**

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

For the Ministry of Health

Counties Manukau

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

Ngāti Whatua, Ngāti Hine, Ngāti Kahu, Ngāti Manu, Ngāti Hāua

tewhekemoko@gmail.com

www.facebook.com/pages/Te-Wheke-Moko/371495646243927

Suggested citation: Robson B, Purdie G, Simmonds S, Waa A, Scorringe K, Rameka R. 2015*. Counties Manukau District Health Board Māori Health Profile 2015.* Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare.

ISBN 978-0-9941252-4-8 (electronic)

Published in October 2015 by Te Rōpū Rangahau Hauora a Eru Pōmare, University of Otago Wellington, PO Box 7343, Wellington South.

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.

# Acknowledgements

Many people have contributed their time and expertise to the Māori Health Profiles. We would like to thank members of Te Tumu Whakarae, DHB Planning and Funding groups, Public Health Services, Māori providers, and Māori governance groups who contributed to our consultation discussions. We would also like to acknowledge those who participated in the workshop at the Tū Kaha conference in Hastings, October 2014.

Paula Searle, Peter Himona, Te Taiawatea Moko-Mead, Li-Chia Yeh, Roimata Timutimu, Natalie Talamaivao from Te Kete Hauora, Ministry of Health provided valuable advice.

The following people assisted us to obtain data: Roslyn Parker, Dale Robison, Catherine Gerard and Mishra Suriyaprakash from the Ministry of Health; Ester Goodwin and Andrew Maclaren, Statistics New Zealand; June Atkinson, University of Otago Wellington; Nikki Turner, Immunisation Advisory Centre; Ali Ajmal, Action on Smoking and Health New Zealand.

Graham Tipene designed the rei puta and Somar Design developed the document template.

Doone Winnard and Sarah Sharpe from Counties Manukau DHB provided very useful peer review of early drafts.

We appreciated the discussions and input of the participants of the Māori Health Profiles Summer School in February 2015, and a special thanks to the guest presenters Paula Searle, Kirikowhai Mikaere, Ana Morrison, Sonia Hawkins, Gay Keating and Jean Gilmour.

We would like to particularly acknowledge Olga Rameka who provided cultural support and guidance throughout the project, ngā mihi aroha ki a koe.

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

− Counties Manukau at a glance

Counties Manukau population

* In 2013, 79,500 Māori lived in the Counties Manukau District Health Board region, 16% of the District’s total population.
* The Counties Manukau Māori population is youthful, but showing signs of ageing. In 2013, the median age was 22.3 years. One in four of the District’s children under 15 years were Māori as were one in five youth aged 15–24 years. The Māori population aged 65 years and over will increase by nearly 43% between 2013 and 2020.

Whānau ora – Healthy families

* In 2013, most Counties Manukau Māori adults (76%) reported that their whānau was doing well, but 7% felt their whānau was doing badly. A small proportion (5%) found it hard to access whānau support in times of need, but most found it easy (87%).
* Being involved in Māori culture was important (very, quite, or somewhat) to the majority of Māori adults (71%) and spirituality was important to 66%.
* Almost all (96%) Counties Manukau Māori had been to a marae at some time. Two-thirds (65%) had been to their ancestral marae, with over half (56%) stating they would like to go more often.
* One in eight (12%) had taken part in traditional healing or massage in the last 12 months.
* A fifth of Counties Manukau Māori could have a conversation about a lot of everyday things in te reo Māori in 2013.

Wai ora – Healthy environments

Education

* In 2013, 88% of Counties Manukau Māori children starting 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, a higher proportion than in 2006 (34%). The gap between Māori and non-Māori closed by three percentage points but Māori remained three-quarters as likely as non-Māori to have this level of qualification in 2013.

Work

* In 2013, 13% of Māori adults aged 15 years and over were unemployed, 90% higher than the non-Māori rate (7%).
* Most Counties Manukau Māori adults (87%) do voluntary work.
* In 2013, Māori were around 80% 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, one in two children in Māori households (defined as households with at least one Māori resident) were in households with low equivalised household incomes (under $15,172), compared to one in three children in other households.
* Among adults 18 years and over, 43% in Māori households were in a low-income household, compared to 30% of adults in other households.
* In 2013, 17% of Counties Manukau Māori adults reported putting up with feeling the cold a lot to keep costs down during the previous 12 months, 5% had gone without fresh fruit and vegetables, and 9% had often postponed or put off a visit to the doctor.
* Residents of Māori households were 3.6 times as likely as residents of other households to have no access to a motor vehicle in 2013 (10% compared to 3%).
* People in Māori households were less likely to have access to telecommunications than those living in other households: 34% had no internet, 29% no telephone, 14% no mobile phone, and 4% had no access to any telecommunications.

Housing

* The most common housing problems reported to be a big problem by Māori adults in 2013 were finding it hard to keep warm (22%), needing repairs (19%), and damp (15%).
* Two-thirds of children in the Counties Manukau area Māori households were living in rented accommodation, 54% higher than the proportion of children in other households (43%).
* A third of residents in Māori households were in crowded homes (i.e. requiring at least one additional bedroom) compared to just under a quarter of residents of other homes (33% compared to 23%).

Area deprivation

* Using the NZDep2013 index of small area deprivation, 58% of Counties Manukau Māori lived in the two most deprived decile areas compared to 32% of non-Māori. Only 7% of Māori lived in the two least deprived deciles compared to 20% of non-Māori.

Mauri ora – Healthy individuals

Pepi, tamariki – Infants and children

* On average 2,422 Māori infants were born per year during 2009–2013, 28% of all live births in the DHB. Approximately 7% of Māori and 6% of non-Māori babies had low birth weight.
* In 2013, 76% of Māori babies in the Counties Manukau area were fully breastfed at 6 weeks.
* Fifty-six percent of Māori infants were enrolled with a Primary Health Organisation by three months of age.
* In 2014, 87% of Māori children were fully immunised at 8 months of age, 90% at 24 months.
* In 2013, 61% of Counties Manukau Māori children aged 5 years and 46% of non-Māori children had caries. These proportions were similar for children in Year 8 of school. On average there were 203 hospital admissions per year among Māori children under 15 years during 2011–2013, at a similar rate to non-Māori children.
* During 2011–2013, on average there were 172 hospital admissions per year for grommet insertions among Māori children (at a rate 11% higher than non-Māori) and 199 admissions for serious skin infections (with the rate 22% higher than for non-Māori children).
* Māori children under 15 years were 51% more likely than non-Māori children to be hospitalised for acute rheumatic fever, with 16 children per year admitted at least once. In addition, six Māori per year in the 15–24 year age group were admitted per year (twice the non-Māori rate).
* Approximately 1,670 hospitalisations per year of Māori children under 15 years were potentially avoidable through population-based health promotion and intersectoral actions, at a rate 6% higher than that of non-Māori.
* Just over 1,000 hospitalisations per year of Māori children were potentially avoidable through preventive or treatment intervention in primary care (ambulatory care sensitive hospitalisations, or ASH), at a similar rate to non-Māori children.

Rangatahi – Young adults

* There has been a significant increase in the proportion of Counties Manukau 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, 72% of Māori girls aged 17 years and 69% of those aged 14 years had completed all three doses of the human papilloma virus (HPV) immunisation.
* Rates of hospitalisation for injury from self-harm were two-thirds higher for Māori than for non-Māori among youth aged 15–24 years during 2011–2013 and twice as high for Māori than non-Māori among young adults aged 25–44 years.

Pakeke – Adults

* Just over half of Māori adults in the Counties Manukau area (55%) reported having excellent or very good health in 2013, and a quarter reported good health. One in five (19%) reported having fair or poor health.
* Smoking rates are decreasing, but remain more than twice as high for Māori as for non-Māori in the Counties Manukau area.

Circulatory system diseases

* Māori adults aged 25 years and over were 88% more likely than non-Māori to be hospitalised for circulatory system diseases (including heart disease and stroke) during 2011–2013.
* Counties Manukau Māori women were around twice as likely as non-Māori women to be admitted with acute coronary syndrome, and around twice as likely to have revascularisation procedures. Among men, Māori and non-Māori rates were similar.
* Heart failure admission rates were close to 4 times as high for Māori as for non-Māori.
* Stroke admission rates were three-quarters higher for Māori than for non-Māori and admissions for hypertensive disease were twice as high.
* Chronic rheumatic heart disease hospital admissions were over twice as common for Māori as for non-Māori and heart valve replacements 81% higher.
* Māori under 75 years were 2.9 times as likely as non-Māori to die from circulatory system diseases in 2007–2011.

Diabetes

* In 2013, 6% of Māori and 8% of non-Māori were estimated to have diabetes (crude prevalence). Half of Māori aged 25 years and over who had diabetes were regularly receiving metformin or insulin, 88% were having their blood sugar monitored regularly, and three-quarters were being screened regularly for renal disease.
* In 2011–2013 Māori with diabetes were 4.5 times as likely as non-Māori to have a lower limb amputated.

Cancer

* Compared to non-Māori, cancer incidence was 66% higher for Māori females and 31% higher for Māori males, while cancer mortality was twice as high for Māori of both genders.
* Breast, lung, uterine and colorectal cancers were the most commonly registered among Counties Manukau Māori women. The rate of lung cancer was over 4 times as high as the non-Māori rate, breast cancer 62% higher, and uterine cancer 42% higher.
* Breast screening coverage of Māori women aged 45–69 years was 69% compared to 73% of non-Māori women in 2014.
* Cervical screening coverage of Māori women aged 25–69 years was 62% over 3 years and 80% over five years (compared to 73% and 87% of non-Māori respectively).
* Lung, prostate, colorectal and liver cancers were the most commonly registered cancers among Counties Manukau Māori men. Lung and liver cancer registration rates were around 3 times as high as the non-Māori rates respectively, while prostate cancer was 26% lower.
* Lung cancer was the most common cause of death from cancer among Māori women, followed by breast, colorectal and stomach cancers. Mortality rates for lung, breast, and stomach cancers were higher for Māori than for non-Māori women.
* Lung cancer was the most common cause of cancer death for Māori men, followed by liver, colorectal, prostate, and stomach cancers. Lung, liver, and stomach cancer mortality rates were higher for Māori than for non-Māori men.

Respiratory disease

* Māori aged 45 years and over were 4 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 most age groups other than 65 years and over.
* Māori under 75 years had 3.4 times the non-Māori rate of death from respiratory disease during 2007–2011.

Mental disorders

* Māori were 2.5 times as likely as non-Māori to be admitted to hospital for a mental disorder during 2011–2013. Schizophrenia related disorders were the most common disorders, followed by mood disorders and substance use disorders.

Gout

* In 2011 the prevalence of gout among Counties Manukau Māori was estimated to be 8%, compared to 5% among non-Māori.
* Thirty-seven percent of Māori with gout regularly received allopurinol, a preventive therapy to lower urate levels. Of those who received allopurinol, 45% had a lab test for serum urate levels in the following six months. Around half were using non-steroidal anti-inflammatory medication.
* In 2011–2013 the rate of hospitalisations for gout was 2.6 times as high for Māori as for non-Māori.

All ages

Hospitalisations

* The all-cause rate of hospital admissions was 27% higher for Māori than for non-Māori during 2011–2013.
* Approximately 5,480 Māori hospital admissions per year were potentially avoidable, with the rate 46% higher for Māori than for non-Māori. The ASH rate was 68% higher.

Mortality

* In 2012–2014, life expectancy at birth for Māori in the Auckland Region was 77.8 years for females (6.8 years lower than for non-Māori females) and 73.7 years for males (7.4 years lower than for non-Māori).
* The all-cause mortality rate for Counties Manukau Māori was 2.2 times the non-Māori rate during 2008–2012.
* Leading causes of death for Māori females were ischaemic heart disease (IHD), lung cancer, diabetes, COPD, and breast cancer. Leading causes of death for Māori males were IHD, lung cancer, accidents, diabetes, and suicide.
* Potentially avoidable mortality and mortality amenable to heath care rates were 2.6 and 2.5 times as high respectively for Māori as for non-Māori in the Counties Manukau District during 2007–2011.

Injuries

* The rate of hospitalisation due to injury was 43% higher for Māori males than for non-Māori males and 57% higher for Māori females compared to non-Māori females during 2011–2013.
* The most common causes of injury resulting in hospitalisations among Māori were falls, exposure to mechanical forces, complications of medical and surgical care, assault, transport accidents, and intentional self-harm.
* Rates of hospital admission for injury caused by assault were 4.7 times as high for Māori females as for non-Māori females, and 2.6 times as high for Māori males as for non-Māori males. Rates were higher for males than for females.
* Injury mortality was 2.5 times as high for Māori as for non-Māori in the Counties Manukau District during 2007–2011.

# Contents

[Tiro whānui – Counties Manukau at a glance v](#_Toc419136907)

[Introduction 1](#_Toc419136921)

[Data sources and key methods 1](#_Toc419136922)

[Further sources of data 2](#_Toc419136923)

[Te Tatauranga o te Iwi – Key demographics 3](#_Toc419136925)

[Whānau ora – Healthy families 4](#_Toc419136926)

[Whānau well-being 4](#_Toc419136927)

[Whānau support 5](#_Toc419136928)

[Importance of participation in Māori culture 5](#_Toc419136929)

[Te Reo Māori 5](#_Toc419136930)

[Access to marae 6](#_Toc419136931)

[Traditional healing or massage 6](#_Toc419136932)

[Wai ora – Healthy environments 7](#_Toc419136933)

[Education 7](#_Toc419136934)

[Work 7](#_Toc419136935)

[Income and standard of living 9](#_Toc419136936)

[Housing 11](#_Toc419136937)

[Housing security 11](#_Toc419136938)

[Household crowding 11](#_Toc419136939)

[Fuel poverty 12](#_Toc419136940)

[Area deprivation 12](#_Toc419136941)

[Mauri ora: Pepi, tamariki - Infants and children 13](#_Toc419136942)

[Births 13](#_Toc419136943)

[Well child/Tamariki ora indicators 13](#_Toc419136944)

[Oral health 14](#_Toc419136945)

[Middle ear disease 15](#_Toc419136946)

[Healthy skin 15](#_Toc419136947)

[Acute rheumatic fever 15](#_Toc419136948)

[Potentially preventable hospitalisations 16](#_Toc419136949)

[Mauri ora: Rangatahi – Young adults 17](#_Toc419136950)

[Smoking 17](#_Toc419136951)

[Immunisations 18](#_Toc419136952)

[Mental health 18](#_Toc419136953)

[Mauri ora: Pakeke – Adults 19](#_Toc419136954)

[Self-assessed health 19](#_Toc419136955)

[Smoking status 19](#_Toc419136956)

[Heart disease and stroke 20](#_Toc419136957)

[Diabetes 22](#_Toc419136958)

[Cancer 23](#_Toc419136959)

[Breast and cervical cancer screening 23](#_Toc419136960)

[Respiratory disease 25](#_Toc419136961)

[Mental disorders 26](#_Toc419136962)

[Gout 26](#_Toc419136963)

[Hip fractures 27](#_Toc419136964)

[Elective surgery 28](#_Toc419136965)

[Mauri ora: All ages 29](#_Toc419136966)

[Hospitalisations 29](#_Toc419136967)

[Potentially avoidable hospitalisations 29](#_Toc419136968)

[Mortality 30](#_Toc419136969)

[Potentially avoidable mortality 31](#_Toc419136970)

[Injuries 32](#_Toc419136971)

[References 33](#_Toc419136972)

[Appendix 1: Population projections 34](#_Toc419136973)

[Appendix 2: Technical notes 36](#_Toc419136974)

[Data sources 36](#_Toc419136975)

[Data from the Census of Population and Dwellings 36](#_Toc419136976)

[Data from Te Kupenga 2013 36](#_Toc419136977)

[Deaths, hospitalisations and cancer registrations 37](#_Toc419136978)

[Ethnicity 37](#_Toc419136979)

[Residence 37](#_Toc419136980)

[Hospital transfers 37](#_Toc419136981)

[Suppression of causes of death or hospitalisation 37](#_Toc419136982)

[Ninety-five percent confidence intervals 37](#_Toc419136983)

[Age standardisation 37](#_Toc419136984)

[ICD-10 codes 38](#_Toc419136985)

## List of Tables and Figures

[**Table 1:** Population by age group, Counties Manukau DHB, 2013 3](#_Toc426491286)

[**Table 2**: Population projections, Counties Manukau DHB, 2013 to 2033 3](#_Toc426491287)

[**Table 3:** Whānau well-being reported by Māori aged 15 years and over, Counties Manukau DHB, 2013 4](#_Toc426491288)

[**Table 4:** Whānau composition reported by Māori aged 15 years and over, Counties Manukau DHB, 2013 4](#_Toc426491289)

[**Table 5**: Access to whānau support, Māori aged 15 years and over, Counties Manukau DHB, 2013 5](#_Toc426491290)

[**Table 6:** Importance of Māori culture and spirituality, Māori aged 15 years and over, Counties Manukau DHB, 2013 5](#_Toc426491291)

[**Table 7:** People who can have a conversation about a lot of everyday things in te reo Māori, Counties Manukau DHB, 2013 5](#_Toc426491292)

[**Table 8:** Use of te reo Māori in the home, Māori aged 15 years and over, Counties Manukau DHB, 2013 6](#_Toc426491293)

[**Table 9:** Access to marae, Māori aged 15 years and over, Counties Manukau DHB, 2013 6](#_Toc426491294)

[**Table 10:** Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Counties Manukau DHB, 2013 6](#_Toc426491295)

[**Table 11:** Adults aged 18 years and over with a Level 2 Certificate or higher Counties Manukau DHB, 2006 and 2013 7](#_Toc426491296)

[**Table 12:** Labour force status, 15 years and over, Counties Manukau DHB, 2006 and 2013 7](#_Toc426491297)

[**Table 13:** Leading industries in which Māori were employed, Counties Manukau DHB, 2013 8](#_Toc426491298)

[**Table 14:** Leading occupations of employed Māori, Counties Manukau DHB, 2013 8](#_Toc426491299)

[**Table 15:** Unpaid work, 15 years and over, Counties Manukau DHB, 2013 9](#_Toc426491300)

[**Table 16:** Unmet need reported by Māori aged 15 years and over to keep costs down in the last 12 months, Counties Manukau DHB, 2013 9](#_Toc426491301)

[**Table 17:** Children aged 0–17 years living in families where the only income is means-tested benefits, Counties Manukau DHB, 2006 and 2013 9](#_Toc426491302)

[**Table 18**: Children and adults living in households with low incomes, Counties Manukau DHB, 2013 10](#_Toc426491303)

[**Table 19**: Households with no access to a motor vehicle, Counties Manukau DHB, 2006 and 2013 10](#_Toc426491304)

[**Table 20**: People in households with no access to telephone, mobile/cell phone, internet, or any telecommunications, Counties Manukau DHB, 2013 10](#_Toc426491305)

[**Table 21:** Housing problems reported by Māori aged 15 years and over, Counties Manukau DHB, 2013 11](#_Toc426491306)

[**Table 22**: Children and adults living in households where rent payment are made, Counties Manukau DHB, 2013 11](#_Toc426491307)

[**Table 23:** People living in crowded households (requiring at least one more bedroom), Counties Manukau DHB, 2013 11](#_Toc426491308)

[**Table 24:** People living in households where no heating fuels are used, Counties Manukau DHB, 2013 12](#_Toc426491309)

[**Table 25**: Birth-weight and gestation, Counties Manukau DHB, 2009–2013 13](#_Toc426491310)

[**Table 26**: Selected Well Child/Tamariki Ora indicators for Māori children, Counties Manukau DHB 13](#_Toc426491311)

[**Table 27:** Children fully immunised by the milestone age, Counties Manukau DHB, 1 Jan 2014 to 31 Dec 2014 14](#_Toc426491312)

[**Table 28**: Oral health status of children aged 5 or in Year 8 at school, Counties Manukau DHB, 2013 14](#_Toc426491313)

[**Table 29**: Hospitalisations for tooth and gum disease, children aged 0–14 years, Counties Manukau DHB, 2011–2013 14](#_Toc426491314)

[**Table 30**: Hospitalisations for grommet insertions, children aged 0–14 years, Counties Manukau DHB, 2011–2013 15](#_Toc426491315)

[**Table 31:** Hospitalisations for serious skin infections, children aged 0–14 years, Counties Manukau DHB, 2011–2013 15](#_Toc426491316)

[**Table 32**: Individuals admitted to hospital for acute rheumatic fever, ages 0–14 and 15–24 years, Counties Manukau DHB, 2011–2013 15](#_Toc426491317)

[**Table 33**: Potentially avoidable hospitalisations for children aged 1 month to 14 years, Counties Manukau DHB, 2011–2013 16](#_Toc426491318)

[**Table 34:** Ambulatory care sensitive hospitalisations for children aged 1 month to 14 years, Counties Manukau DHB, 2011–2013 16](#_Toc426491319)

[**Table 35:** Human papilloma virus immunisations (HPV) by birth cohorts, Counties Manukau DHB, 1 September 2008 to 30 September 2014 18](#_Toc426491320)

[**Table 36**: Hospitalisations for injury from intentional self-harm, 15–24 and 25–44 years, Counties Manukau DHB, 2011–2013 18](#_Toc426491321)

[**Table 37:** Health status reported by Māori aged 15 years and over, Counties Manukau DHB, 2013 19](#_Toc426491322)

[**Table 38**: Cigarette smoking status, 15 years and over, Counties Manukau DHB, 2006 and 2013 19](#_Toc426491323)

[**Table 39**: Hospitalisations for circulatory system diseases, 25 years and over, Counties Manukau DHB, 2011–2013 20](#_Toc426491324)

[**Table 40**: Ischaemic heart disease indicators, 25 years and over, Counties Manukau DHB, 2011–2013 20](#_Toc426491325)

[**Table 41:** Hospitalisations for heart failure, stroke, and hypertensive disease, 25 years and over, Counties Manukau DHB, 2011–2013 21](#_Toc426491326)

[**Table 42**: Hospitalisations for chronic rheumatic heart disease and heart valve replacements, 25 years and over, Counties Manukau DHB, 2011–2013 21](#_Toc426491327)

[**Table 43:** Early deaths from circulatory system disease, Counties Manukau DHB, 2007–2011 22](#_Toc426491328)

[**Table 44:** Diabetes prevalence, medication use, monitoring of blood glucose levels, screening for renal disease, Counties Manukau DHB, 2013 22](#_Toc426491329)

[**Table 45:** Hospitalisations for lower limb amputations for people with concurrent diabetes, 15 years and over, Counties Manukau DHB, 2011–2013 22](#_Toc426491330)

[**Table 46:** Most common cancer registrations for Māori by site, all ages, Counties Manukau DHB, 2008–2012 23](#_Toc426491331)

[**Table 47:** Most common cancer deaths for Māori by site, all ages, Counties Manukau DHB, 2007–2011 23](#_Toc426491332)

[**Table 48:** BreastScreen Aotearoa breast screening coverage, women aged 45–69 years, Counties Manukau DHB, 24 months to 31 December 2014 24](#_Toc426491333)

[**Table 49**: Cervical screening coverage, women aged 25–69 years, Counties Manukau DHB, 3 years and 5 years to 31 December 2014 24](#_Toc426491334)

[**Table 50:** Hospitalisations for asthma, by age group, Counties Manukau DHB, 2011–2013 25](#_Toc426491335)

[**Table 51**: Hospitalisations for chronic obstructive pulmonary disease (COPD), 45 years and over, Counties Manukau DHB, 2011–2013 25](#_Toc426491336)

[**Table 52**: Early deaths from respiratory disease, Counties Manukau DHB, 2007–2011 25](#_Toc426491337)

[**Table 53**: Hospitalisations for mental disorders, all ages, Counties Manukau DHB, 2011–2013 26](#_Toc426491338)

[**Table 54:** Gout prevalence and treatment, 20–79 years, Counties Manukau DHB, 2011 27](#_Toc426491339)

[**Table 55**: Hospitalisations for gout, 25 years and over, Counties Manukau DHB, 2011–2013 27](#_Toc426491340)

[**Table 56**: Hospitalisations for hip fractures, 65 years and over, Counties Manukau DHB, 2011–2013 27](#_Toc426491341)

[**Table 57**: Hospitalisations for hip replacements, 50 years and over, Counties Manukau DHB, 2011–2013 28](#_Toc426491342)

[**Table 58:** Publicly funded hospitalisations for cataract surgery, 45 years and over, Counties Manukau DHB, 2011–2013 28](#_Toc426491343)

[**Table 59:** All-cause hospitalisations, all ages, Counties Manukau DHB, 2011–2013 29](#_Toc426491344)

[**Table 60:** Potentially avoidable hospitalisations, 0–74 years, Counties Manukau DHB, 2011–2013 29](#_Toc426491345)

[**Table 61**: Ambulatory care sensitive hospitalisations, 0–74 years, Counties Manukau DHB, 2011–2013 29](#_Toc426491346)

[**Table 62:** Life expectancy at birth, Auckland Region, 2012–2014 30](#_Toc426491347)

[**Table 63**: All-cause deaths, all ages, Counties Manukau DHB, 2008–2012 30](#_Toc426491348)

[**Table 64**: Leading causes of death for Māori, all ages, Counties Manukau DHB, 2007–2011 30](#_Toc426491349)

[**Table 65:** Potentially avoidable mortality, 0–74 years, Counties Manukau DHB, 2007–2011 31](#_Toc426491350)

[**Table 66:** Amenable mortality, 0–74 years, Counties Manukau DHB, 2007–2011 31](#_Toc426491351)

[**Table 67:** Hospitalisations for injuries, all ages, Counties Manukau DHB, 2011–2013 32](#_Toc426491352)

[**Table 68**: Hospitalisations for assault, all ages, Counties Manukau DHB, 2011–2013 32](#_Toc426491353)

[**Table 69**: Deaths from injury, all ages, Counties Manukau DHB, 2007–2011 32](#_Toc426491354)

[**Table 70**: Māori population projections, single year by age group, Counties Manukau DHB, 2013 to 2020 34](#_Toc426491355)

[**Table 71**: Total population projections, single year, by age group, Counties Manukau DHB, 2013 to 2020 35](#_Toc426491356)

[**Table 72:** Data sources 36](#_Toc426491357)

[**Table 73:** 2001 Census total Māori population 38](#_Toc426491358)

[**Table 74**: Potentially avoidable hospitalisation ICD-10 codes for children aged 1 month to 14 years 39](#_Toc426491359)

[**Table 75:** Ambulatory care sensitive hospitalisation ICD-10 codes for children aged 1 month to 14 years 39](#_Toc426491360)

[**Table 76:** Ambulatory care sensitive hospitalisation ICD-10 codes for people aged 1 month to 74 years 40](#_Toc426491361)

[**Table 77:** Avoidable mortality ICD-10 codes 40](#_Toc426491362)

[**Table 78:** Amenable mortality ICD-10 codes 42](#_Toc426491363)

[**Figure 1:** Distribution by NZDep 2013 decile, Counties Manukau DHB, 2013 12](#_Toc419129275)

[**Figure 2:** Trends in the proportion of students aged 14–15 years who have never smoked, by gender, Counties Manukau DHB, 1999–2013 17](#_Toc419129276)

[**Figure 3:** Regular smokers, ages 15–17, 18–19, 20–24 years, Counties Manukau DHB, 2013 17](#_Toc419129277)

# 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/tamariki to rangatahi then pakeke, and also a section on indicators that affect individuals of all ages.

This document presents data for residents of **Counties Manukau 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 Counties Manukau DHB. Accompanying Excel tables also include data for the total Counties Manukau 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 12% (79,500) of the country’s total Māori population lived in the Counties Manukau DHB area. The total population of the DHB (496,300) made up 11% of the national population. In 2015, the Māori population was estimated to be 81,900 and the total population 520,100. [[2]](#footnote-2)

Table 1: Population by age group, Counties Manukau DHB, 2013

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age group (years)** | **Māori** | | | **Non-Māori** | | Total DHB  Number |
| Number | Age distribution | % of DHB | Number | Age distribution |
| 0–14 | 28,630 | 36% | 24 | 90,600 | 22% | 119,230 |
| 15–24 | 14,850 | 19% | 19 | 61,580 | 15% | 76,430 |
| 25–44 | 19,110 | 24% | 15 | 111,900 | 27% | 131,010 |
| 45–64 | 13,500 | 17% | 12 | 103,780 | 25% | 117,280 |
| 65+ | 3,440 | 4% | 7 | 48,920 | 12% | 52,360 |
| Total | 79,500 | 100% | 16 | 416,800 | 100% | 496,300 |

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

Māori residents comprised 16% of the DHB population in 2013. The Māori population is relatively young, with a median age in 2013 of 22.3 years, compared with 33.1 years for the total DHB population. Māori comprised 24% of the DHB’s children aged 0–14 years and 19% of those aged 15–24 years.

Table 2: Population projections, Counties Manukau 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 | 79,500 | 16 | 12 | 36 | 60 | 4 | 22.3 | 496,300 | 33.1 | 11 | 692,300 | 4,442,100 |
| 2018 | 84,700 | 16 | 12 | 36 | 59 | 5 | 22.7 | 545,200 | 33.3 | 12 | 734,500 | 4,726,200 |
| 2023 | 89,400 | 15 | 12 | 35 | 59 | 6 | 23.3 | 586,100 | 34.2 | 12 | 773,500 | 4,935,200 |
| 2028 | 94,000 | 15 | 12 | 33 | 59 | 8 | 24.0 | 628,100 | 35.4 | 12 | 811,700 | 5,139,700 |
| 2033 | 99,000 | 15 | 12 | 32 | 59 | 9 | 24.5 | 669,700 | 36.5 | 13 | 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 4% but is projected to increase to 9% in 2033. Between 2013 and 2020 the number of Māori aged 65 and over will increase by 43% from 3,440 to 4,920 (see Appendix 1). In 2013, there were 950 Māori aged 75 years and over in the Counties Manukau District, with 201 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, Counties Manukau DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **How the whānau is doing** | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Well / Extremely well | 45,500 | 76.4 | (72.1, | 80.8) | 83.4 | (82.5, | 84.4) |
| Neither well nor badly | 9,500 | 16.2 | (12.5, | 20.0) | 10.3 | (9.4, | 11.2) |
| Badly / Extremely badly | 4,500\* | 7.3\* | (5.1, | 9.5) | 6.3 | (5.6, | 7.0) |

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

Three-quarters of Counties Manukau Māori adults (76%) reported that their whānau was doing well or extremely well in 2013. However 7% felt their whānau was doing badly or extremely badly.

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Whānau description** | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| **Size of whānau** | | | | | | | |
| 10 or less | 36,500 | 61.8 | (57.5, | 66.0) | 53.7 | (52.1, | 55.3) |
| 11 to 20 | 11,500 | 19.6 | (15.5, | 23.8) | 22.6 | (21.3, | 24.0) |
| More than 20 | 11,000 | 18.6 | (15.0, | 22.2) | 23.6 | (22.4, | 24.8) |
| **Groups included in whānau** | | | | | | | |
| Parents, partner, children, brothers & sisters | 49,000 | 81.1 | (77.0, | 85.3) | 94.6 | (94.0, | 95.2) |
| Aunts & uncles, cousins, nephews & nieces, other in-laws | 20,000 | 33.3 | (28.5, | 38.1) | 41.3 | (39.8, | 42.8) |
| Grandparents, grandchildren | 18,500 | 30.7 | (26.2, | 35.1) | 41.9 | (40.5, | 43.4) |
| Friends, others | 5,500 | 8.9 | (6.3, | 11.6) | 12.4 | (11.5, | 13.3) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.

Table 4 shows the size and composition of whānau, with around one in five reporting whānau sizes of more than 20 people. Nine percent included friends in their description of whānau.

## Whānau support

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **How easy is it to get help** | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| **Support in times of need** | | | | | |  |  |
| Easy, very easy | 52,000 | 86.6 | (83.5, | 89.6) | 81.2 | (80.1, | 82.4) |
| Sometimes easy, sometimes hard | 5,000 | 8.3 | (6.0, | 10.6) | 12.7 | (11.7, | 13.6) |
| Hard / very hard | 3,000\* | 5.2\* | (3.5, | 6.8) | 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 | 42,000 | 69.2 | (64.7, | 73.6) | 64.1 | (62.7, | 65.6) |
| Sometimes easy, sometimes hard | 9,000 | 14.7 | (10.8, | 18.6) | 16.9 | (15.9, | 18.0) |
| Hard / very hard | 6,000\* | 10.1\* | (6.8, | 13.4) | 14.7 | (13.5, | 15.9) |
| Don't need help | 3,500 | 6.0 | (4.3, | 7.8) | 4.2 | (3.7, | 4.7) |

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

In 2013, the majority of Māori adults in the Counties Manukau District (87%) reported having easy access to support in times of need. However, an estimated 3,000 (5%) had difficulty getting help from whānau.

A smaller proportion found it easy to get help with Māori cultural practices (69%), with 10% finding it hard or very hard. A further 6% reported not needing help.

## Importance of participation in Māori culture

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| **Importance of being involved in Māori culture** | | | | | |  |  |
| Very / quite | 28,000 | 46.7 | (41.0, | 52.4) | 46.3 | (44.9, | 47.6) |
| Somewhat | 15,000 | 24.6 | (20.1, | 29.1) | 24.2 | (22.9, | 25.6) |
| A little / not at all | 17,500 | 28.7 | (23.2, | 34.2) | 29.5 | (28.3, | 30.7) |
| **Importance of spirituality** | | | | | | | |
| Very / quite | 29,500 | 48.9 | (43.5, | 54.3) | 48.7 | (47.4, | 49.9) |
| Somewhat | 10,000 | 16.7 | (12.4, | 20.9) | 17.0 | (16.0, | 18.0) |
| A little / not at all | 20,500 | 34.4 | (29.3, | 39.5) | 34.3 | (33.1, | 35.5) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.

Being involved in Māori culture was important (very, quite, or somewhat) to the majority (71%) of Counties Manukau Māori adults. Spirituality was important to two-thirds of Māori adults (66%).

## Te Reo Māori

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

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| 13,101 | 19.4 | (19.1, | 19.7) | 1,881 | 0.5 | (0.5, | 0.6) | **36.53** | **(34.63,** | **38.54)** | 18.9 |

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, one in five of all Māori in the Counties Manukau District 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, Counties Manukau DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Language spoken at home** | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Māori is main language | 1,500\*\* | 2.8\*\* | (1.3, | 4.3) | 2.6 | (2.2, | 3.0) |
| Māori is used regularly | 11,000 | 18.9 | (14.7, | 23.1) | 20.5 | (19.2, | 21.8) |

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

One in five Māori adults reported that Māori language was used regularly in the home in 2013, and for 3% te reo Māori was the main language.

## Access to marae

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Been to marae** | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| At some time | 58,000 | 96.0 | (94.2, | 97.8) | 96.0 | (95.5, | 96.6) |
| In previous 12 months(1) | 37,500 | 65.1 | (59.9, | 70.3) | 58.2 | (56.6, | 59.7) |
| Ancestral marae at some time(2) | 38,500 | 65.1 | (59.9, | 70.3) | 62.3 | (60.9, | 63.7) |
| Ancestral marae in previous 12 months(3) | 21,000 | 35.7 | (30.9, | 40.5) | 33.6 | (32.3, | 34.9) |
| Like to go to ancestral marae more often(2) | 25,000 | 56.0 | (50.2, | 61.9) | 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 the Counties Manukau District (96%) had been to a marae, with two-thirds (65%) having been in the last 12 months. Of those who had been to a marae, 65% had been to at least one of their ancestral marae, with 36% having been in the last 12 months, and over half (56%) 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, Counties Manukau DHB, 2013

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| 7,000 | 11.9 | (8.6, | 15.3) | 10.9 | (10.0, | 11.7) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.

In 2013, an estimated 7,000 Māori adults (12%) in the Counties Manukau District 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 Counties Manukau DHB, 2006 and 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| 2006 | 12,852 | 34.2 | (33.8, | 34.7) | 117,669 | 52.9 | (52.7, | 53.1) | **0.65** | **(0.64,** | **0.66)** | -18.7 |
| 2013 | 16,551 | 43.1 | (42.6, | 43.6) | 143,226 | 58.4 | (58.2, | 58.6) | **0.74** | **(0.73,** | **0.75)** | -15.4 |

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 34% to 43% between 2006 and 2013. The gap between Māori and non-Māori closed by three percentage points, but in 2013 Māori remained less likely than non-Māori to have this level of qualification.

## Work

Table 12: Labour force status, 15 years and over, Counties Manukau 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 | 20,271 | 49.5 | (49.1, | 50.0) | 132,294 | 53.4 | (53.2, | 53.6) | **0.93** | **(0.92,** | **0.94)** | | -3.9 | |
| Employed part-time | 4,362 | 10.0 | (9.7, | 10.3) | 34,086 | 13.7 | (13.6, | 13.9) | **0.73** | **(0.71,** | **0.75)** | | -3.7 | |
| Unemployed | 3,561 | 8.3 | (8.1, | 8.6) | 9,777 | 4.7 | (4.6, | 4.8) | **1.79** | **(1.72,** | **1.85)** | | 3.7 | |
| Not in the labour force | 13,680 | 32.1 | (31.7, | 32.5) | 84,669 | 28.2 | (28.0, | 28.4) | **1.14** | **(1.12,** | **1.15)** | | 3.9 | |
| **2013** | | | | | | | | | | | | | | |
| Employed full-time | 18,105 | 43.2 | (42.8, | 43.7) | 138,864 | 50.4 | (50.3, | 50.6) | **0.86** | **(0.85,** | **0.87)** | | -7.2 | |
| Employed part-time | 4,380 | 9.7 | (9.4, | 9.9) | 35,031 | 12.5 | (12.4, | 12.6) | **0.77** | **(0.75,** | **0.80)** | | -2.8 | |
| Unemployed | 5,466 | 12.9 | (12.6, | 13.2) | 15,822 | 6.8 | (6.7, | 6.9) | **1.90** | **(1.84,** | **1.96)** | | 6.1 | |
| Not in the labour force | 15,582 | 34.2 | (33.8, | 34.6) | 100,284 | 30.2 | (30.1, | 30.4) | **1.13** | **(1.12,** | **1.15)** | | 4.0 | |

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 a decrease in the number and proportion of Māori adults employed full-time, or part-time, and a corresponding increase in the unemployment rate (from 8% to 13%). There was also an increase in the Māori population who were not in the labour force.

The absolute gaps between Māori and non-Māori full-time employment and unemployment rates increased between 2006 and 2013. In 2013, Māori were 90% more likely than non-Māori to be unemployed, with an absolute gap of 6%.

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ANZSIC Industry** | **Counties Manukau DHB** | | | | | | **New Zealand** | |
| **Māori** | | | **Non-Māori** | | |
| Number | % | Rank | Number | % | Rank | % | Rank |
| **Females** | | | | | | | | |
| Education and Training | 1,512 | 14.5 | 1 | 9,663 | 12.5 | 2 | 12.9 | 2 |
| Health Care and Social Assistance | 1,491 | 14.3 | 2 | 11,646 | 15.1 | 1 | 17.1 | 1 |
| Retail Trade | 978 | 9.4 | 3 | 8,856 | 11.5 | 3 | 11.6 | 3 |
| Manufacturing | 969 | 9.3 | 4 | 7,362 | 9.6 | 4 | 6.0 | 6 |
| Transport, Postal and Warehousing | 891 | 8.6 | 5 | 3,516 | 4.6 | 9 | 2.5 | 14 |
| **Males** | | | | | | | | |
| Construction | 1,818 | 17.9 | 1 | 10,200 | 11.6 | 2 | 13.2 | 2 |
| Manufacturing | 1,770 | 17.4 | 2 | 15,924 | 18.2 | 1 | 13.4 | 1 |
| Transport, Postal and Warehousing | 1,464 | 14.4 | 3 | 7,563 | 8.6 | 5 | 5.9 | 7 |
| Wholesale Trade | 819 | 8.1 | 4 | 8,445 | 9.6 | 3 | 6.2 | 6 |
| Retail Trade | 639 | 6.3 | 5 | 7,845 | 8.9 | 4 | 8.3 | 5 |

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

Education and training, and health care and social assistance were the leading industries employing Māori women in the Counties Manukau area in 2013. For Māori men, leading industries were construction, manufacturing, and transport, postal and warehousing. The next most common industries were wholesale trade and retail trade.

Table 14: Leading occupations of employed Māori, Counties Manukau DHB, 2013

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ANZSCO Occupation** | **Counties Manukau DHB** | | | | | | **New Zealand** | |
| **Māori** | | | **Non-Māori** | | |
| Number | % | Rank | Number | % | Rank | % | Rank |
| **Females** | | | | | | | | |
| Clerical and Administrative Workers | 2,247 | 21.7 | 1 | 16,695 | 21.8 | 2 | 19.5 | 2 |
| Professionals | 2,082 | 20.1 | 2 | 18,765 | 24.5 | 1 | 26.7 | 1 |
| Community and Personal Service Workers | 1,506 | 14.5 | 3 | 9,075 | 11.8 | 5 | 12.9 | 4 |
| Sales Workers | 1,269 | 12.3 | 4 | 10,233 | 13.3 | 4 | 11.7 | 5 |
| Managers | 1,263 | 12.2 | 5 | 10,380 | 13.5 | 3 | 14.4 | 3 |
| Labourers | 1,116 | 10.8 | 6 | 6,105 | 8.0 | 6 | 8.3 | 6 |
| Machinery Operators and Drivers | 450 | 4.3 | 7 | 1,857 | 2.4 | 8 | 1.5 | 8 |
| Technicians and Trades Workers | 426 | 4.1 | 8 | 3,600 | 4.7 | 7 | 5.0 | 7 |
| **Males** | | | | | | | | |
| Machinery Operators and Drivers | 2,517 | 24.6 | 1 | 10,704 | 12.3 | 4 | 9.1 | 5 |
| Labourers | 1,878 | 18.3 | 2 | 9,807 | 11.3 | 5 | 13.6 | 4 |
| Technicians and Trades Workers | 1,746 | 17.1 | 3 | 17,403 | 20.0 | 2 | 18.5 | 3 |
| Managers | 1,263 | 12.3 | 4 | 18,234 | 21.0 | 1 | 22.7 | 1 |
| Professionals | 891 | 8.7 | 5 | 13,437 | 15.5 | 3 | 18.6 | 2 |
| Community and Personal Service Workers | 714 | 7.0 | 6 | 4,257 | 4.9 | 8 | 5.4 | 7 |
| Clerical and Administrative Workers | 651 | 6.4 | 7 | 5,811 | 6.7 | 7 | 5.1 | 8 |
| Sales Workers | 579 | 5.7 | 8 | 7,161 | 8.2 | 6 | 7.1 | 6 |

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

Among employed Māori women, the leading occupational groupings were clerical and administrative workers (22%), professionals (20%), and community and personal service workers (15%). The next most common occupations were sales workers, managers, and labourers.

Māori men were most likely to be employed as machinery operators and drivers (25%), labourers (18%), technicians and trade workers (17%), and managers (12%).

Table 15: Unpaid work, 15 years and over, Counties Manukau 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 | 34,893 | 87.3 | (86.9, | 87.6) | 233,298 | | 86.0 | | (85.9, | 86.2) | **1.01** | **(1.01,** | **1.02)** | 1.3 |
| Looking after disabled/ill household member | 5,523 | 13.6 | (13.3, | 14.0) | 20,910 | | 7.6 | | (7.5, | 7.7) | **1.80** | **(1.74,** | **1.85)** | 6.0 | |
| Looking after disabled/ill non-household member | 4,711 | 11.3 | (10.9, | 11.6) | 18,357 | | 6.0 | | (5.9, | 6.1) | **1.86** | **(1.80,** | **1.92)** | 5.2 | |

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

Eighty-seven percent of Māori adults worked without pay in 2013. Māori were around four-fifths more likely than non-Māori to look after someone who was disabled or ill without pay, within the home and outside of the home.

## 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, Counties Manukau DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Actions taken a lot to keep costs down** | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Put up with feeling the cold | 10,000 | 16.8 | (13.5, | 20.2) | 11.0 | (10.2, | 11.8) |
| Go without fresh fruit and vegetables | 3,000\* | 5.0\* | (2.9, | 7.1) | 5.4 | (4.8, | 6.0) |
| Postpone or put off visits to the doctor | 5,000 | 8.7 | (6.2, | 11.2) | 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%.

In 2013, an estimated 10,000 Māori adults (17%) reported putting up with feeling cold a lot to keep costs down during the previous 12 months, 3,000 (5%) had gone without fresh fruit and vegetables, and 5,000 (9%) had 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, Counties Manukau 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 | 8,868 | 27.2 | (26.7, | 27.7) | 9,621 | 11.0 | (10.8, | 11.2) | **2.48** | **(2.41,** | **2.54)** | 16.2 |
| 2013 | 10,341 | 32.4 | (31.9, | 32.9) | 10,419 | 11.5 | (11.3, | 11.7) | **2.82** | **(2.75,** | **2.89)** | 20.9 |

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, with the proportion increasing from 27% to 32%. Children in Māori families were 2.8 times as likely as children in non-Māori families to be in this situation.

Table 18: Children and adults living in households with low incomes, Counties Manukau 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 | 12,738 | 51.4 | (50.8, | 52.0) | 27,492 | 36.0 | (35.7, | 36.3) | **1.43** | **(1.41,** | **1.45)** | 15.4 |
| Adults 18 years & over | 18,156 | 42.7 | (42.2, | 43.2) | 56,946 | 29.6 | (29.3, | 29.8) | **1.44** | **(1.42,** | **1.46)** | 13.1 |

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.

In 2013, half of the children in Māori households (over 12,700) were in households with low equivalised household incomes, 43% higher than the proportion of other children. Two in five adults in Māori households (over 18,100) lived in low income households, 44% higher than the proportion of other adults.

Table 19: Households with no access to a motor vehicle, Counties Manukau 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 | 2,094 | 9.4 | (9.0, | 9.8) | 5,652 | 5.7 | (5.6, | 5.8) | **1.65** | **(1.58,** | **1.73)** | 3.7 |
| 2013 | 2,712 | 11.6 | (11.2, | 12.1) | 5,394 | 5.0 | (4.9, | 5.2) | **2.32** | **(2.22,** | **2.43)** | 6.6 |
| **People (% age-standardised)** | | | | | | | | | | | | |
| 2006 | 6,741 | 7.9 | (7.7, | 8.1) | 11,271 | 3.0 | (3.0, | 3.1) | **2.60** | **(2.52,** | **2.68)** | 4.9 |
| 2013 | 8,961 | 10.2 | (10.0, | 10.4) | 11,235 | 2.9 | (2.8, | 2.9) | **3.57** | **(3.47,** | **3.68)** | 7.4 |

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, 12% of Māori households had no access to a motor vehicle, over twice the proportion of non-Māori households. The proportion of Māori households without a vehicle increased between 2006 and 2013. Residents of Māori households were 3.6 times as likely as residents of non-Māori households to have no access to a motor vehicle.

Table 20: People in households with no access to telephone, mobile/cell phone, internet, or any telecommunications, Counties Manukau 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 | 12,684 | 13.7 | (13.5, | 13.9) | 46,968 | 12.3 | (12.2, | 12.4) | **1.11** | **(1.09,** | **1.14)** | 1.4 |
| No telephone | 24,585 | 28.7 | (28.4, | 29.0) | 34,665 | 11.9 | (11.7, | 12.0) | **2.41** | **(2.38,** | **2.45)** | 16.8 |
| No internet | 29,763 | 33.5 | (33.2, | 33.8) | 61,023 | 17.1 | (17.0, | 17.2) | **1.96** | **(1.94,** | **1.98)** | 16.4 |
| No tele-communications | 3,333 | 3.8 | (3.7, | 3.9) | 4,269 | 1.4 | (1.3, | 1.4) | **2.74** | **(2.62,** | **2.88)** | 2.4 |

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, 34% of people in Māori households had no access to the internet, 29% did not have a telephone, 14% had no mobile phone, and 4% had no access to any telecommunications in the home. The largest absolute gaps between Counties Manukau Māori and non-Māori households were in access to the internet (a difference of 17 percentage points) and telephone (17 percentage points).

## Housing

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Housing problem (a big problem)** | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Too small | 4,500\* | 7.8\* | (5.5, | 10.0) | 5.3 | (4.7, | 5.9) |
| Damp | 9,000 | 15.2 | (12.4, | 18.1) | 11.3 | (10.5, | 12.2) |
| Hard to keep warm | 13,000 | 21.8 | (17.8, | 25.8) | 16.5 | (15.4, | 17.7) |
| Needs repairs | 11,000 | 18.6 | (15.3, | 22.0) | 13.8 | (12.7, | 14.9) |
| Pests in the house | 6,000\* | 10.1\* | (6.9, | 13.2) | 5.8 | (5.1, | 6.5) |

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

Housing problems reported as a big problem by Counties Manukau Māori adults in 2013 included difficulty keeping the house warm (22%), needing repairs (19%), and damp (15%). Eight percent felt their house was too small, and 10% 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, Counties Manukau DHB, 2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Measure | **Māori households** | | | | **Non-Māori households** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| Households | 13,095 | 56.9 | (56.2, | 57.5) | 31,854 | 30.0 | (29.8, | 30.3) | **1.89** | **(1.87,** | **1.92)** | 26.8 |
| Children under 18 years (% age-standardised) | 21,558 | 65.9 | (65.4, | 66.5) | 39,342 | 42.9 | (42.6, | 43.2) | **1.54** | **(1.52,** | **1.55)** | 23.0 |
| Adults 18 years and over (% age-standardised) | 29,805 | 54.9 | (54.5, | 55.3) | 74,076 | 34.4 | (34.2, | 34.6) | **1.60** | **(1.58,** | **1.61)** | 20.5 |

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, 13,095 Māori households in the Counties Manukau District were rented, making up 57% of all Māori households, compared to 30% of non-Māori households.

Among children living in a Māori household, 66% (21,558 children) were living in rented homes, compared to 43% (39,342 children) in non-Māori households.

Fifty-five percent of adults living in Māori households were living in rented accommodation (29,805 adults), compared to 34% of adults living in non-Māori households (74,076 adults).

### Household crowding

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Measure | **Māori households** | | | | **Non-Māori households** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| Households | 4,719 | 20.2 | (19.7, | 20.8) | 10,632 | 9.9 | (9.7, | 10.1) | **2.05** | **(1.98,** | **2.11)** | 10.3 |
| People (% age standardised) | 28,788 | 33.3 | (33.0, | 33.6) | 65,604 | 22.6 | (22.4, | 22.7) | **1.47** | **(1.46,** | **1.49)** | 10.7 |

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 twice as likely as non-Māori households to be classified as crowded using the Canadian National Occupancy Standard, with 4,719 homes needing at least one additional bedroom, affecting 28,788 people. Residents of Māori households were 47% more likely than others to be living in crowded conditions.

### Fuel poverty

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

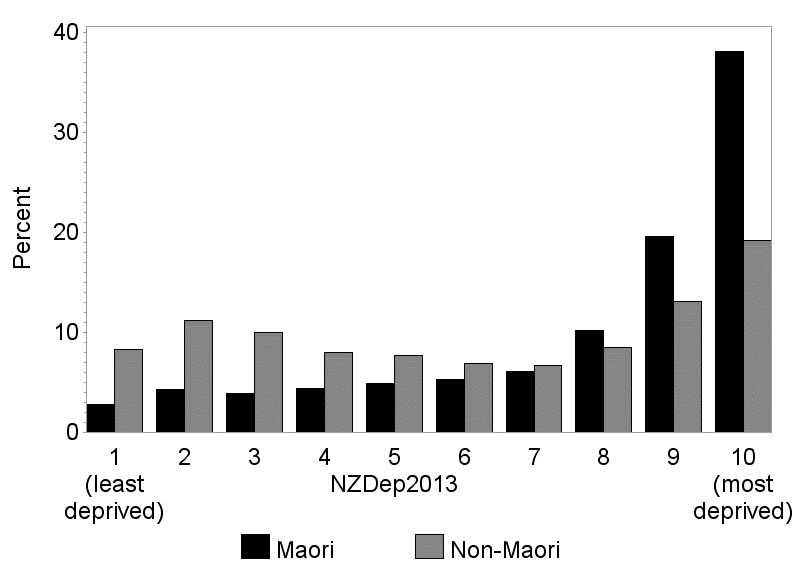
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Measure | **Māori households** | | | | **Non-Māori households** | | | | Māori/non-Māori  ratio (95% CI) | | | Difference in percentage |
| Number | % | (95% CI) | | Number | % | (95% CI) | |
| Households | 2,037 | 8.9 | (8.5, | 9.2) | 6,318 | 6.0 | (5.8, | 6.1) | **1.49** | **(1.42,** | **1.56)** | 2.9 |
| People (% age standardised) | 8,121 | 9.4 | (9.2, | 9.6) | 24,942 | 8.3 | (8.2, | 8.4) | **1.13** | **(1.11,** | **1.16)** | 1.1 |

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, 9% of Māori households (2,037 homes with 8,121 residents) had no heating, compared to 6% of non-Māori households (6,318 homes with 24,942 residents without heating).

## Area deprivation

Figure 1: Distribution by NZDep 2013 decile, Counties Manukau DHB, 2013



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

Counties Manukau DHB has a more deprived small area profile than the national population, but Māori are much more likely than non-Māori to live in the most deprived neighbourhoods. In 2013, 58% of Māori lived in the two most deprived decile areas (Dep 9 and 10), compared to 32% of non-Māori (accompanying Excel table). Conversely, 7% of Māori lived in the two least deprived deciles (Dep 1 and 2) compared to 20% of non-Māori.

# 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, Counties Manukau 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 | 173 | 7.2 | (6.7, | 7.6) | 356 | 5.7 | (5.5, | 6.0) | **1.25** | **(1.15,** | **1.35)** | 1.4 |
| High birth-weight | 54 | 2.2 | (2.0, | 2.5) | 193 | 3.1 | (2.9, | 3.3) | **0.72** | **(0.63,** | **0.83)** | -0.9 |
| Preterm | 215 | 8.9 | (8.4, | 9.4) | 450 | 7.2 | (7.0, | 7.5) | **1.23** | **(1.14,** | **1.32)** | 1.6 |

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

During 2009 to 2013 there were 2,422 Māori infants born per year on average, 28% of all live births in the Counties Manukau DHB (8,631 per year). On average, 173 Māori babies per year were born with low birth-weight, at a rate of 7%, 25% higher than non-Māori babies; 54 per year (2%) were born with high birth-weight, 28% lower than non-Māori; and 215 per year (9%) were born preterm, a rate 23% higher than non-Māori.

## Well child/Tamariki ora indicators

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

|  |  |  |  |
| --- | --- | --- | --- |
| Indicator | Period | **Māori** | |
| Count | % |
| 1. Babies enrolled with a Primary Health Organisation (PHO) by three months old | 20 Aug to 19 Nov 2013 | 207 | 56 |
| 11. Babies exclusively or fully breastfed at 2 weeks | January to June 2013 | 452 | 75 |
| 12. Babies exclusively or fully breastfed at 6 weeks | 470 | 76 |
| 19. Mothers smoke-free two weeks postnatal | 391 | 65 |
| 5. Children under 5 years enrolled with oral health services (PHO enrolled children) | 2012 | 7,461 | 59 |
| 7. Children starting school who have participated in ECE | 2013 | 1,711 | 88 |
| 15. Children with a healthy weight at 4 years, DHB of service | July to Dec 2013 | 490 | 71 |

Source: Well Child/Tamariki Ora 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 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, 56% of Māori babies were enrolled with a PHO by three months of age. In the first half of 2013, 75% of Māori babies were breastfed at two weeks of age and 76% at six weeks. Sixty-five percent of Māori mothers were smoke-free two weeks after giving birth.

Among pre-school children enrolled with a PHO 59% of Māori were enrolled with oral health services in 2012. Most (88%) Māori children who started school in 2013 had participated in early childhood education. Almost three-quarters with a BMI recorded at their B4 School Check had a healthy weight.

Table 27: Children fully immunised by the milestone age, Counties Manukau 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 | 1,335 | 63% | 4,954 | 82% | 0.77 | -19% |
| 8 months | 1,817 | 87% | 5,659 | 95% | 0.92 | -7% |
| 12 months | 1,970 | 92% | 5,841 | 96% | 0.96 | -4% |
| 18 months | 1,701 | 73% | 5,587 | 89% | 0.82 | -16% |
| 24 months | 2,254 | 90% | 6,115 | 96% | 0.94 | -5% |
| 5 years | 1,693 | 68% | 4,892 | 74% | 0.91 | -6% |

Source: National Immunisation Register

In the 12 months up to 31 December 2014, 63% of infants aged six months were fully immunised, compared to 82% of non-Māori infants. However, 87% of Māori children aged eight months and 90% of those aged 24 months had completed their appropriate immunisations. At five years of age 68% of Māori children were fully immunised.

## Oral health

Table 28: Oral health status of children aged 5 or in Year 8 at school, Counties Manukau 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 | 1,521 | 61 | (58, | 63) | 2.7 | 5,026 | 46 | (44, | 47) | 2.1 | **1.33** | **(1.27,** | **1.40)** | 15 |
| Year 8 | 1,287 | 60 | (57, | 63) | 1.6 | 4,830 | 48 | (47, | 49) | 1.2 | **1.25** | **(1.19,** | **1.32)** | 12 |

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.

Sixty-one percent of Māori children aged five years in 2012 had caries, 33% higher than the proportion of non-Māori children. The mean number of decayed, missing or filled teeth was 2.7 for Māori compared to 2.1 for non-Māori. Of those in Year eight at school (aged around 12 years) 60% of Māori and 48% of non-Māori children had caries. The mean number of decayed, missing or filled teeth was 1.6 for Māori and 1.2 for non-Māori.

Table 29: Hospitalisations for tooth and gum disease, children aged 0–14 years, Counties Manukau 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 | 97 | 682.6 | (608.5, | 765.8) | 282 | 650.9 | (608.5, | 696.3) | 1.05 | (0.92, | 1.20) | 31.7 |
| Male | 106 | 698.1 | (625.3, | 779.4) | 325 | 707.9 | (664.8, | 753.8) | 0.99 | (0.87, | 1.12) | -9.8 |
| Total | 203 | 690.4 | (637.5, | 747.5) | 607 | 679.4 | (648.9, | 711.4) | 1.02 | (0.93, | 1.11) | 10.9 |

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

There were 203 hospital admissions per year on average for tooth and gum disease among Māori children, at a rate of 690 per 100,000, similar to the non-Māori rate.

## Middle ear disease

Table 30: Hospitalisations for grommet insertions, children aged 0–14 years, Counties Manukau 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 | 73 | 517.7 | (453.5, | 591.1) | 170 | 391.2 | (358.7, | 426.7) | **1.32** | **(1.13,** | **1.55)** | 126.5 |
| Male | 99 | 645.4 | (575.8, | 723.5) | 303 | 656.7 | (615.4, | 700.8) | 0.98 | (0.86, | 1.12) | -11.3 |
| Total | 172 | 581.6 | (533.4, | 634.2) | 473 | 524.0 | (497.4, | 552.0) | **1.11** | **(1.00,** | **1.23)** | 57.6 |

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

On average, 172 Māori children per year were admitted for insertion of grommets for otitis media. Māori girls had a rate 32% higher than non-Māori girls, or 127 more admissions per 100,000.

## Healthy skin

Table 31: Hospitalisations for serious skin infections, children aged 0–14 years, Counties Manukau 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 | 97 | 673.7 | (600.5, | 755.8) | 232 | 528.1 | (490.3, | 568.9) | **1.28** | **(1.11,** | **1.46)** | 145.6 |
| Male | 101 | 663.6 | (592.8, | 742.8) | 262 | 564.0 | (526.0, | 604.9) | **1.18** | **(1.03,** | **1.34)** | 99.6 |
| Total | 199 | 668.6 | (616.9, | 724.7) | 494 | 546.1 | (519.0, | 574.6) | **1.22** | **(1.11,** | **1.35)** | 122.6 |

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

On average there were 199 admissions per year for serious skin infections among Māori children. The rate was 22% higher than for non-Māori children, or 123 more admissions per 100,000 children per year.

## Acute rheumatic fever

Table 32: Individuals admitted to hospital for acute rheumatic fever, ages 0–14 and 15–24 years, Counties Manukau 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) | | |
| **0–14 years** | | | | | | | | | | | | |
| Female | 6 | 48.0 | (30.6, | 75.2) | 14 | 32.2 | (23.9, | 43.4) | 1.49 | (0.87, | 2.56) | 15.8 |
| Male | 10 | 69.1 | (48.0, | 99.4) | 21 | 45.1 | (35.3, | 57.6) | 1.53 | (0.99, | 2.38) | 24.0 |
| Total | 16 | 58.5 | (44.1, | 77.7) | 36 | 38.6 | (32.0, | 46.7) | **1.51** | **(1.08,** | **2.13)** | 19.9 |
| **15–24 years** | | | | | | | | | | | | |
| Female | 4 | 56.2 | (32.6, | 96.7) | 6 | 19.0 | (11.8, | 30.6) | **2.96** | **(1.43,** | **6.09)** | 37.2 |
| Male | 2 | 27.6 | (12.4, | 61.5) | 6 | 20.5 | (13.1, | 32.1) | 1.35 | (0.54, | 3.38) | 7.1 |
| Total | 6 | 41.9 | (26.7, | 65.7) | 12 | 19.7 | (14.2, | 27.4) | **2.12** | **(1.22,** | **3.70)** | 22.1 |

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

Among Counties Manukau Māori children aged 14 years and under, on average 16 per year were hospitalised at least once for acute rheumatic fever during 2011 to 2013, at a rate 51% higher than non-Māori, or 20 more children per 100,000. Among Māori aged 15 to 24 years, an average of six per year were admitted, at a rate twice that of non-Māori, or 22 more young people per 100,000.

## 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, Counties Manukau DHB, 2011–2013

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | | **Non-Māori** | | | | Māori/non-Māori  ratio (95% CI) | | | Rate differ-ence |
| Ave. no. per year | Rate per 100,000 (95% CI) | | | Ave. no. per year | Rate per 100,000 (95% CI) | | |
| Female | 738 | 5,036.1 | (4,830.2, | 5,250.7) | 2,096 | 4,811.8 | (4,694.3, | 4,932.3) | 1.05 | (1.00, | 1.10) | 224.2 |
| Male | 934 | 5,957.6 | (5,740.6, | 6,182.8) | 2,573 | 5,579.4 | (5,456.3, | 5,705.3) | **1.07** | **(1.02.** | **1.12)** | 378.1 |
| Total | 1,672 | 5,496.8 | (5,346.4, | 5,651.5) | 4,669 | 5,195.6 | (5,110.2, | 52,82.4) | **1.06** | **(1.02.** | **1.09)** | 301.2 |

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

On average, 1,672 hospitalisations of Māori children per year were potentially avoidable, at a rate 6% higher than the non-Māori rate, or 301 more admissions per 100,000.

Table 34: Ambulatory care sensitive hospitalisations for children aged 1 month to 14 years, Counties Manukau 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 | 459 | 3,186.3 | (3,021.9, | 3,359.5) | 1,472 | 3,384.0 | (3,285.7, | 3,485.4) | 0.94 | (0.89, | 1.00) | -197.8 |
| Male | 560 | 3,635.2 | (3,465.0, | 3,813.7) | 1,641 | 3,563.0 | (3,464.8, | 3,663.9) | 1.02 | (0.97, | 1.08) | 72.2 |
| Total | 1,019 | 3,410.7 | (3,291.5, | 3,534.2) | 3,113 | 3,473.5 | (3,403.7, | 3,544.7) | 0.98 | (0.94, | 1.02) | -62.8 |

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

On average there were 1,019 admissions per year for ambulatory care sensitive conditions among Māori children, at a rate of 3,410 per 100,000, similar to the rate for non-Māori children.

# Mauri ora: Rangatahi

− Young adults

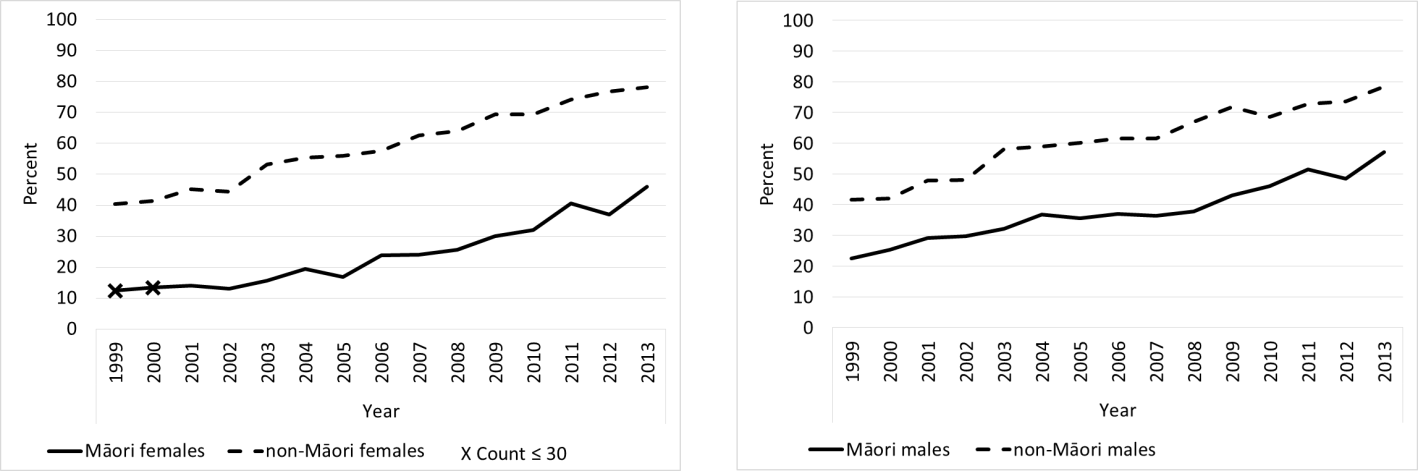
T

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](https://webmail.staff.otago.ac.nz/owa/redir.aspx?SURL=ogMldlHngmTdYeQxCTREMm7H1LN5LgAOdELZ0JAOV-HEH2Ofo1nSCGgAdAB0AHAAOgAvAC8AdwB3AHcALgBvAHQAYQBnAG8ALgBhAGMALgBuAHoALwB3AGUAbABsAGkAbgBnAHQAbwBuAC8AZABlAHAAYQByAHQAbQBlAG4AdABzAC8AcAB1AGIAbABpAGMAaABlAGEAbAB0AGgALwByAGUAcwBlAGEAcgBjAGgALwBlAHIAdQBwAG8AbQBhAHIAZQAvAHIAZQBzAGUAYQByAGMAaAAvAG8AdABhAGcAbwAwADEAOQA0ADkANAAuAGgAdABtAGwAIwBwAHUAYgBsAGkAYwBhAHQAaQBvAG4A&URL=http%3a%2f%2fwww.otago.ac.nz%2fwellington%2fdepartments%2fpublichealth%2fresearch%2ferupomare%2fresearch%2fotago019494.html%23publication)).

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://webmail.staff.otago.ac.nz/owa/redir.aspx?SURL=vKqdLaY3KS4X5hdTOFEU2OkK4NbdVrSW-dy0DceojODEH2Ofo1nSCGgAdAB0AHAAcwA6AC8ALwBjAGQAbgAuAGEAdQBjAGsAbABhAG4AZAAuAGEAYwAuAG4AegAvAGEAcwBzAGUAdABzAC8AZgBtAGgAcwAvAGYAYQBjAHUAbAB0AHkALwBhAGgAcgBnAC8AZABvAGMAcwAvAHkAbwB1AHQAaAAxADIALQBtAGEAbwByAGkALQByAGUAcABvAHIAdAAuAHAAZABmAA..&URL=https%3a%2f%2fcdn.auckland.ac.nz%2fassets%2ffmhs%2ffaculty%2fahrg%2fdocs%2fyouth12-maori-report.pdf). Other data related to youth can be found in the CYES reports on child and youth health. The [Child and Youth Health Compass](https://webmail.staff.otago.ac.nz/owa/redir.aspx?SURL=OeAgh67iivQZU6drTAlUqf0Q1ubxnUfj7d8UiBeoB2oegmWfo1nSCGgAdAB0AHAAOgAvAC8AYwBvAG0AcABhAHMAcwAuAGgAaQBpAHIAYwAuAG8AcgBnAC4AbgB6AC8AcwBlAGMAdABpAG8AbgAvADMAMQAwADEANQAvADkALQB5AG8AdQB0AGgALQBoAGUAYQBsAHQAaAAtAHMAZQByAHYAaQBjAGUAcwAvAA..&URL=http%3a%2f%2fcompass.hiirc.org.nz%2fsection%2f31015%2f9-youth-health-services%2f) 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, Counties Manukau DHB, 1999–2013

Source: Action on Smoking and Health Year 10 Snapshot Survey, 2013

Over the last 15 years there has been a significant increase in the proportion 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, Counties Manukau DHB, 2013

Source: 2013 Census, Statistics New Zealand  
Note: Regular smokers smoke one or more cigarettes per day.

Smoking rates have decreased significantly among young Māori and non-Māori adults in the Counties Manukau area since 2006. However, the high smoking rates among those aged 18–24 years suggests that a sizeable group starts smoking in this age group. At ages 20–24 years, 43% of Māori were smoking regularly in 2013. Non-Māori in each age group were at least half as likely as Māori to smoke regularly.

## Immunisations

Table 35: Human papilloma virus immunisations (HPV) by birth cohorts, Counties Manukau 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 | 624 | 68.6% | 1,908 | 60.4% | 1.14 | 8.2% |
| 1999 | 15 | 2012 | 572 | 65.0% | 1,950 | 63.9% | 1.02 | 1.1% |
| 1998 | 16 | 2011 | 564 | 68.0% | 1,829 | 60.0% | 1.13 | 8.0% |
| 1997 | 17 | 2010 | 610 | 71.8% | 1,914 | 63.2% | 1.14 | 8.6% |

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

By September 2014, 69% of Māori girls aged 14 years in 2014 had received all three doses of the human papilloma virus vaccine, compared to 60% of non-Māori, and 57% of all New Zealand girls of the same age. Seventy-two percent of Māori women aged 17 in 2014 were fully immunised, compared to 63% of non-Māori in the DHB and 55% nationally.

## Mental health

Table 36: Hospitalisations for injury from intentional self-harm, 15–24 and 25–44 years, Counties Manukau 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 | 62 | 807.1 | (699.3, | 931.6) | 146 | 499.1 | (454.5, | 548.2) | **1.62** | **(1.36,** | **1.92)** | 308.0 |
| Male | 22 | 312.7 | (245.6, | 398.1) | 55 | 175.4 | (150.5, | 204.5) | **1.78** | **(1.34,** | **2.37)** | 137.2 |
| Total | 84 | 559.9 | (494.9, | 633.4) | 201 | 337.3 | (311.3, | 365.4) | **1.66** | **(1.43,** | **1.92)** | 222.6 |
| **25–44 years** | | | | | | | | | | | | |
| Female | 40 | 373.4 | (312.3, | 446.4) | 98 | 168.4 | (150.1, | 188.9) | **2.22** | **(1.79,** | **2.74)** | 205.0 |
| Male | 22 | 263.0 | (206.4, | 335.2) | 66 | 125.6 | (109.2, | 144.6) | **2.09** | **(1.58,** | **2.77)** | 137.4 |
| Total | 62 | 318.2 | (275.2, | 367.9) | 164 | 147.0 | (134.5, | 160.7) | **2.16** | **(1.83,** | **2.57)** | 171.2 |

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

Māori aged 15–24 years were 66% more likely than non-Māori to be admitted to hospital for injury from intentional self-harm. On average there were 84 admissions per year among young Māori in the Counties Manukau area. Females had higher rates of admission than males.

Māori aged 25–44 years were twice as likely as non-Māori to be admitted. On average there were 62 admissions per year among Māori in this age group.

# 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 the Counties Manukau area can be found in the accompanying Excel© tables labelled ‘Death registrations’ and ‘Hospitalisations by principal diagnosis’. For example, the hospitalisations table shows disparities between Counties Manukau Māori and non-Māori in rates of admission for epilepsy, perforation of the tympanic membrane, atrial fibrillation and flutter, bronchiectasis, gallstones (cholelithiasis), acute pancreatitis, head injuries, burns, poisoning.

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, Counties Manukau DHB, 2013

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Health status** | **Counties Manukau DHB** | | | | **New Zealand** | | |
| Estimated number | % | (95% CI) | | % | (95% CI) | |
| Excellent | 14,500 | 24.0 | (18.8, | 29.3) | 18.1 | (16.8, | 19.3) |
| Very good | 19,000 | 31.2 | (26.4, | 36.0) | 37.0 | (35.5, | 38.5) |
| Good | 15,500 | 25.4 | (21.3, | 29.4) | 28.5 | (27.3, | 29.7) |
| Fair / poor | 11,500 | 19.4 | (15.9, | 22.9) | 16.4 | (15.3, | 17.5) |

Source: Te Kupenga 2013, Statistics New Zealand customised report.

Just over half of Counties Manukau Māori adults (55%) reported having excellent or very good health in 2013 and another quarter (25%) described their health as good. One in five (19%) reported having fair or poor health status.

## Smoking status

Table 38: Cigarette smoking status, 15 years and over, Counties Manukau 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 | 18,380 | 46.4 | (45.9, | 46.9) | 44,814 | 19.8 | (19.6, | 20.0) | **2.34** | **(2.31,** | **2.37)** | 26.6 |
| Ex-smoker | 6,514 | 16.6 | (16.2, | 16.9) | 42,147 | 14.2 | (14.0, | 14.3) | **1.17** | **(1.14,** | **1.20)** | 2.4 |
| Never smoked | 14,391 | 37.1 | (36.6, | 37.6) | 159,384 | 66.0 | (65.8, | 66.2) | **0.56** | **(0.55,** | **0.57)** | -28.9 |
| **2013** | | | | | | | | | | | | |
| Regular smoker | 14,748 | 36.6 | (36.2, | 37.1) | 35,604 | 14.0 | (13.8, | 14.1) | **2.62** | **(2.58,** | **2.66)** | 22.6 |
| Ex-smoker | 8,553 | 19.8 | (19.5, | 20.2) | 46,863 | 13.8 | (13.7, | 13.9) | **1.44** | **(1.41,** | **1.47)** | 6.0 |
| Never smoked | 17,712 | 43.6 | (43.1, | 44.1) | 193,470 | 72.2 | (72.1, | 72.4) | **0.60** | **(0.60,** | **0.61)** | -28.6 |

Source: 2006 and 2013 Censuses, 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 Māori adults who smoked cigarettes regularly decreased from 46% to 37%. The proportion who were ex-smokers increased by three percentage points and the proportion who had never smoked increased by seven percentage points. Nevertheless, in 2013, Māori were 2.6 times as likely as non-Māori to smoke regularly, or an absolute difference of 23 percentage points.

## Heart disease and stroke

Table 39: Hospitalisations for circulatory system diseases, 25 years and over, Counties Manukau 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 | 507 | 2,210.2 | (2,100.4, | 2,325.7) | 2,609 | 1,021.6 | (994.3, | 1,049.7) | **2.16** | **(2.04,** | **2.29)** | 1,188.5 |
| Male | 487 | 2,627.5 | (2,494.3, | 2,767.9) | 3,324 | 1,556.1 | (1,521.8, | 1,591.3) | **1.69** | **(1.60,** | **1.79)** | 1,071.4 |
| Total | 994 | 2,418.9 | (2,331.9, | 2,509.1) | 5,933 | 1,288.9 | (1,266.9, | 1,311.3) | **1.88** | **(1.80,** | **1.95)** | 1,130.0 |

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

On average 994 Counties Manukau Māori were admitted to hospital per year for diseases of the circulatory system (including heart disease and stroke), at a rate 88% higher than non-Māori, or 1,130 more admissions per 100,000.

Table 40: Ischaemic heart disease indicators, 25 years and over, Counties Manukau 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 | 86 | 358.7 | (317.2, | 405.7) | 514 | 169.8 | (160.2, | 180.1) | **2.11** | **(1.84,** | **2.42)** | 188.9 |
| Male | 97 | 501.4 | (446.6, | 562.8) | 1055 | 481.7 | (463.7, | 500.5) | 1.04 | (0.92, | 1.18) | 19.6 |
| Total | 183 | 430.0 | (395.1, | 468.1) | 1569 | 325.8 | (315.5, | 336.4) | **1.32** | **(1.21,** | **1.45)** | 104.3 |
| **Angiography procedures** | | | | | | | | | | | | |
| Female | 74 | 310.7 | (272.2, | 354.7) | 356 | 156.8 | (146.9, | 167.4) | **1.98** | **(1.71,** | **2.30)** | 153.9 |
| Male | 92 | 476.8 | (423.3, | 537.0) | 850 | 432.0 | (414.2, | 450.5) | 1.10 | (0.97, | 1.25) | 44.7 |
| Total | 166 | 393.7 | (360.2, | 430.4) | 1205 | 294.4 | (284.2, | 305.0) | **1.34** | **(1.22,** | **1.47)** | 99.3 |
| **Angioplasty procedures** | | | | | | | | | | | | |
| Female | 18 | 74.5 | (56.8, | 97.7) | 100 | 40.8 | (36.1, | 46.2) | **1.82** | **(1.35,** | **2.46)** | 33.7 |
| Male | 32 | 167.9 | (137.3, | 205.3) | 361 | 192.2 | (180.2, | 205.1) | 0.87 | (0.71, | 1.08) | -24.4 |
| Total | 50 | 121.2 | (103.0, | 142.6) | 461 | 116.5 | (110.0, | 123.4) | 1.04 | (0.88, | 1.24) | 4.6 |
| **Coronary Artery Bypass Graft (CABG)** | | | | | | | | | | | | |
| Female | 7 | 28.2 | (18.3, | 43.3) | 36 | 14.7 | (12.1, | 18.0) | **1.91** | **(1.19,** | **3.07)** | 13.4 |
| Male | 12 | 60.8 | (43.8, | 84.3) | 135 | 63.4 | (57.2, | 70.2) | 0.96 | (0.68, | 1.35) | -2.6 |
| Total | 19 | 44.5 | (34.2, | 57.8) | 171 | 39.1 | (35.7, | 42.8) | 1.14 | (0.86, | 1.50) | 5.4 |
| **Acute coronary syndrome admissions** | | | | | | | | | | | | |
| Female | 60 | 249.3 | (215.1, | 288.8) | 351 | 113.7 | (105.8, | 122.0) | **2.19** | **(1.86,** | **2.58)** | 135.6 |
| Male | 69 | 359.3 | (313.3, | 412.2) | 724 | 332.4 | (317.3, | 348.3) | 1.08 | (0.94, | 1.25) | 26.9 |
| Total | 129 | 304.3 | (275.1, | 336.6) | 1075 | 223.0 | (214.5, | 231.9) | 1.36 | (1.22, | 1.52) | 81.3 |

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

On average, 183 Māori per year were admitted to hospital for ischaemic heart disease, at a rate 32% higher than non-Māori. Of these, 129 were admitted with acute coronary syndrome, at a rate that was similar to non-Māori.

There were 166 angiography procedures conducted for Māori patients per year, at a rate 34% higher than non-Māori. On average, 32 Māori men and 18 Māori women per year had angioplasty procedures, with the rate for Māori women 82% higher than the non-Māori rate. Twelve Māori men and seven Māori women per year had a coronary artery bypass graft on average, with the rate for Māori women 91% higher than for non-Māori women.

Table 41: Hospitalisations for heart failure, stroke, and hypertensive disease, 25 years and over, Counties Manukau 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 | 87 | 361.8 | (320.1, | 409.0) | 325 | 91.9 | (84.9, | 99.6) | **3.94** | **(3.40,** | **4.56)** | 269.9 |
| Male | 96 | 511.6 | (455.1, | 575.2) | 365 | 130.4 | (121.8, | 139.7) | **3.92** | **(3.42,** | **4.49)** | 381.2 |
| Total | 183 | 436.7 | (401.0, | 475.6) | 690 | 111.2 | (105.6, | 117.1) | **3.93** | **(3.55,** | **4.34)** | 325.5 |
| **Stroke** | | | | | | | | | | | | |
| Female | 59 | 252.8 | (217.9, | 293.3) | 367 | 122.1 | (113.6, | 131.3) | **2.07** | **(1.76,** | **2.44)** | 130.7 |
| Male | 42 | 226.9 | (190.3, | 270.6) | 372 | 151.5 | (141.9, | 161.8) | **1.50** | **(1.24,** | **1.81)** | 75.4 |
| Total | 102 | 239.9 | (214.0, | 268.9) | 739 | 136.8 | (130.3, | 143.6) | **1.75** | **(1.55,** | **1.99)** | 103.1 |
| **Hypertensive disease** | | | | | | | | | | | | |
| Female | 15 | 68.1 | (50.6, | 91.6) | 71 | 31.3 | (26.6, | 36.8) | **2.18** | **(1.55,** | **3.06)** | 36.8 |
| Male | 10 | 56.1 | (38.7, | 81.3) | 49 | 29.7 | (24.7, | 35.6) | **1.89** | **(1.25,** | **2.86)** | 26.4 |
| Total | 25 | 62.1 | (49.1, | 78.4) | 120 | 30.5 | (27.0, | 34.4) | **2.04** | **(1.56,** | **2.65)** | 31.6 |

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

There were 183 admissions per year on average for Māori with heart failure, at nearly 4 times the rate for non-Māori, or 326 more admissions per 100,000. The rate was higher for males than for females.

On average, 102 Māori per year were admitted for stroke, at a rate 75% higher than for non-Māori, or 103 more admissions per 100,000.

Māori were admitted for hypertensive disease at twice the rate of non-Māori, or 32 more admissions per 100,000. On average there were 25 admissions per year among Māori.

Table 42: Hospitalisations for chronic rheumatic heart disease and heart valve replacements, 25 years and over, Counties Manukau 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 | 11 | 50.2 | (35.7, | 70.5) | 38 | 24.7 | (20.2, | 30.3) | **2.03** | **(1.37,** | **3.02)** | 25.5 |
| Male | 5 | 29.0 | (17.3, | 48.5) | 18 | 10.4 | (7.7, | 14.1) | **2.78** | **(1.52,** | **5.05)** | 18.5 |
| Total | 16 | 39.6 | (29.7, | 52.7) | 56 | 17.6 | (14.8, | 20.8) | **2.25** | **(1.61,** | **3.14)** | 22.0 |
| **Heart valve replacements** | | | | | | | | | | | | |
| Female | 9 | 40.6 | (27.9, | 59.1) | 35 | 17.0 | (13.6, | 21.3) | **2.39** | **(1.54,** | **3.69)** | 23.6 |
| Male | 5 | 26.2 | (15.4, | 44.5) | 44 | 19.9 | (16.3, | 24.2) | 1.32 | (0.75, | 2.32) | 6.3 |
| Total | 14 | 33.4 | (24.5, | 45.5) | 79 | 18.4 | (15.9, | 21.4) | **1.81** | **(1.29,** | **2.55)** | 15.0 |

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

On average, there were 16 hospital admissions per year for Māori with chronic rheumatic heart disease, at a rate 2.3 times that of non-Māori.

Heart valve replacements were conducted on 14 Māori per year on average at a rate 81% higher than for non-Māori.

Table 43: Early deaths from circulatory system disease, Counties Manukau 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 | 26 | 58.2 | (49.1, | 69.1) | 72 | 18.3 | (16.4, | 20.5) | **3.18** | **(2.59,** | **3.90)** | 39.9 |
| Male | 40 | 104.2 | (90.7, | 119.8) | 141 | 37.3 | (34.5, | 40.3) | **2.79** | **(2.38,** | **3.28)** | 66.9 |
| Total | 67 | 81.2 | (72.9, | 90.5) | 213 | 27.8 | (26.1, | 29.7) | **2.92** | **(2.58,** | **3.31)** | 53.4 |

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 67 Counties Manukau Māori per year died early from circulatory system disease, at a rate nearly 3 times the rate for non-Māori, or 53 more deaths per 100,000. Māori men had a higher mortality rate than Māori women.

## Diabetes

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indicator | **Māori** | | **Non-Māori** | | Māori/non-Māori ratio | Difference in percentage |
| Count | % (crude) | Count | % (crude) |
| Prevalence of diabetes (all ages) | 4,752 | 5.7 | 32,387 | 7.6 | 0.75 | -1.9 |
| People with diabetes regularly receiving metformin or insulin, 25+ | 2,439 | 51.3 | 18,121 | 56.0 | 0.92 | -4.6 |
| People with diabetes having regular Hb1Ac monitoring, 25+ | 4,164 | 87.6 | 29,096 | 88.7 | 0.99 | -1.1 |
| People with diabetes having regular screening for renal disease, 25+ | 3,580 | 75.3 | 24,757 | 76.4 | 0.99 | -1.1 |

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.

Approximately 4,750 Counties Manukau Māori were estimated to have diabetes in 2013, giving a crude prevalence of 6%. Half of Māori with diabetes (51%) were regularly receiving metformin or insulin in 2013. Eighty-eight percent were having regular monitoring of blood glucose levels and 76% were being screened for renal disease.

Table 45: Hospitalisations for lower limb amputations for people with concurrent diabetes, 15 years and over, Counties Manukau 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 | 8 | 25.3 | (17.1, | 37.5) | 15 | 4.6 | (3.3, | 6.3) | **5.50** | **(3.31,** | **9.13)** | 20.7 |
| Male | 14 | 48.4 | (35.6, | 65.9) | 35 | 11.7 | (9.4, | 14.5) | **4.15** | **(2.85,** | **6.03)** | 36.8 |
| Total | 22 | 36.9 | (28.9, | 47.0) | 50 | 8.1 | (6.8, | 9.7) | **4.53** | **(3.35,** | **6.12)** | 28.7 |

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

On average 22 Māori individuals per year with diabetes had lower limbs amputated, at a rate 4.5 times that of non-Māori.

## Cancer

Table 46: Most common cancer registrations for Māori by site, all ages, Counties Manukau 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 | 141 | 296.0 | (274.9 | 318.8) | 772 | 178.1 | (171.7 | 184.7) | **1.66** | **(1.53** | **1.81)** | 118.0 |
| Breast | 44 | 90.9 | (79.6, | 103.9) | 219 | 56.0 | (52.5, | 59.7) | **1.62** | **(1.40,** | **1.88)** | 34.9 |
| Lung | 26 | 54.3 | (45.7, | 64.4) | 67 | 12.3 | (10.9, | 13.9) | **4.41** | **(3.58,** | **5.43)** | 42.0 |
| Uterus | 9 | 19.8 | (14.9, | 26.4) | 56 | 13.9 | (12.3, | 15.8) | **1.42** | **(1.04,** | **1.95)** | 5.9 |
| Colorectal | 9 | 19.6 | (14.7, | 26.1) | 103 | 18.6 | (16.8, | 20.6) | 1.05 | (0.78, | 1.43) | 1.0 |
| **Male** | | | | | | | | | | | | |
| All cancers | 91 | 234.9 | (214.1, | 257.7) | 824 | 179.4 | (173.3, | 185.7) | **1.31** | **(1.19,** | **1.45)** | 55.5 |
| Lung | 20 | 50.9 | (41.8, | 61.8) | 81 | 15.2 | (13.7, | 16.9) | **3.34** | **(2.67,** | **4.16)** | 35.6 |
| Prostate | 14 | 34.6 | (27.3, | 43.9) | 235 | 46.5 | (43.8, | 49.4) | **0.74** | **(0.58,** | **0.95)** | -11.9 |
| Colorectal | 7 | 17.3 | (12.3, | 24.3) | 109 | 20.7 | (18.9, | 22.7) | 0.84 | (0.59, | 1.19) | -3.4 |
| Liver | 6 | 14.7 | (10.2, | 21.0) | 23 | 5.4 | (4.4, | 6.5) | **2.72** | **(1.81,** | **4.10)** | 9.3 |

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

There were 141 cancer registrations per year on average among Counties Manukau Māori females, at a rate two-thirds higher than for non-Māori. The most common cancers registered for Māori females were breast, lung, uterus, and colorectal cancers. Registration rates were higher for Māori than for non-Māori women for cancers of the lung (4.4 times as high), breast (62% higher), and uterus (42% higher).

Among Counties Manukau Māori males there were 91 cancer registrations per year on average, at a rate 31% higher than for non-Māori. Lung, prostate, colorectal, and liver cancer were the most common cancers registered for Māori males. Māori registration rates were higher than those of non-Māori for lung cancer (3.3 times as high) and liver cancer (2.7 times as high) but 26% lower for prostate cancer.

Table 47: Most common cancer deaths for Māori by site, all ages, Counties Manukau 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 cancer deaths | 53 | 117.8 | (104.3, | 133.0) | 296 | 53.4 | (50.2, | 56.7) | **2.21** | **(1.93,** | **2.53)** | 64.4 |
| Lung | 19 | 42.2 | (34.5, | 51.5) | 47 | 8.1 | (7.1, | 9.4) | **5.18** | **(4.05,** | **6.61)** | 34.0 |
| Breast | 8 | 17.9 | (13.1, | 24.4) | 52 | 11.4 | (10.0, | 13.1) | **1.56** | **(1.11,** | **2.20)** | 6.4 |
| Colorectal | 3 | 8.3 | (5.1, | 13.4) | 38 | 6.0 | (5.1, | 7.2) | 1.37 | (0.82, | 2.29) | 2.2 |
| Stomach | 2 | 5.1 | (2.8, | 9.4) | 10 | 1.8 | (1.3, | 2.5) | **2.82** | **(1.41,** | **5.61)** | 3.3 |
| **Male** | | | | | | | | | | | | |
| All cancer deaths | 48 | 131.8 | (115.7, | 150.1) | 326 | 63.1 | (59.8, | 66.7) | **2.09** | **(1.81,** | **2.40)** | 68.7 |
| Lung | 17 | 47.6 | (38.3, | 59.1) | 66 | 12.3 | (10.9, | 13.8) | **3.88** | **(3.04,** | **4.96)** | 35.3 |
| Liver | 5 | 13.4 | (9.1, | 19.7) | 12 | 2.6 | (2.0, | 3.4) | **5.17** | **(3.22,** | **8.29)** | 10.8 |
| Colorectal | 4 | 11.5 | (7.3, | 18.2) | 46 | 8.4 | (7.3, | 9.8) | 1.36 | (0.84, | 2.20) | 3.1 |
| Prostate | 3 | 8.5 | (5.1, | 14.1) | 36 | 5.2 | (4.4, | 6.1) | 1.64 | (0.96, | 2.79) | 3.3 |
| Stomach | 3 | 8.5 | (5.0, | 14.4) | 14 | 2.9 | (2.2, | 3.8) | **2.94** | **(1.62,** | **5.32)** | 5.6 |

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 33% of all deaths in 2007–2011, with a rate twice the rate for non-Māori. Lung cancer was the most common cause of cancer death (33% of all cancer deaths), followed by breast, colorectal, and stomach cancer. The lung cancer mortality rate was 5.2 times that of non-Māori females, stomach cancer 2.8 times the non-Māori rate and breast cancer mortality was 56% higher.

For Māori males, cancer deaths accounted for 27% of all deaths, with a rate twice that of non-Māori males. Lung cancer was the most common cause of cancer death for Māori males, at over a third of all cancer deaths. Liver, colorectal, prostate, and stomach cancers were the next most common. Lung cancer mortality was nearly 4 times as high for Māori as for non-Māori males, liver cancer 5 times as high, and stomach cancer mortality 3 times as high.

### Breast and cervical cancer screening

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Māori** | | | **Non-Māori** | | |
| Number screened | Eligible population | % screened | Number screened | Eligible population | % screened |
| 5,744 | 8,355 | 68.7% | 45,921 | 62,820 | 73.1% |

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, 69% of Māori women and 73% of non-Māori women in the Counties Manukau area had been screened.

Table 49: Cervical screening coverage, women aged 25–69 years, Counties Manukau 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 % |
| 17,696 | 14,217 | 80.3% | 10,972 | 62.0% | 111,640 | 97,121 | 87.0% | 81,498 | 73.0% |

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 87% of non-Māori women had had a cervical smear test during the five years prior to December 2014. The three year cervical screening coverage was 62% for Māori women and 73% 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, Counties Manukau 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 | 68 | 480.6 | (418.8, | 551.5) | 179 | 409.9 | (376.6, | 446.1) | 1.17 | (1.00, | 1.38) | 70.7 |
| Male | 117 | 761.0 | (685.2, | 845.2) | 226 | 489.6 | (454.1, | 527.9) | **1.55** | **(1.37,** | **1.77)** | 271.4 |
| Total | 185 | 620.8 | (571.1, | 674.9) | 405 | 449.7 | (425.1, | 475.8) | **1.38** | **(1.25,** | **1.53)** | 171.1 |
| **15–34 years** | | | | | | | | | | | | |
| Female | 72 | 532.6 | (465.8, | 608.9) | 112 | 192.5 | (173.0, | 214.3) | **2.77** | **(2.33,** | **3.28)** | 340.0 |
| Male | 30 | 297.7 | (241.4, | 367.1) | 58 | 100.6 | (86.7, | 116.8) | **2.96** | **(2.29,** | **3.83)** | 197.1 |
| Total | 102 | 415.1 | (370.3, | 465.3) | 169 | 146.6 | (134.4, | 159.9) | **2.83** | **(2.45,** | **3.27)** | 268.5 |
| **35–64 years** | | | | | | | | | | | | |
| Female | 63 | 496.5 | (429.8, | 573.6) | 145 | 172.4 | (156.2, | 190.3) | **2.88** | **(2.42,** | **3.43)** | 324.1 |
| Male | 22 | 213.2 | (166.5, | 272.9) | 65 | 81.3 | (70.0, | 94.4) | **2.62** | **(1.96,** | **3.50)** | 131.9 |
| Total | 85 | 354.8 | (313.1, | 402.2) | 210 | 126.8 | (116.8, | 137.7) | **2.80** | **(2.41,** | **3.25)** | 228.0 |
| **65 years and over** | | | | | | | | | | | | |
| Female | 4 | 234.7 | (135.9, | 405.4) | 50 | 180.0 | (151.4, | 214.0) | 1.30 | (0.73, | 2.31) | 54.7 |
| Male | 2 | 115.9 | (48.2, | 278.7) | 17 | 75.3 | (56.8, | 99.9) | 1.54 | (0.61, | 3.87) | 40.6 |
| Total | 6 | 175.3 | (109.9, | 279.6) | 67 | 127.7 | (110.1, | 148.0) | 1.37 | (0.84, | 2.24) | 47.6 |

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

There were 185 admissions for asthma per year among Māori children aged 0–14 years, at a rate 38% higher than that of non-Māori children, or 171 more admissions per 100,000. Among Māori adults aged 15–34 and 35–64 years, there were 102 and 85 admissions per year respectively, both at rates 2.8 times the rates of non-Māori. Older Māori aged 65 years and over were admitted at a rate 175 per 100,000 with 6 admissions per year.

Table 51: Hospitalisations for chronic obstructive pulmonary disease (COPD), 45 years and over, Counties Manukau 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 | 177 | 1,954.9 | (1,795.2, | 2,128.9) | 341 | | 308.6 | | (288.5, | 330.2) | **6.33** | | **(5.68,** | **7.06)** | 1,646.3 | |
| Male | 102 | 1,397.6 | (1,249.3, | 1,563*.5)* | 531 | | 524.0 | | (497.3, | 552.2) | **2.67** | | **(2.36,** | **3.02)** | 873.6 | |
| Total | 280 | 1,676.2 | (1,565.7, | 1,794.6) | 871 | | 416.3 | | (399.5, | 433.9) | **4.03** | | **(3.72,** | **4.36)** | 1,259.9 | |

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

There were 280 hospitalisations per year on average for Māori with COPD, at a rate 4 times that of non-Māori, or 1,260 more admissions per 100,000. Māori women had a higher rate of admission than Māori men, and a greater disparity with non-Māori women (over 6 times the rate, or 1,646 more admissions per 100,000).

Table 52: Early deaths from respiratory disease, Counties Manukau 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 | 11 | 24.3 | (18.6, | 31.7) | 22 | 6.0 | (4.8, | 7.4) | **4.06** | **(2.88,** | **5.71)** | 18.3 |
| Male | 8 | 20.5 | (15.0, | 28.0) | 27 | 7.0 | (5.8, | 8.5) | **2.91** | **(2.02,** | **4.20)** | 13.5 |
| Total | 19 | 22.4 | (18.3, | 27.4) | 49 | 6.5 | (5.6, | 7.5) | **3.44** | **(2.68,** | **4.41)** | 15.9 |

Source: Mortality data, Ministry of Health  
Note: “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, 19 Māori per year died early from respiratory disease, at a rate 3.4 times the non-Māori rate, or 16 more deaths per 100,000.

## Mental disorders

Table : Hospitalisations for mental disorders, all ages, Counties Manukau 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 | 217 | 497.0 | (459.8, | 537.3) | 680 | 243.8 | (232.0, | 256.2) | **2.04** | **(1.86,** | **2.24)** | 253.2 |
| Schizophrenia | 86 | 199.9 | (176.6, | 226.4) | 155 | 61.2 | (55.5, | 67.4) | **3.27** | **(2.79,** | **3.83)** | 138.8 |
| Mood (affective) | 48 | 107.9 | (91.4, | 127.4) | 187 | 59.0 | (53.8, | 64.9) | **1.83** | **(1.51,** | **2.21)** | 48.9 |
| —Bipolar | 32 | 69.3 | (56.6, | 85.0) | 86 | 27.5 | (24.0, | 31.4) | **2.52** | **(1.98,** | **3.22)** | 41.9 |
| —Depressive   episode | 12 | 28.7 | (20.7, | 39.9) | 71 | 22.8 | (19.5, | 26.7) | 1.26 | (0.87, | 1.81) | 5.9 |
| Substance use | 35 | 84.1 | (69.4, | 101.9) | 105 | 48.2 | (42.8, | 54.2) | **1.75** | **(1.39,** | **2.19)** | 36.0 |
| —Alcohol | 27 | 63.7 | (51.2, | 79.3) | 91 | 41.5 | (36.6, | 47.2) | **1.53** | **(1.19,** | **1.97)** | 22.2 |
| Anxiety,  stress-related | 26 | 56.5 | (45.0, | 70.8) | 119 | 44.8 | (39.8, | 50.4) | 1.26 | (0.98, | 1.63) | 11.7 |
| **Male** | | | | | | | | | | | | |
| All disorders | 270 | 781.6 | (728.6, | 838.5) | 692 | 278.0 | (265.2, | 291.6) | **2.81** | **(2.58,** | **3.06)** | 503.6 |
| Schizophrenia | 170 | 508.5 | (465.4, | 555.4) | 222 | 105.6 | (97.6, | 114.3) | **4.82** | **(4.28,** | **5.42)** | 402.9 |
| Mood (affective) | 34 | 93.1 | (76.3, | 113.6) | 118 | 41.0 | (36.5, | 46.1) | **2.27** | **(1.80,** | **2.86)** | 52.1 |
| —Bipolar | 18 | 48.7 | (37.0, | 64.1) | 49 | 18.6 | (15.6, | 22.2) | **2.62** | **(1.89,** | **3.63)** | 30.1 |
| —Depressive   episode | 13 | 35.5 | (25.6, | 49.1) | 49 | 15.8 | (13.1, | 19.0) | **2.25** | **(1.54,** | **3.27)** | 19.7 |
| Substance use | 38 | 102.7 | (85.1, | 123.8) | 178 | 77.2 | (70.6, | 84.6) | **1.33** | **(1.08,** | **1.64)** | 25.4 |
| —Alcohol | 31 | 81.0 | (65.8, | 99.8) | 153 | 63.9 | (57.9, | 70.5) | **1.27** | **(1.01,** | **1.60)** | 17.2 |
| Anxiety,  stress-related | 15 | 42.2 | (31.2, | 57.1) | 74 | 27.2 | (23.5, | 31.5) | **1.55** | **(1.11,** | **2.17)** | 15.0 |
| **Total** | | | | | | | | | | | | |
| All disorders | 487 | 639.3 | (606.6, | 673.8) | 1373 | 260.9 | (252.1, | 270.0) | **2.45** | **(2.30,** | **2.61)** | 378.4 |
| Schizophrenia | 256 | 354.2 | (329.4, | 380.8) | 377 | 83.4 | (78.4, | 88.7) | **4.25** | **(3.86,** | **4.67)** | 270.8 |
| Mood (affective) | 82 | 100.5 | (88.4, | 114.3) | 305 | 50.0 | (46.5, | 53.8) | **2.01** | **(1.73,** | **2.33)** | 50.5 |
| —Bipolar | 50 | 59.0 | (50.1, | 69.6) | 135 | 23.0 | (20.7, | 25.6) | **2.56** | **(2.10,** | **3.12)** | 36.0 |
| —Depressive  episode | 25 | 32.1 | (25.4, | 40.5) | 120 | 19.3 | (17.1, | 21.7) | **1.66** | **(1.28,** | **2.16)** | 12.8 |
| Substance use | 73 | 93.4 | (81.7, | 106.8) | 283 | 62.7 | (58.4, | 67.4) | **1.49** | **(1.28,** | **1.73)** | 30.7 |
| —Alcohol | 58 | 72.4 | (62.2, | 84.2) | 243 | 52.7 | (48.8, | 57.0) | **1.37** | **(1.16,** | **1.63)** | 19.7 |
| Anxiety,  stress-related | 40 | 49.3 | (41.1, | 59.2) | 193 | 36.0 | (32.8, | 39.5) | **1.37** | **(1.12,** | **1.68)** | 13.3 |

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

Māori had 2.5 times the rate of admission for mental disorders of non-Māori.

Among Māori females, the overall admission rate for mental disorders was twice that of non-Māori females. The most common cause of admission was schizophrenia related disorders, with 86 admissions per year on average, at a rate more than 3 times as high as the non-Māori rate. Māori women also had higher admission rates for mood disorders and substance use disorders (mostly alcohol).

Among Māori males, the overall admission rate was 2.8 times as high as the non-Māori rate. Admissions for schizophrenia type disorders were the most common, at a rate 4.8 times the non-Māori rate. The second most common cause of admission was for substance use, with a rate 33% higher than the non-Māori rate. The rate of admission for mood disorders and anxiety and stress related disorders were also higher for Māori than for non-Māori males.

## Gout

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indicator | **Māori** | | **Non-Māori** | | Māori/non-Māori ratio | Difference in percentage |
| Count | % | Count | % |
| Gout prevalence | 3,689 | 7.6 | 14,196 | 5.0 | 1.51 | 2.6 |
| People with gout who received allopurinol regularly | 1,373 | 37.2 | 4,923 | 34.7 | 1.07 | 2.5 |
| Colchicine use by people with gout not dispensed allopurinol | 353 | 9.6 | 1,470 | 10.4 | 0.92 | -0.8 |
| NSAID use by people with gout | 1,821 | 49.4 | 6,679 | 47.0 | 1.05 | 2.3 |
| Serum urate test within six months following allopurinol dispensing | 959 | 44.6 | 3,599 | 46.3 | 0.96 | -1.7 |

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.

Around 3,690 Māori aged 20–79 years were estimated to have gout in 2011, giving a crude prevalence of 8%, 51% higher than the prevalence in non-Māori. Thirty-seven percent of Māori with gout regularly received allopurinol, a preventive therapy to lower urate levels. Of those who received allopurinol 45% had a lab test for serum urate levels within the following six months. Nearly half of Māori with gout were using non-steroidal anti-inflammatory medication.

Table 55: Hospitalisations for gout, 25 years and over, Counties Manukau 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 | 78.8 | (60.6, | 102.5) | 45 | 20.5 | (16.8, | 25.0) | **3.85** | **(2.77,** | **5.35)** | 58.3 |
| Male | 44 | 260.4 | (218.7, | 309.9) | 159 | 108.6 | (98.1, | 120.3) | **2.40** | **(1.96,** | **2.93)** | 151.7 |
| Total | 63 | 169.6 | (146.4, | 196.5) | 204 | 64.6 | (58.9, | 70.7) | **2.63** | **(2.21,** | **3.12)** | 105.0 |

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

On average, there were 63 hospital admissions for gout per year among Counties Manukau Māori, at a rate 2.6 times the rate for non-Māori, or 105 more admissions per 100,000. Admissions were more frequent among males than females.

## Hip fractures

Table 56: Hospitalisations for hip fractures, 65 years and over, Counties Manukau 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 | 167.6 | (90.0, | 312.0) | 157 | 359.7 | (323.9, | 399.6) | **0.47** | **(0.25,** | **0.88)** | -192.2 |
| Male | 2 | 170.2 | (81.0, | 357.4) | 64 | 207.5 | (178.7, | 241.0) | 0.82 | (0.38, | 1.75) | -37.3 |
| Total | 6 | 168.9 | (104.0, | 274.2) | 221 | 283.6 | (260.2, | 309.2) | **0.60** | **(0.36,** | **0.97)** | -114.7 |

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

On average, six Māori per year aged 65 and over were admitted to hospital for hip fractures, at a rate of just over 220 per 100,000, 40% lower than the non-Māori rate, or 115 fewer admissions per 100,000.

## Elective surgery

Table 57: Hospitalisations for hip replacements, 50 years and over, Counties Manukau 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 | 26 | 403.9 | (323.7, | 504.0) | 146 | 184.7 | (167.1, | 204.3) | **2.19** | **(1.71,** | **2.79)** | 219.2 |
| Male | 20 | 377.3 | (292.8, | 486.2) | 109 | 164.8 | (147.2, | 184.4) | **2.29** | **(1.73,** | **3.02)** | 212.5 |
| Total | 46 | 390.6 | (330.3, | 461.9) | 255 | 174.7 | (162.1, | 188.4) | **2.24** | **(1.86,** | **2.69)** | 215.9 |

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

On average, 46 Māori aged 50 years and over were admitted to hospital per year for a hip replacement, at 2.2 times the rate for non-Māori, or 216 more admissions per 100,000.

Table 58: Publicly funded hospitalisations for cataract surgery, 45 years and over, Counties Manukau 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 | 92 | 1010.7 | (898.0, | 1137.5) | 954 | 813.5 | (781.4, | 847.0) | **1.24** | **(1.10,** | **1.41)** | 197.2 |
| Male | 62 | 850.7 | (736.2, | 983.0) | 733 | 743.9 | (711.6, | 777.6) | 1.14 | (0.98, | 1.33) | 106.8 |
| Total | 154 | 930.7 | (848.8, | 1020.5) | 1687 | 778.7 | (755.8, | 802.3) | **1.20** | **(1.08,** | **1.32)** | 152.0 |

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

On average, 154 Counties Manukau Māori aged 45 years and over were admitted to hospital for cataract surgery each year. The rate for Māori was 20% higher than for non-Māori, or 152 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 presented for the Auckland Region as data was not available by DHB.

## Hospitalisations

Table 59: All-cause hospitalisations, all ages, Counties Manukau 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 | 12,940 | 29,707.2 | (29,409.5, | 30,008.0) | 54,306 | 22,549.2 | (22,421.0, | 22,678.2) | **1.32** | **(1.30,** | **1.33)** | 7,158.0 |
| Male | 8,464 | 21,458.8 | (21,192.2, | 21,728.6) | 43,623 | 17,870.1 | (17,755.3, | 17,985.8) | **1.20** | **(1.18,** | **1.22)** | 3,588.6 |
| Total | 21,405 | 25,583.0 | (25,382.9, | 25,784.7) | 97,929 | 20,209.7 | (20,123.5, | 20,296.2) | **1.27** | **(1.25,** | **1.28)** | 5,373.3 |

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

On average, there were just over 21,400 Māori hospital admissions per year and close to 98,000 non-Māori admissions. All-cause admission rates were 27% higher for Māori than non-Māori, or 5,373 more admissions per 100,000.

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, Counties Manukau 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 | 3,041 | 6,966.1 | (6,822.8, | 7,112.5) | 9,552 | 4,464.1 | (4,405.5, | 4,523.4) | **1.56** | **(1.52,** | **1.60)** | 2,502.1 |
| Male | 2,441 | 6,255.2 | (6,111.4, | 6,402.5) | 9,918 | 4,564.7 | (4,506.1, | 4,624.1) | **1.37** | **(1.33,** | **1.41)** | 1,690.5 |
| Total | 5,483 | 6,610.7 | (6,508.8, | 6,714.1) | 19,470 | 4,514.4 | (4,472.9, | 4,556.3) | **1.46** | **(1.44,** | **1.49)** | 2,096.3 |

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, 5,483 Māori hospital admissions per year were potentially avoidable through population based prevention strategies, with a rate 46% higher than non-Māori, or more than 2,000 more admissions per 100,000.

Table 61: Ambulatory care sensitive hospitalisations, 0–74 years, Counties Manukau 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 | 1,484 | 3,359.0 | (3,260.4, | 3,460.6) | 4,333 | 1,939.7 | (1,901.5, | 1,978.6) | **1.73** | **(1.67,** | **1.79)** | 1,419.3 |
| Male | 1,282 | 3,291.9 | (3,187.8, | 3,399.4) | 4,674 | 2,030.1 | (1,991.9, | 2,069.1) | **1.62** | **(1.56,** | **1.68)** | 1,261.8 |
| Total | 2,766 | 3,318.3 | (3,246.4, | 3,391.7) | 9,007 | 1,980.6 | (1,953.6, | 2,008.0) | **1.68** | **(1.63,** | **1.72)** | 1,337.7 |

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

On average, there were 2,766 ambulatory care sensitive hospitalisations per year among Māori, at a rate two-thirds higher than the non-Māori rate, or 1,338 more admissions per 100,000.

## Mortality

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender** | **Māori** | | | **Non-Māori** | | | Difference in years |
| Years (95% credible interval) | | | Years (95% credible interval) | | |
| Female | 77.8 | (77.1, | 78.4) | 84.6 | (84.4, | 84.8) | -6.8 |
| Male | 73.7 | (73.1, | 74.4) | 81.1 | (81.0, | 81.3) | -7.4 |

Source: Statistics New Zealand Subnational Period Life Tables: 2012–14.  
Notes: This data is for the Auckland Region (including Counties Manukau, Auckland, and Waitemata DHBs). 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 expected years of 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 Auckland Region, life expectancy at birth was 77.8 years for Māori females, 6.8 years lower than the life expectancy of non-Māori females (84.6 years). For Māori males, life expectancy was 73.7 years, 7.4 years lower than that of non-Māori males (81.1 years).

Table 63: All-cause deaths, all ages, Counties Manukau 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 | 149 | 349.7 | (332.4, | 368.0) | 963 | 154.6 | (150.3, | 159.1) | **2.26** | **(2.13,** | **2.40)** | 195.1 |
| Male | 174 | 494.4 | (471.4, | 518.5) | 1018 | 228.0 | (222.6, | 233.5) | **2.17** | **(2.06,** | **2.29)** | 266.4 |
| Total | 323 | 422.0 | (407.6, | 437.1) | 1981 | 191.3 | (187.8, | 194.9) | **2.21** | **(2.12,** | **2.29)** | 230.7 |

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 323 Māori deaths per year on average in the Counties Manukau area during 2008 to 2012. The Māori mortality rate was 2.2 times the non-Māori rate, or 231 more deaths per 100,000.

Table 64: Leading causes of death for Māori, all ages, Counties Manukau 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 | 21 | 44.7 | (36.9, | 54.3) | 176 | 15.4 | (14.2, | 16.7) | **2.91** | **(2.35,** | **3.59)** | 29.3 |
| Lung cancer | 19 | 41.4 | (33.9, | 50.5) | 47 | 8.3 | (7.2, | 9.5) | **5.00** | **(3.91,** | **6.38)** | 33.1 |
| Diabetes | 11 | 23.8 | (18.3, | 31.0) | 39 | 6.1 | (5.2, | 7.1) | **3.93** | **(2.88,** | **5.36)** | 17.8 |
| COPD | 10 | 21.9 | (16.6, | 28.8) | 34 | 3.9 | (3.3, | 4.7) | **5.57** | **(4.03,** | **7.71)** | 17.9 |
| Breast cancer | 8 | 17.7 | (13.0, | 24.2) | 52 | 11.6 | (10.1, | 13.3) | **1.53** | **(1.09,** | **2.15)** | 6.1 |
| **Male** | | | | | | | | | | | | |
| IHD | 29 | 79.8 | (67.7, | 94.1) | 219 | 36.5 | (34.1, | 39.0) | **2.19** | **(1.83,** | **2.61)** | 43.3 |
| Lung cancer | 17 | 45.9 | (37.2, | 56.8) | 66 | 12.4 | (11.1, | 13.9) | **3.70** | **(2.91,** | **4.71)** | 33.5 |
| Accidents | 17 | 48.3 | (38.9, | 59.8) | 48 | 17.6 | (15.2, | 20.3) | **2.75** | **(2.12,** | **3.56)** | 30.7 |
| Diabetes | 11 | 29.7 | (22.9, | 38.5) | 41 | 8.2 | (7.0, | 9.5) | **3.63** | **(2.69,** | **4.91)** | 21.5 |
| Suicide | 9 | 24.5 | (18.2, | 33.0) | 25 | 11.6 | (9.6, | 14.0) | **2.11** | **(1.49,** | **3.00)** | 12.9 |
| **Total** | | | | | | | | | | | | |
| IHD | 50 | 62.3 | (54.9, | 70.6) | 394 | 25.9 | (24.6, | 27.4) | **2.40** | **(2.09,** | **2.75)** | 36.3 |
| Lung cancer | 37 | 43.7 | (37.7, | 50.6) | 114 | 10.3 | (9.5, | 11.3) | **4.22** | **(3.56,** | **5.01)** | 33.3 |
| Accidents | 25 | 33.2 | (27.8, | 39.7) | 77 | 12.1 | (10.7, | 13.7) | **2.75** | **(2.21,** | **3.42)** | 21.2 |
| Diabetes | 22 | 26.7 | (22.2, | 32.2) | 79 | 7.1 | (6.4, | 7.9) | **3.76** | **(3.03,** | **4.67)** | 19.6 |
| COPD | 16 | 19.8 | (15.9, | 24.8) | 86 | 5.6 | (5.0, | 6.2) | **3.55** | **(2.78,** | **4.54)** | 14.3 |

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 Counties Manukau Māori women were ischaemic heart disease (IHD), lung cancer, diabetes mellitus, chronic obstructive pulmonary disease (COPD), and breast cancer. The mortality rate for lung cancer was 5 times the non-Māori rate, COPD 5.6 times as high, diabetes was nearly 4 times as high, IHD nearly 3 times as high, and breast cancer mortality was 53% higher than for non-Māori. Lung cancer and IHD show the highest absolute differences in mortality rates, with around 30 more deaths per 100,000.

For Counties Manukau Māori men, the leading causes of death were IHD, lung cancer, accidents, diabetes and suicide. Mortality rates for these causes were all higher for Māori than for non-Māori men, ranging from 2.1 times as high (suicide) to 3.7 times as high (for lung cancer). The highest absolute difference in rates was for deaths from IHD with 43 more deaths per 100,000.

Data on leading cause 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, Counties Manukau 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 | 97 | 217.2 | (198.6, | 237.5) | 267 | 80.7 | (75.8, | 85.9) | **2.69** | **(2.41,** | **3.00)** | 136.5 |
| Male | 112 | 293.9 | (270.4, | 319.4) | 373 | 118.5 | (112.6, | 124.8) | **2.48** | **(2.25,** | **2.73)** | 175.3 |
| Total | 209 | 255.5 | (240.4, | 271.6) | 640 | 99.6 | (95.7, | 103.6) | **2.57** | **(2.39,** | **2.76)** | 155.9 |

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

Among Counties Manukau Māori there were 209 potentially avoidable deaths per year on average during 2007–2011, at a rate 2.6 times the non-Māori rate, or 156 more deaths per 100,000.

Table 66: Amenable mortality, 0–74 years, Counties Manukau 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 | 67 | 150.3 | (135.0, | 167.4) | 185 | 56.2 | (52.2, | 60.6) | **2.67** | **(2.35,** | **3.05)** | 94.1 |
| Male | 75 | 196.7 | (177.6, | 217.8) | 268 | 85.2 | (80.2, | 90.5) | **2.31** | **(2.05,** | **2.60)** | 111.5 |
| Total | 142 | 173.5 | (161.1, | 186.9) | 453 | 70.7 | (67.5, | 74.1) | **2.45** | **(2.25,** | **2.68)** | 102.8 |

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

Deaths amenable to health care were 2.5 times as frequent among Māori as among non-Māori, or 103 more deaths per 100,000. There were 142 Māori deaths per year on average.

## 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 among Counties Manukau Māori were falls, exposure to mechanical forces, complications of medical and surgical care, assault, transport accidents, and intentional self-harm.

Table : Hospitalisations for injuries, all ages, Counties Manukau 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 | 1,134 | 2,675.6 | (2,586.1, | 2,768.2) | 4,226 | 1,702.3 | (1,666.9, | 1,738.4) | **1.57** | **(1.51,** | **1.64)** | 973.3 |
| Male | 1,389 | 3,749.7 | (3,635.6, | 3,867.3) | 5,562 | 2,616.1 | (2,572.2, | 2,660.7) | **1.43** | **(1.38,** | **1.48)** | 1,133.6 |
| Total | 2,523 | 3,212.6 | (3,139.8, | 3,287.1) | 9,788 | 2,159.2 | (2,130.9, | 2,187.8) | **1.49** | **(1.45,** | **1.53)** | 1,053.5 |

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

On average there were 2,523 hospitalisations for injury among Māori per year, at a rate 49% higher than non-Māori or approximately 1,050 more admissions per 100,000.

Table 68: Hospitalisations for assault, all ages, Counties Manukau 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 | 124 | 301.1 | (271.8, | 333.6) | 127 | 63.7 | (57.4, | 70.7) | **4.73** | **(4.09,** | **5.47)** | 237.4 |
| Male | 196 | 556.8 | (512.8, | 604.5) | 408 | 211.0 | (199.2, | 223.6) | **2.64** | **(2.39,** | **2.92)** | 345.7 |
| Total | 320 | 428.9 | (402.2, | 457.4) | 535 | 137.3 | (130.6, | 144.5) | **3.12** | **(2.88,** | **3.39)** | 291.6 |

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

On average 320 Māori per year were admitted to hospital for injury caused by assault, at a rate 3.1 times the non-Māori rate, or 292 more admissions per 100,000. Males had higher admission rates than females.

Table 69: Deaths from injury, all ages, Counties Manukau 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 | 13 | 32.1 | (25.2, | 40.9) | 44 | 12.7 | (10.7, | 15.1) | **2.52** | **(1.87,** | **3.39)** | 19.4 |
| Male | 28 | 77.8 | (65.7, | 92.1) | 77 | 31.2 | (27.9, | 34.9) | **2.49** | **(2.04,** | **3.05)** | 46.6 |
| Total | 41 | 54.9 | (47.8, | 63.1) | 121 | 22.0 | (20.0, | 24.1) | **2.50** | **(2.11,** | **2.95)** | 33.0 |

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 41 Counties Manukau Māori died from injuries per year, at a rate 2.5 times as high as for non-Māori, or 33 more deaths per 100,000. Mortality rates were higher for males than females for both Māori and non-Māori.

# References

Anderson P, Craig E, Jackson G, Jackson C. 2012. Developing a tool to monitor potentially avoidable and ambulatory care sensitive hospitalisations in New Zealand children. *New Zealand Medical Journal* 125(1366): 25–37.

Clayton D, Hills M. 1993. *Statistical Methods in Epidemiology*. Oxford: Oxford University Press.

Crengle S, Clark T C., Robinson E, Bullen P, Dyson B, Denny S, Fleming T, Fortune S, Peiris-John R, Utter J, Rossen F, Sheridan J, Teevale T, & The Adolescent Health Research Group (2013). *The health and wellbeing of Māori New Zealand secondary school students in 2012. Te Ara Whakapiki Taitamariki: Youth’12.* Auckland: The University of Auckland.

Ministry of Health. 2010. *Saving Lives: Amenable mortality in New Zealand, 1996–2006*. Wellington: Ministry of Health.

Ministry of Health. 2013. *New Zealand Health Survey: Annual update of key findings 2012/13*. Wellington: Ministry of Health.

Ministry of Health. 2014. *The Health of Māori Adults and Children, 2011–2013*. Wellington: Ministry of Health.

Robson B, Harris R. 2007. *Hauora: Māori Standards of Health IV. A study of the years 2000–2005.* Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare*.*

Robson B, Purdie G, Cram F, Simmonds S. 2007. Age standardisation: an indigenous standard? *Emerging Themes in Epidemiology* 4:3.

# Appendix 1: Population projections

Table : Māori population projections, single year by age group, Counties Manukau 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 | 1,110 | 1,020 | 2,140 |  | 1,150 | 1,090 | 2,230 |  | 1,130 | 1,080 | 2,210 |  | 1,120 | 1,070 | 2,190 |
| 1-4 | 4,310 | 4,060 | 8,370 |  | 4,340 | 4,050 | 8,390 |  | 4,350 | 4,090 | 8,440 |  | 4,380 | 4,150 | 8,540 |
| 5-9 | 4,960 | 4,550 | 9,510 |  | 5,050 | 4,750 | 9,800 |  | 5,230 | 4,880 | 10,110 |  | 5,300 | 4,890 | 10,190 |
| 10-14 | 4,390 | 4,210 | 8,610 |  | 4,450 | 4,160 | 8,620 |  | 4,440 | 4,120 | 8,560 |  | 4,460 | 4,180 | 8,640 |
| 15-19 | 4,040 | 4,060 | 8,100 |  | 4,110 | 4,060 | 8,170 |  | 4,160 | 4,060 | 8,220 |  | 4,230 | 4,050 | 8,290 |
| 20-24 | 3,070 | 3,690 | 6,750 |  | 3,180 | 3,700 | 6,880 |  | 3,340 | 3,730 | 7,070 |  | 3,460 | 3,790 | 7,250 |
| 25-29 | 2,230 | 2,970 | 5,200 |  | 2,320 | 3,110 | 5,430 |  | 2,430 | 3,260 | 5,690 |  | 2,530 | 3,310 | 5,840 |
| 30-34 | 1,890 | 2,620 | 4,510 |  | 1,900 | 2,610 | 4,500 |  | 1,930 | 2,620 | 4,540 |  | 1,960 | 2,610 | 4,570 |
| 35-39 | 1,980 | 2,490 | 4,470 |  | 1,940 | 2,450 | 4,390 |  | 1,860 | 2,480 | 4,340 |  | 1,790 | 2,520 | 4,310 |
| 40-44 | 2,170 | 2,750 | 4,930 |  | 2,100 | 2,740 | 4,840 |  | 2,050 | 2,640 | 4,690 |  | 1,970 | 2,580 | 4,540 |
| 45-49 | 1,980 | 2,450 | 4,430 |  | 1,990 | 2,480 | 4,480 |  | 1,990 | 2,550 | 4,530 |  | 2,070 | 2,600 | 4,670 |
| 50-54 | 1,820 | 2,140 | 3,960 |  | 1,900 | 2,200 | 4,100 |  | 1,920 | 2,220 | 4,140 |  | 1,890 | 2,250 | 4,140 |
| 55-59 | 1,270 | 1,620 | 2,890 |  | 1,300 | 1,640 | 2,940 |  | 1,420 | 1,730 | 3,140 |  | 1,520 | 1,790 | 3,300 |
| 60-64 | 1,000 | 1,230 | 2,220 |  | 1,040 | 1,300 | 2,340 |  | 1,030 | 1,360 | 2,390 |  | 1,050 | 1,420 | 2,470 |
| 65-69 | 760 | 800 | 1,550 |  | 780 | 850 | 1,630 |  | 800 | 900 | 1,710 |  | 830 | 960 | 1,800 |
| 70-74 | 420 | 520 | 940 |  | 440 | 570 | 1,010 |  | 470 | 590 | 1,060 |  | 500 | 590 | 1,080 |
| 75-79 | 230 | 330 | 550 |  | 250 | 330 | 580 |  | 270 | 360 | 630 |  | 270 | 410 | 680 |
| 80-84 | 90 | 180 | 280 |  | 90 | 200 | 290 |  | 100 | 200 | 300 |  | 120 | 190 | 310 |
| 85-89 | 30 | 60 | 90 |  | 40 | 60 | 100 |  | 40 | 60 | 110 |  | 40 | 70 | 110 |
| 90+ | 10 | 20 | 30 |  | 10 | 30 | 30 |  | 10 | 30 | 40 |  | 10 | 40 | 40 |
| **All Ages** | **37,800** | **41,800** | **79,500** |  | **38,400** | **42,400** | **80,700** |  | **39,000** | **43,000** | **81,900** |  | **39,500** | **43,500** | **83,000** |
|  |  | 2017 |  |  |  | 2018 |  |  |  | 2019 |  |  |  | 2020 |  |
| 0 | 1,120 | 1,060 | 2,180 |  | 1,120 | 1,060 | 2,180 |  | 1,120 | 1,060 | 2,180 |  | 1,110 | 1,060 | 2,170 |
| 1-4 | 4,430 | 4,180 | 8,610 |  | 4,420 | 4,210 | 8,630 |  | 4,390 | 4,180 | 8,570 |  | 4,380 | 4,170 | 8,540 |
| 5-9 | 5,300 | 4,920 | 10,220 |  | 5,240 | 4,920 | 10,160 |  | 5,290 | 4,960 | 10,260 |  | 5,280 | 4,990 | 10,280 |
| 10-14 | 4,590 | 4,270 | 8,860 |  | 4,730 | 4,370 | 9,110 |  | 4,820 | 4,560 | 9,380 |  | 4,990 | 4,690 | 9,670 |
| 15-19 | 4,150 | 4,020 | 8,170 |  | 4,200 | 4,030 | 8,230 |  | 4,250 | 3,960 | 8,210 |  | 4,230 | 3,910 | 8,140 |
| 20-24 | 3,640 | 3,800 | 7,440 |  | 3,700 | 3,780 | 7,480 |  | 3,760 | 3,770 | 7,530 |  | 3,800 | 3,770 | 7,570 |
| 25-29 | 2,580 | 3,370 | 5,950 |  | 2,690 | 3,330 | 6,030 |  | 2,800 | 3,340 | 6,140 |  | 2,960 | 3,370 | 6,330 |
| 30-34 | 2,030 | 2,670 | 4,700 |  | 2,070 | 2,830 | 4,900 |  | 2,150 | 2,960 | 5,100 |  | 2,250 | 3,100 | 5,350 |
| 35-39 | 1,760 | 2,510 | 4,270 |  | 1,770 | 2,490 | 4,260 |  | 1,770 | 2,470 | 4,240 |  | 1,800 | 2,480 | 4,280 |
| 40-44 | 1,900 | 2,500 | 4,390 |  | 1,840 | 2,350 | 4,190 |  | 1,800 | 2,310 | 4,110 |  | 1,710 | 2,340 | 4,050 |
| 45-49 | 2,090 | 2,590 | 4,680 |  | 2,030 | 2,610 | 4,640 |  | 1,950 | 2,600 | 4,550 |  | 1,910 | 2,490 | 4,400 |
| 50-54 | 1,860 | 2,250 | 4,120 |  | 1,840 | 2,310 | 4,140 |  | 1,840 | 2,330 | 4,180 |  | 1,830 | 2,390 | 4,220 |
| 55-59 | 1,580 | 1,890 | 3,470 |  | 1,670 | 2,000 | 3,660 |  | 1,740 | 2,050 | 3,790 |  | 1,760 | 2,070 | 3,830 |
| 60-64 | 1,080 | 1,470 | 2,550 |  | 1,120 | 1,480 | 2,600 |  | 1,130 | 1,500 | 2,630 |  | 1,240 | 1,570 | 2,820 |
| 65-69 | 850 | 1,020 | 1,870 |  | 840 | 1,080 | 1,920 |  | 880 | 1,140 | 2,030 |  | 870 | 1,200 | 2,070 |
| 70-74 | 550 | 630 | 1,170 |  | 600 | 670 | 1,270 |  | 630 | 710 | 1,340 |  | 650 | 760 | 1,410 |
| 75-79 | 280 | 400 | 690 |  | 300 | 400 | 700 |  | 310 | 450 | 760 |  | 330 | 460 | 800 |
| 80-84 | 130 | 210 | 340 |  | 140 | 230 | 370 |  | 160 | 230 | 380 |  | 180 | 250 | 430 |
| 85-89 | 50 | 80 | 130 |  | 50 | 100 | 140 |  | 40 | 110 | 150 |  | 50 | 110 | 160 |
| 90+ | 10 | 30 | 40 |  | 10 | 30 | 40 |  | 20 | 30 | 50 |  | 20 | 30 | 50 |
| **All Ages** | **40,000** | **43,900** | **83,900** |  | **40,400** | **44,300** | **84,700** |  | **40,900** | **44,700** | **85,600** |  | **41,300** | **45,200** | **86,500** |
| These projections were derived in October 2014. | | | | | |
| **Source: Statistics New Zealand** | | | |  |  |

Table : Total population projections, single year, by age group, Counties Manukau DHB, 2013 to 2020

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Projected 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 | 4,220 | 4,020 | 8,240 | | 4,040 | | 3,820 | | 7,860 | 4,150 | 3,930 | 8,070 | 4,230 | 4,010 | 8,240 |
| 1-4 | 17,010 | 16,060 | 33,070 | | 17,050 | | 16,110 | | 33,160 | 16,770 | 15,810 | 32,580 | 16,470 | 15,560 | 32,030 |
| 5-9 | 20,320 | 18,940 | 39,260 | | 20,770 | | 19,520 | | 40,290 | 21,330 | 20,100 | 41,430 | 21,750 | 20,420 | 42,170 |
| 10-14 | 19,870 | 18,780 | 38,660 | | 20,150 | | 18,870 | | 39,020 | 19,920 | 18,780 | 38,700 | 19,850 | 18,800 | 38,650 |
| 15-19 | 20,130 | 19,290 | 39,420 | | 20,370 | | 19,530 | | 39,900 | 20,700 | 19,780 | 40,480 | 20,780 | 19,710 | 40,500 |
| 20-24 | 18,600 | 18,410 | 37,010 | | 19,510 | | 19,240 | | 38,750 | 20,240 | 19,700 | 39,930 | 20,640 | 19,980 | 40,620 |
| 25-29 | 15,560 | 17,170 | 32,730 | | 16,890 | | 18,220 | | 35,110 | 18,270 | 19,260 | 37,530 | 19,570 | 20,170 | 39,740 |
| 30-34 | 14,750 | 16,970 | 31,720 | | 15,470 | | 17,650 | | 33,120 | 16,080 | 18,400 | 34,480 | 16,690 | 19,060 | 35,750 |
| 35-39 | 14,490 | 16,520 | 31,020 | | 14,690 | | 16,580 | | 31,270 | 14,830 | 16,830 | 31,660 | 15,020 | 17,180 | 32,200 |
| 40-44 | 16,710 | 18,830 | 35,540 | | 16,570 | | 18,700 | | 35,270 | 16,420 | 18,380 | 34,800 | 15,940 | 17,980 | 33,920 |
| 45-49 | 16,770 | 17,970 | 34,740 | | 16,730 | | 18,310 | | 35,050 | 16,790 | 18,510 | 35,300 | 16,910 | 18,750 | 35,650 |
| 50-54 | 15,810 | 16,880 | 32,690 | | 16,390 | | 17,390 | | 33,780 | 16,640 | 17,770 | 34,410 | 16,810 | 17,870 | 34,670 |
| 55-59 | 13,010 | 13,880 | 26,890 | | 13,450 | | 14,370 | | 27,820 | 14,040 | 14,890 | 28,930 | 14,490 | 15,420 | 29,920 |
| 60-64 | 11,150 | 11,810 | 22,960 | | 11,450 | | 12,260 | | 23,710 | 11,630 | 12,630 | 24,270 | 11,960 | 13,020 | 24,980 |
| 65-69 | 9,070 | 9,490 | 18,560 | | 9,590 | | 9,980 | | 19,570 | 10,130 | 10,540 | 20,670 | 10,470 | 10,890 | 21,360 |
| 70-74 | 6,480 | 6,980 | 13,470 | | 6,820 | | 7,340 | | 14,160 | 7,000 | 7,640 | 14,630 | 7,290 | 7,930 | 15,220 |
| 75-79 | 4,150 | 4,750 | 8,890 | | 4,360 | | 5,040 | | 9,400 | 4,720 | 5,370 | 10,090 | 5,090 | 5,790 | 10,870 |
| 80-84 | 2,660 | 3,530 | 6,190 | | 2,730 | | 3,590 | | 6,320 | 2,800 | 3,670 | 6,470 | 2,810 | 3,680 | 6,490 |
| 85-89 | 1,400 | 2,140 | 3,540 | | 1,430 | | 2,170 | | 3,600 | 1,520 | 2,210 | 3,730 | 1,590 | 2,320 | 3,910 |
| 90+ | 500 | 1,210 | 1,710 | | 570 | | 1,280 | | 1,840 | 600 | 1,340 | 1,940 | 650 | 1,360 | 2,000 |
| **All Ages** | **242,700** | **253,600** | **496,300** | | **249,000** | | **260,000** | | **509,000** | **254,600** | **265,500** | **520,100** | **259,000** | **269,900** | **528,900** |
|  |  | **2017** |  | |  | | **2018** | |  |  | **2019** |  |  | **2020** |  |
| 0 | 4,320 | 4,090 | 8,410 | | 4,390 | | 4,160 | | 8,550 | 4,470 | 4,230 | 8,710 | 4,570 | 4,320 | 8,890 |
| 1-4 | 16,380 | 15,530 | 31,910 | | 16,440 | | 15,560 | | 32,000 | 16,750 | 15,860 | 32,610 | 17,070 | 16,160 | 33,230 |
| 5-9 | 21,780 | 20,460 | 42,240 | | 21,480 | | 20,400 | | 41,890 | 21,160 | 20,090 | 41,250 | 20,870 | 19,770 | 40,640 |
| 10-14 | 20,220 | 19,030 | 39,250 | | 20,740 | | 19,430 | | 40,160 | 21,030 | 19,870 | 40,890 | 21,500 | 20,350 | 41,850 |
| 15-19 | 20,500 | 19,540 | 40,040 | | 20,500 | | 19,420 | | 39,920 | 20,590 | 19,330 | 39,930 | 20,240 | 19,130 | 39,370 |
| 20-24 | 20,970 | 20,290 | 41,270 | | 21,050 | | 20,380 | | 41,440 | 21,020 | 20,370 | 41,380 | 21,130 | 20,420 | 41,550 |
| 25-29 | 20,660 | 20,870 | 41,530 | | 21,510 | | 21,360 | | 42,870 | 22,040 | 21,830 | 43,870 | 22,470 | 21,990 | 44,460 |
| 30-34 | 17,330 | 19,620 | 36,950 | | 18,160 | | 20,350 | | 38,510 | 19,170 | 21,080 | 40,250 | 20,330 | 21,910 | 42,230 |
| 35-39 | 15,450 | 17,630 | 33,080 | | 16,010 | | 18,170 | | 34,180 | 16,520 | 18,640 | 35,170 | 17,000 | 19,240 | 36,240 |
| 40-44 | 15,490 | 17,580 | 33,070 | | 15,190 | | 17,100 | | 32,290 | 15,210 | 16,960 | 32,170 | 15,230 | 17,090 | 32,320 |
| 45-49 | 17,040 | 18,870 | 35,920 | | 16,820 | | 18,910 | | 35,730 | 16,530 | 18,640 | 35,170 | 16,300 | 18,220 | 34,520 |
| 50-54 | 16,740 | 17,850 | 34,590 | | 16,610 | | 17,880 | | 34,490 | 16,440 | 18,080 | 34,510 | 16,410 | 18,180 | 34,590 |
| 55-59 | 14,970 | 16,070 | 31,040 | | 15,480 | | 16,700 | | 32,190 | 15,960 | 17,100 | 33,060 | 16,150 | 17,410 | 33,560 |
| 60-64 | 12,230 | 13,310 | 25,530 | | 12,710 | | 13,660 | | 26,370 | 13,040 | 14,050 | 27,090 | 13,560 | 14,510 | 28,070 |
| 65-69 | 10,560 | 11,210 | 21,770 | | 10,620 | | 11,440 | | 22,060 | 10,850 | 11,810 | 22,660 | 11,000 | 12,150 | 23,150 |
| 70-74 | 7,780 | 8,380 | 16,160 | | 8,310 | | 9,010 | | 17,320 | 8,780 | 9,450 | 18,230 | 9,280 | 9,960 | 19,240 |
| 75-79 | 5,390 | 6,130 | 11,530 | | 5,600 | | 6,290 | | 11,900 | 5,880 | 6,600 | 12,480 | 6,010 | 6,860 | 12,870 |
| 80-84 | 3,030 | 3,790 | 6,820 | | 3,190 | | 3,950 | | 7,140 | 3,330 | 4,190 | 7,520 | 3,640 | 4,470 | 8,110 |
| 85-89 | 1,610 | 2,370 | 3,980 | | 1,610 | | 2,420 | | 4,040 | 1,660 | 2,470 | 4,130 | 1,700 | 2,550 | 4,240 |
| 90+ | 680 | 1,390 | 2,070 | | 740 | | 1,460 | | 2,200 | 790 | 1,490 | 2,280 | 850 | 1,530 | 2,380 |
| **All Ages** | **263,100** | **274,000** | **537,100** | | **267,200** | | **278,100** | | **545,200** | **271,200** | **282,100** | **553,400** | **275,300** | **286,200** | **561,500** |
| 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 |

Note: \*no causes for 2012

This report includes customised Statistics New Zealand’s data which are licensed by Statistics New Zealand for re-use under the Creative Commons Attribution 3.0 New Zealand licence.

## 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 cancer | C61\* |
| Testicular cancer | 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)