** | **10,900** | **21,900** |  | | **11,100** | **11,100** | | **22,100** |  | **11,200** | **11,200** | **22,500** |  | | **11,400** | **11,400** | **22,800** |
| These projections were derived in October 2014. | | | | | | | |
| **Source: Statistics New Zealand** | | | | |

Table 71: Total population projections, single year, by age group, Taranaki DHB, 2013 to 2020

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Projected Total Population by Age and Sex at 30 June 2014–43 (2013-Base)** | | | | | | | | | | |
| **\*\*\* Medium Projection : Assuming Medium Fertility, Medium Mortality, and Medium Migration \*\*\*** | | | | | | | | | | | | | | | | | |
| **Age** | | **Male** | **Female** | **Total** |  | **Male** | **Female** | **Total** |  | **Male** | **Female** | | **Total** |  | **Male** | **Female** | **Total** |
|  | | **2013(Base)** | | |  |  | **2014** |  |  |  | **2015** | |  |  |  | **2016** |  |
| 0 | | 780 | 760 | 1,540 |  | 790 | 750 | 1,530 |  | 800 | 760 | | 1,570 |  | 810 | 770 | 1,570 |
| 1-4 | | 3,500 | 3,260 | 6,770 |  | 3,370 | 3,260 | 6,630 |  | 3,340 | 3,190 | | 6,530 |  | 3,320 | 3,180 | 6,500 |
| 5-9 | | 4,050 | 3,880 | 7,930 |  | 4,270 | 4,030 | 8,300 |  | 4,400 | 4,220 | | 8,620 |  | 4,510 | 4,280 | 8,800 |
| 10,14 | | 4,030 | 3,830 | 7,860 |  | 3,940 | 3,750 | 7,700 |  | 3,920 | 3,710 | | 7,630 |  | 3,870 | 3,690 | 7,560 |
| 15-19 | | 3,780 | 3,510 | 7,290 |  | 3,820 | 3,570 | 7,390 |  | 3,900 | 3,600 | | 7,500 |  | 3,890 | 3,560 | 7,440 |
| 20-24 | | 3,370 | 3,100 | 6,480 |  | 3,530 | 3,170 | 6,700 |  | 3,560 | 3,160 | | 6,720 |  | 3,520 | 3,140 | 6,660 |
| 25-29 | | 3,090 | 3,290 | 6,380 |  | 3,340 | 3,470 | 6,810 |  | 3,580 | 3,700 | | 7,280 |  | 3,800 | 3,820 | 7,620 |
| 30-34 | | 3,160 | 3,270 | 6,430 |  | 3,230 | 3,400 | 6,630 |  | 3,360 | 3,480 | | 6,840 |  | 3,430 | 3,640 | 7,070 |
| 35-39 | | 3,230 | 3,630 | 6,860 |  | 3,240 | 3,520 | 6,760 |  | 3,240 | 3,530 | | 6,780 |  | 3,310 | 3,550 | 6,860 |
| 40-44 | | 3,830 | 4,090 | 7,930 |  | 3,790 | 4,180 | 7,970 |  | 3,780 | 4,120 | | 7,900 |  | 3,650 | 4,000 | 7,650 |
| 45-49 | | 3,780 | 3,940 | 7,720 |  | 3,730 | 3,950 | 7,680 |  | 3,810 | 4,070 | | 7,880 |  | 3,930 | 4,140 | 8,070 |
| 50-54 | | 4,010 | 4,300 | 8,300 |  | 4,090 | 4,250 | 8,330 |  | 4,060 | 4,220 | | 8,280 |  | 3,930 | 4,110 | 8,040 |
| 55-59 | | 3,600 | 3,760 | 7,360 |  | 3,640 | 3,900 | 7,540 |  | 3,720 | 4,060 | | 7,780 |  | 3,840 | 4,210 | 8,050 |
| 60-64 | | 3,350 | 3,350 | 6,700 |  | 3,420 | 3,420 | 6,840 |  | 3,480 | 3,490 | | 6,970 |  | 3,560 | 3,580 | 7,130 |
| 65-69 | | 2,770 | 2,910 | 5,690 |  | 2,960 | 3,040 | 6,000 |  | 3,100 | 3,200 | | 6,290 |  | 3,200 | 3,260 | 6,470 |
| 70,74 | | 2,060 | 2,170 | 4,230 |  | 2,160 | 2,290 | 4,450 |  | 2,250 | 2,340 | | 4,600 |  | 2,330 | 2,440 | 4,770 |
| 75-79 | | 1,540 | 1,810 | 3,350 |  | 1,560 | 1,840 | 3,400 |  | 1,630 | 1,900 | | 3,530 |  | 1,680 | 2,000 | 3,670 |
| 80-84 | | 1,110 | 1,430 | 2,550 |  | 1,110 | 1,420 | 2,520 |  | 1,120 | 1,440 | | 2,560 |  | 1,160 | 1,450 | 2,610 |
| 85-89 | | 630 | 1,000 | 1,640 |  | 670 | 1,030 | 1,700 |  | 670 | 1,030 | | 1,700 |  | 690 | 1,040 | 1,730 |
| 90+ | | 220 | 560 | 770 |  | 240 | 580 | 820 |  | 280 | 620 | | 900 |  | 280 | 630 | 920 |
| **All Ages** | | **55,900** | **57,900** | **113,800** |  | **56,900** | **58,800** | **115,700** |  | **58,000** | **59,800** | | **117,800** |  | **58,700** | **60,500** | **119,200** |
|  | |  | **2017** |  |  |  | **2018** |  |  |  | **2019** | |  |  |  | **2020** |  |
| 0 | | 810 | 770 | 1,570 |  | 810 | 760 | 1,570 |  | 810 | 770 | | 1,570 |  | 810 | 770 | 1,580 |
| 1-4 | | 3,270 | 3,140 | 6,420 |  | 3,290 | 3,130 | 6,420 |  | 3,290 | 3,130 | | 6,420 |  | 3,290 | 3,130 | 6,420 |
| 5-9 | | 4,520 | 4,290 | 8,800 |  | 4,420 | 4,180 | 8,610 |  | 4,260 | 4,130 | | 8,390 |  | 4,180 | 4,020 | 8,200 |
| 10,14 | | 3,930 | 3,760 | 7,690 |  | 3,980 | 3,910 | 7,900 |  | 4,170 | 4,020 | | 8,200 |  | 4,260 | 4,170 | 8,430 |
| 15-19 | | 3,780 | 3,480 | 7,260 |  | 3,690 | 3,340 | 7,030 |  | 3,560 | 3,210 | | 6,780 |  | 3,480 | 3,120 | 6,600 |
| 20-24 | | 3,490 | 3,080 | 6,560 |  | 3,470 | 3,040 | 6,510 |  | 3,420 | 3,010 | | 6,440 |  | 3,410 | 2,960 | 6,370 |
| 25-29 | | 3,900 | 3,860 | 7,760 |  | 3,980 | 3,800 | 7,780 |  | 4,020 | 3,740 | | 7,770 |  | 3,930 | 3,620 | 7,550 |
| 30-34 | | 3,580 | 3,760 | 7,340 |  | 3,720 | 3,940 | 7,660 |  | 3,870 | 4,020 | | 7,900 |  | 4,010 | 4,170 | 8,190 |
| 35-39 | | 3,320 | 3,490 | 6,800 |  | 3,380 | 3,550 | 6,930 |  | 3,390 | 3,610 | | 7,000 |  | 3,460 | 3,640 | 7,100 |
| 40-44 | | 3,550 | 3,900 | 7,450 |  | 3,370 | 3,720 | 7,100 |  | 3,330 | 3,560 | | 6,890 |  | 3,280 | 3,520 | 6,800 |
| 45-49 | | 3,880 | 4,130 | 8,010 |  | 3,870 | 4,130 | 8,000 |  | 3,790 | 4,170 | | 7,960 |  | 3,730 | 4,070 | 7,810 |
| 50-54 | | 3,840 | 4,020 | 7,860 |  | 3,780 | 3,960 | 7,740 |  | 3,700 | 3,940 | | 7,640 |  | 3,730 | 4,010 | 7,740 |
| 55-59 | | 3,940 | 4,240 | 8,180 |  | 4,000 | 4,310 | 8,310 |  | 4,060 | 4,230 | | 8,290 |  | 3,990 | 4,180 | 8,170 |
| 60-64 | | 3,610 | 3,760 | 7,370 |  | 3,600 | 3,790 | 7,390 |  | 3,620 | 3,910 | | 7,530 |  | 3,660 | 4,030 | 7,690 |
| 65-69 | | 3,220 | 3,260 | 6,490 |  | 3,290 | 3,340 | 6,630 |  | 3,340 | 3,390 | | 6,730 |  | 3,380 | 3,430 | 6,810 |
| 70,74 | | 2,420 | 2,620 | 5,040 |  | 2,570 | 2,780 | 5,350 |  | 2,740 | 2,900 | | 5,640 |  | 2,850 | 3,040 | 5,890 |
| 75-79 | | 1,760 | 2,020 | 3,780 |  | 1,810 | 2,020 | 3,830 |  | 1,890 | 2,130 | | 4,020 |  | 1,970 | 2,150 | 4,120 |
| 80-84 | | 1,160 | 1,470 | 2,640 |  | 1,190 | 1,520 | 2,710 |  | 1,200 | 1,550 | | 2,750 |  | 1,260 | 1,600 | 2,850 |
| 85-89 | | 720 | 1,000 | 1,720 |  | 690 | 1,000 | 1,700 |  | 690 | 980 | | 1,670 |  | 690 | 1,000 | 1,690 |
| 90+ | | 310 | 680 | 990 |  | 350 | 700 | 1,050 |  | 380 | 730 | | 1,110 |  | 390 | 750 | 1,130 |
| **All Ages** | | **59,000** | **60,700** | **119,700** |  | **59,300** | **60,900** | **120,200** |  | **59,500** | **61,200** | | **120,700** |  | **59,800** | **61,400** | **121,100** |
| These projections were derived in October 2014. | | | | | | | | | | | | | | | | | |
| **Source: Statistics New Zealand** | | | | | | | | | | | | | | | | | |

# Appendix 2: Technical notes

This appendix provides a list of data sources and technical information on the analyses of deaths, cancer registrations, and hospitalisations, Census data and data from Te Kupenga 2013.

## Data sources

Table 72: Data sources

|  |  |  |
| --- | --- | --- |
| **Source (agency or collection)** | **Data** | **Period** |
| Action on Smoking and Health (ASH) | ASH Year 10 Snapshot Survey | 2013 |
| Health Quality and Safety Commission | New Zealand Atlas of Healthcare Variation | 2011, 2013 |
| Ministry of Education | ENROL (Education Counts) | 2013 |
| Ministry of Health | Birth registrations | 2009–2013 |
|  | B4 School Check Information System | 2013 |
|  | Cancer Registry | 2008–2012 |
|  | Community Oral Health Service | 2013 |
|  | Death registrations | 2007–2012\* |
|  | National Immunisation Register | 2008–2014 |
|  | National Maternity Collection | 2013 |
|  | National Screening Unit | 2010–2014 |
|  | PHO Enrolment Collection | 2012–2013 |
|  | Well Child/Tamariki Ora Indicators | 2014 |
|  | National Minimum Data Set (NMDS) – hospital discharges | 2011–2013 |
| Plunket | Breastfeeding rates | 2013 |
| Statistics New Zealand | Census of Population and Dwellings | 2006 |
|  | Census of Population and Dwellings | 2013 |
|  | NZ Population projections for the Ministry of Health (2013 Census base) | 2014 |
|  | Te Kupenga 2013, the Māori Social Survey | 2013 |
|  | Subnational Period Life Tables | 2012–2014 |

Note: \*no causes for 2012

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## Data from the Census of Population and Dwellings

Indicators using data from the Census of Population and Dwellings include the Census usually resident population.

Prioritised ethnicity was used to identify Māori individuals (any person who identified Māori as any of their ethnic groups) and non-Māori included people who had at least one valid ethnic response, none of which was Māori.

Households were classified as Māori if any usual resident was Māori. Households were counted if they were in private occupied dwellings.

People living in households included the population resident in permanent private households.

Standard Census definitions and forms can be found [here.](http://www.stats.govt.nz/Census/2013-census/info-about-2013-census-data/2013-census-definitions-forms/definitions.aspx)

Data on proportions of people were age-standardised to the 2001 Māori population.

## Data from Te Kupenga 2013

Te Kupenga 2013 was a post-census survey of individuals who identified with Māori ethnicity or Māori descent in the 2013 Census. The target population was the usually resident Māori population of New Zealand, living in occupied private dwellings on the 2013 Census night and aged 15 years or older. The data was collected during June to August 2013.

All estimates of numbers, percentages, and confidence intervals for data presented from Te Kupenga were calculated by Statistics New Zealand. The estimates of numbers of people in the DHB were rounded to the nearest five hundred in order to provide a more appropriate level of precision to the sample survey. All percentages were calculated from unrounded data.

Further details on the survey measures are available in the Te Kupenga 2013 [Data Dictionary](http://www.stats.govt.nz/survey-participants/a-z-of-our-surveys/te-kupenga-data-dictionary.aspx).

## Deaths, hospitalisations and cancer registrations

### Ethnicity

Most indicators are presented for Māori and non-Māori. In each data set a person was classified as Māori if any one of their recorded ethnicity was Māori. No adjusters for undercount of hospitalisations, cancer registrations, or deaths were applied.

### Residence

The DHB of residence was determined from the domicile code attached to the public hospital discharge record, the death registration, or the cancer registration.

### Hospital transfers

For ambulatory sensitive hospitalisations and analyses of hospitalisations by cause (such as asthma, ischaemic heart disease) transfers to other services or others hospitals were not counted as an admission if the admission had an ambulatory sensitive diagnosis or had the same principal diagnosis group respectively, was on the same day or the following day as the initial admission and either had its admission source code as ‘transfer from another hospital facility’ or initial admission had its event end type code indicating a discharge to an acute facility, another healthcare facility, or other service within same facility. For avoidable hospitalisations, all admissions, the tables of hospitalisations for mental disorders, causes of hospital admissions for injuries and causes of admissions, admissions were not counted if the admission had its admission source code as ‘transfer from another hospital facility’.

### Suppression of causes of death or hospitalisation

In tables presenting data on causes of death, hospitalisation, or cancer registrations by site, data is not presented where there were fewer than five Māori events during the period represented by the data.

### Ninety-five percent confidence intervals

The rates and ratios presented are estimates of the ‘true’ rate or ratio, calculated using data available. The 95% confidence interval (CI) indicates the interval that has a 95% probability of enclosing the ‘true’ value.

The CI is influenced by the population size of the group. When the population is small, the CI becomes wider and there is less certainty about the rate.

When the CIs of two groups do not overlap, the difference in rates between the groups is statistically significant. Sometimes, even when there are overlapping CIs, the difference between the groups may be statistically significant. In this report, if CIs overlap but a difference has been reported, a test of statistical significance (the log-transformation method) was performed (Clayton and Hills 1993).

### Age standardisation

Age-standardised rates adjust for differences in age distribution of the populations being compared. They are artificial rates created to allow comparisons to be made with differing groups. Age-standardised rates are calculated by applying age-specific rates to a standard population; they should only be compared with other adjusted rates that were calculated using the same ‘standard’ population. The standard population used in this report was the 2001 Census Māori population (shown below).

Rates for the total Māori and non-Māori populations were age–sex-standardised. This means the rates were standardised to a population with equal numbers of males and females and the age distribution of the total Māori population from the 2001 Census (Robson, Purdie et al 2007).

Standardising to the Māori population provides age-standardised rates that closely approximate the crude Māori rates (the actual rates among the Māori population) while also allowing comparisons with the non-Māori population. Care should be taken when using data from another source that are standardised using a different standard population, as they are not comparable.

Table 73: 2001 Census total Māori population

|  |  |  |
| --- | --- | --- |
| **Age group (years)** | **2001 Census total Māori population** | **Weighting** |
| 0–4 | 67,404 | 12.81 |
| 5–9 | 66,186 | 12.58 |
| 10–14 | 62,838 | 11.94 |
| 15–19 | 49,587 | 9.42 |
| 20–24 | 42,153 | 8.01 |
| 25–29 | 40,218 | 7.64 |
| 30–34 | 39,231 | 7.46 |
| 35–39 | 38,412 | 7.30 |
| 40–44 | 32,832 | 6.24 |
| 45–49 | 25,101 | 4.77 |
| 50–54 | 19,335 | 3.67 |
| 55–59 | 13,740 | 2.61 |
| 60–64 | 11,424 | 2.17 |
| 65–69 | 8,043 | 1.53 |
| 70–74 | 5,046 | 0.96 |
| 75–79 | 2,736 | 0.52 |
| 80–84 | 1,251 | 0.24 |
| 85 and over | 699 | 0.13 |

### ICD-10 codes

The International Classification of Diseases (ICD-10) codes used for the calculation of avoidable and ambulatory sensitive hospitalisations and avoidable and amenable mortality are presented in Tables 45 to 49 below. For the Excel tables of deaths by cause, hospitalisations by cause, mental disorders, hospitalisations for injuries by external cause, and cancer registrations, the codes are listed in Appendix 2 of [Hauora: Māori Standards of Health IV.](http://www.otago.ac.nz/wellington/otago067739.pdf) For other tables, the ICD codes are listed in the accompanying Excel tables.

Table 74: Potentially avoidable hospitalisation ICD-10 codes for children aged 1 month to 14 years

|  |  |
| --- | --- |
| **Condition** | **ICD-10-AM code** |
| Acute bronchiolitis | J21 |
| Acute rheumatic fever | I00–I02 |
| Acute upper respiratory tract infection excluding croup | J00–J03, J06 |
| Asthma | J45, J46 |
| Bacterial meningitis\* | G00, G01 |
| Bacterial/Unspecified pneumonia | J13–J16, J18 |
| Bronchiectasis | J47 |
| Constipation | K59.0 |
| Chronic rheumatic heart disease | I05–I09 |
| Croup, acute laryngitis, tracheitis | J04, J05.0 |
| Dental (dental caries, pulp, periodontal) | K02, K04, K05 |
| Dermatitis/eczema | L20–L30 |
| Febrile convulsions | R560 |
| Gastroenteritis | A00–A09, K529, R11, |
| Gastro oesophageal reflux | K21 |
| Meningococcal disease | A39 |
| Nutritional deficiency | D50–D53, E40–E64, |
| Otitis media | H65–H67 |
| Osteomyelitis | M86 |
| Skin infection | H00.0, H01.0, J34.0, L00–L05, L08, L98.0 |
| Tuberculosis | A15–A19 |
| Urinary tract infection ≥ 5 years | N10, N12, N13.6, N30.0, N30.9, N39.0, |
| Vaccine preventable diseases: tetanus neonatorum congenital rubella | P350, A33, A34 |
| tetanus, diphtheria, pertussis, polio, hepatitis B | A35, A36, A37, A80, B16, B18.0, B18.1 |
| measles, rubella, mumps | B05, B06, B26, M01.4 |
| Viral pneumonia | J12, J10.0, J11.0 |
| Viral /other / unspecified meningitis | A87, G02, G03 |
| Viral infection of unspecified site | B34 |

Source: Anderson et al (2012)  
Notes:  
Includes all acute admissions and arranged admissions that were admitted within 7 days.   
Waiting list admissions were excluded, apart from dental admissions which were all included.   
Admissions were included for patients aged 29 days through to 14 years, at admission.

Table 75: Ambulatory care sensitive hospitalisation ICD-10 codes for children aged 1 month to 14 years

|  |  |
| --- | --- |
| **Condition** | **ICD-10-AM code** |
| Acute rheumatic fever | I00–I02 |
| Acute upper respiratory tract infections excluding croup | J00–J03, J06 |
| Asthma | J45, J46 |
| Bacterial/Unspecified pneumonia | J13–J16, J18 |
| Bronchiectasis | J47 |
| Constipation | K59.0 |
| Chronic rheumatic heart disease | I05–I09 |
| Dental (dental caries, pulp, periodontal) | K02, K04, K05 |
| Dermatitis/eczema | L20–L30 |
| Gastroenteritis | A02–A09, K529, R11 |
| Gastro oesophageal reflux | K21 |
| Nutritional deficiency | D50–D53, E40–E64 |
| Otitis media | H65–H67 |
| Skin infection | L00–L04, L08, L98.0, J34.0, H01.0, H00.0 |
| Urinary tract infection ≥ 5 years | N10, N12, N136, N30.0, N30.9, N39.0 |
| Vaccine preventable diseases: tetanus neonatorum congenital rubella | P350, A33, A34 |
| > 6 months: tetanus, diphtheria, pertussis, polio, hepatitis B | A35, A36, A37, A80, B16, B18.0, B18.1 |
| > 16 months: measles, rubella, mumps | B05, B06, B26, M01.4 |

Source: Anderson et al (2012)  
Notes:  
Includes all acute admissions and arranged admissions that were admitted within 7 days.   
Waiting list admissions were excluded, apart from dental admissions which were all included.   
Admissions were included for patients aged 29 days through to 14 years, at admission.

Table 76: Ambulatory care sensitive hospitalisation ICD-10 codes for people aged 1 month to 74 years

|  |  |
| --- | --- |
| **Condition** | **ICD-10 code** |
| Gastroenteritis/dehydration | A02–A09, K52.9, R11 |
| Vaccine preventable disease MMR | B05\*, B06\*, B26\*, M01.4\*, P35.0 |
| Vaccine preventable disease Other ‡ | A33–A37, A40.3, A80, B16, B18 |
| Sexually transmitted infections § | A50–A59, A60, A63, A64, I98.0, M02.3, M03.1, M73.0, M73.1, N29.0, N34.1 |
| Cervical cancer § | C53 |
| Nutrition deficiency and anaemia | D50–D53, E40–E46, E50–E64, M83.3§ |
| Diabetes § | E10–E14, E162 |
| Epilepsy § | G40, G41, O15, R56.0, R56.8 |
| Upper respiratory and ENT | H65, H66, H67, J00–J04, J06 |
| Rheumatic fever/heart disease | I00, I01, I02, I05–I09 |
| Hypertensive disease § | I10–I15, I67.4 |
| Angina and chest pain † § | I20, R07.2–R07.4 |
| Myocardial infarction † § | I21–I23, I24.1 |
| Other ischaemic heart disease † § | I24.0, I24.8, I24.9, I25 |
| Congestive heart failure § | I50, J81 |
| Stroke † § | I61, I63–I66 |
| Pneumonia | J13–J16, J18 |
| Asthma | J45, J46 |
| Bronchiectasis || | J47 |
| Dental conditions | K02, K04, K05 |
| Gastro-oesophageal reflux disease | K21 |
| Peptic ulcer § | K25–K28 |
| Constipation | K590 |
| Cellulitis | H00.0, H01.0, J34.0, L01–L04, L08, L98.0 |
| Dermatitis and eczema | L20–L30 |
| Kidney/urinary infection ¶ | N10, N12, N13.6, N30.9, N39.0 |

Source: Ministry of Health   
Notes: Acute and arranged (occurring in less than 7 days of decision) admissions, except dental where elective admission are also included.  
Excluding discharges from an emergency department with one day of stay or shorter.  
\* Aged 15 months to 14 years.  
† Each admission counts as a half.  
‡ Aged six months to 14 years.  
§ Aged 15 years and over.  
|| Aged more than 15 years.  
¶ Aged 5 years and over.

Table 77: Avoidable mortality ICD-10 codes

|  |  |
| --- | --- |
| **Condition** | **ICD-10-AM** |
| Tuberculosis | A15–A19, B90 |
| Selected invasive bacterial and protozoal infection | A38–A41, A46, A48.1, B50–B54, G00, G03, J02.0, J13–J15, J18, L03 |
| Hepatitis | B15–B19 |
| HIV/AIDS | B20–B24 |
| Viral pneumonia and influenza | J10, J12, J17.1, J21 |
| Lip, oral cavity and pharynx cancers | C00–C14 |
| Oesophageal cancer | C15 |
| Stomach cancer | C16 |
| Colorectal cancer | C18–C21 |
| Liver cancer | C22 |
| Lung cancer | C33–C34 |
| Bone and cartilage cancer | C40–C41\* |
| Melanoma of skin | C43 |
| Non-melanotic skin cancer | C44 |
| Breast cancer (female only) | C50 |
| Uterine cancer | C54–C55 |
| Cervical cancer | C53 |
| Prostate | C61\* |
| Testis | C62\* |
| Bladder cancer | C67 |
| Thyroid cancer | C73 |
| Hodgkin’s disease | C81 |
| Lymphoid leukaemia, acute/chronic | C91.0, C91.1 |
| Benign tumours | D10–D36 |
| Thyroid disorders | E00–E07 |
| Diabetes | E10–E14\*\* |
| Alcohol-related diseases | F10, I42.6, K29.2, K70 |
| Illicit drug use disorders | F11–F16, F18–F19 |
| Epilepsy | G40–G41 |
| Rheumatic and other valvular heart diseases | I01–I09, I33–I37\* |
| Hypertensive heart disease | I10\*, I11 |
| Ischaemic heart disease | I20–I25 |
| Heart failure | I50\* |
| Cerebrovascular diseases | I60–I69 |
| Aortic aneurysm | I71 |
| Nephritis and nephrosis | I12–I13, N00–N09, N17–N19 |
| Obstructive uropathy and prostatic hyperplasia | N13, N20–N21, N35, N40, N99.1 |
| DVT with pulmonary embolism | I26, I80.2 |
| COPD | J40–J44\*\*\* |
| Asthma | J45–J46\*\*\* |
| Peptic ulcer disease | K25–K28 |
| Acute abdomen, appendicitis, intestinal obstruction, cholecystitis/lithiasis, pancreatitis, hernia | K35–K38, K40–K46, K80–K83, K85–K86, K91.5 |
| Chronic liver disease (excluding alcohol related disease) | K73, K74 |
| Complications of pregnancy | O00–O96\*, O98–O99\* |
| Birth defects | H31.1, P00, P04, Q00–Q99 |
| Complications of perinatal period | P01–P02\*, P03, P05–P95 |
| Road traffic injuries | V01–V04, V06, V09–V80, V82−V86\*, V87, V88.0−V88.5\*, V88.7−V88.9\*, V89, V98\*, V99 |
| Accidental poisonings | X40–X49 |
| Falls | W00–W19 |
| Fires | X00–X09 |
| Drownings | W65–W74 |
| Suicide and self-inflicted injuries | X60–X84, Y87.0 |
| Violence | X85–Y09, Y87.1 |
| Event of undetermined intent | Y10–Y34, Y87.2\*\*\*\* |
| Treatment injury | Y60–Y82\* |

Notes: \*Added from amenable mortality  
\*\*E09 should be added if using ICD-10 AM version 3 or higher.  
\*\*\*All ages added from amenable mortality  
\*\*\*\*Y87.2 added by authors for completeness

Table 78: Amenable mortality ICD-10 codes

| **Group** | **Condition** | **ICD-10** |
| --- | --- | --- |
| Infections | Pulmonary tuberculosis | A15−A16 |
| Meningococcal disease | A39 |
| Pneumococcal disease | A40.3, G00.1, J13 |
| HIV/AIDS | B20–B24 |
| Cancers | Stomach | C16 |
| Rectum | C19–C21 |
| Bone and cartilage | C40–C41 |
| Melanoma | C43 |
| Female breast | C50 |
| Cervix | C53 |
| Testis | C62 |
| Prostate | C61 |
| Thyroid | C73 |
| Hodgkin’s | C81 |
| Acute lymphoblastic leukaemia (age 0–44 years) | C91.0 |
| Maternal and infant | Complications of pregnancy | O00–O96, O98–O99 |
| Complications of the perinatal period | P01–P03, P05–P94 |
| Cardiac septal defect | Q21 |
| Chronic disorders | Diabetes | E10–E14\* |
| Valvular heart disease | I01, I05–I09, I33–I37 |
| Hypertensive diseases | I10–I13 |
| Coronary disease | I20–I25 |
| Heart failure | I50 |
| Cerebrovascular diseases | I60–I69 |
| Renal failure | N17–N19 |
| Pulmonary embolism | I26 |
| COPD | J40-J44 |
| Asthma | J45–J46 |
| Peptic ulcer disease | K25–K27 |
| Cholelithiasis | K80 |
| Injuries | Suicide | X60–X84 |
| Land transport accidents (excluding trains) | V01–V04,V06−V14, V16−V24, V26−V34, V36−V44, V46−V54, V56−V64, V66−V74, V76−V79, V80.0−V80.5, V80.7−V80.9, V82−V86, V87.0−V87.5, V87.7−V87.9, V88.0−V88.5, V88.7−V88.9, V89, V98−V99 |
| Falls (accidental fall on same level) | W00−W08, W18 |
| Fire, smoke or flames | X00–X09 |
| Treatment injury | Y60–Y82 |

Source: Ministry of Health 2010  
Note: \* E09 should be added if using ICD-10 AM version 3 or higher.



1. The use of the 2001 Māori population standard makes the age-standardised data in this report comparable to the Ministry of Health’s Māori health chartbooks, but not to other Ministry of Health documents which use the World Health Organisation’s world population. [↑](#footnote-ref-1)
2. Population projections are provided in Appendix 1. [↑](#footnote-ref-2)