Te Aka Whai Ora
Māori Health Authority

Iwi-Māori Partnership Board Health Profile:

Te Tauraki

Volume One

Iwi-Māori Partnership Board Health Profile:

Te Tauraki

Volume One

Recommended citation: Curtis, E., Loring, B., Walker, R., Pearse, T., Gilbert-Perenise, S., Gray, G., Akuhata-Huntington, Z., Latham, K., Kiriona, K. (2023). *Iwi-Māori Partnership Board Health Profile: Te Tauraki. Volume One*. Te Aka Whai Ora – Māori Health Authority; Auckland.

15th December 2023

ISBN - 978-1-991286-14-7

Ngā kupu whakamihi
Acknowledgements

Toitū te mauri nui

Toitū te mauri roa

Toitū te mauri ora

Tīhei Te Aka Whai Ora e!

Kei ngā whakatiketike ki te rangi, kei ngā whakatamarahi ki te whenua, koutou e kōkiri ana i te Pae Ora nō roto mai i te oranga nui, te oranga roa o ō tātou whānau, hapū, iwi puta i Aotearoa whānui – tēnā koutou!

E pēnei ana te nui, me te hari o ngā mihi ki a koutou e ngā kaiwhakairo i te tatauranga Hauora Māori kia pai ai te whakatakoto kupu mō tā tātou kaupapa, mō Te Aka Whai Ora.

Kāore e ārikarika nei ngā mihi nui ki a koutou –

huri noa, tēnā koutou, tēnā koutou, tēnā tātou katoa.

Ngā kupu whakamihi - Acknowledgements

Many people have contributed their time and expertise to the Iwi-Māori Partnership Board health profiles.

These profiles have been written by Elana Curtis, Belinda Loring, Rhiannon Walker, Tyla Pearse, Sade Gilbert-Perenise, George Gray, with overall leadership and direction provided by Zaine Akuhata-Huntington, Kadin Latham and Kingi Kiriona. This work has been supported by a wider team at Te Aka Whai Ora, including Nigel Chee, Paula Searle, Teei Kaiaruna, Riki Kyle, Yahp Jasperse, Swathy Babu Kathanaparambil, Ngarangi Williams, Michele Bristow, Ngaringi Katipa, TeMatetahuna Paki, and Raniera Albert.

We thank Doone Winnard, Delwyn Armstrong and Gary Jackson at Te Whatu Ora for their leadership and support with data quality assurance.

We are also very grateful to the following people who assisted us to obtain and analyse data: Sydney Kingstone, Mildred (Ai Wei) Lee, Michael Walsh, Dean Papaconstantinou; Liam Gray from Statistics New Zealand; and Kirk Paterson from Manatū Hauora.

Shelley Cousins from RUN developed the document template and graphic design.

We would like to thank Suzanne Pitama and Reigna Morgan for providing helpful peer review of earlier drafts.

We acknowledge the leadership of Bridget Robson and colleagues at Te Rōpū Rangahau Hauora a Eru Pōmare, University of Otago Wellington, whose earlier work on the 2015 District Health Board Māori Health Profiles was used as a basis for these Iwi-Māori Partnership Board profiles.

Te kupu takamua
Foreword

Te kupu takamua - Foreword

We are extremely pleased to present this report that provides the most up-to-date snapshot of Māori health for the newly formed Iwi-Māori Partnership Boards.

In doing so, we acknowledge the legacy of work associated with Māori-led health data reporting to date – from the seminal *Hauora* series to *Tatau Kahukura* and the *2015 District Health Board Māori Health Profiles*, this report continues the commitment to excellence that Māori communities and whānau both need and deserve.

Iwi-Māori Partnership Boards were created under the Pae Ora (Healthy Futures) Act 2022 to provide a vehicle for local feedback and leadership on how the health sector is performing to meet the needs and aspirations of whānau in their area. Iwi-Māori Partnership Boards have a pivotal role to play in determining how health services and public health interventions should be designed and delivered.

Te Aka Whai Ora welcomes the contribution of each Iwi-Māori Partnership Board to use the data presented in these reports to understand what issues are important to them and what response(s) are needed to ensure their tino rangatiratanga and mana motuhake over their health and wellbeing are being realised. The data presented in this profile require contextualisation - they are a starting point for Iwi-Māori Partnership Boards to interpret, together with other sources of information, and decide how best to respond to the needs (and rights) of the whānau within their rohe.

This report represents the first wave of analysis (Volume One). This volume includes key demographic information, mauri ora (overall health status), whānau ora (healthy families) and wai ora (healthy environments) indicators specific to each Iwi-Māori Partnership Board. A second volume with additional indicators focused on Te Aka Whai Ora-identified health priority areas (e.g. cancer, long-term conditions, first 1,000 days and mental health) will be released early in 2024.

The data presented within these profiles are a dimension of 'whānau voice'. They represent Māori stories and Māori lived experience and should be valued as a taonga for the health system to use and respond to as part of the broader commitment to Te Tiriti o Waitangi and equity.

We are extremely humbled by the sacrifices that have been made by our people: externally, as Iwi-Māori Partnership Boards have been established, and within the organisation, to produce this output in such a short time-frame since our establishment as an entity in July 2022.

We thank our partners who have contributed to this report and hope that this commitment to excellence in Māori health continues - mō āke tonu atu.

Ngā mihi,

Tipa Mahuta

Waikato, Maniapoto, Ngāpuhi

Te Kaihautū (Chair)

Riana Manuel

Ngāti Pukenga, Ngāti Maru, Ngāti Kahungunu

Te Aka Matua (Chief Executive)

Te ihirangi
Contents

Te ihirangi - Table of Contents

List of Tables

List of Figures

List of Abbreviations, Acronyms and Initialisms

ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
Av	Average
CI	Confidence Intervals
COPD	Chronic Obstructive Pulmonary Disease
DHB	District Health Board
ERP	Estimated resident population
GCH	Geographic Classification for Health
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification
IMPB	Iwi-Māori Partnership Board
NHI	National Health Index
No	Number
NZ	Aotearoa/New Zealand
NZDep2018	New Zealand Index of Deprivation 2018
PHO	Primary Health Organisation
RR	Rate ratio
SA1	Statistical Area Level 1
SA2	Statistical Area Level 2
StatsNZ	Statistics New Zealand
TKHM	Te Kupenga Hauora Māori
UR	Usually resident
WHO	World Health Organization

Māori Glossary

Aotearoa	New Zealand
Hāpori Māori	Māori communities
Hauora Māori	Māori health
Hui	Meeting, gathering
Iwi	Tribe
Kaupapa Māori	Māori initiative, approach, topic, agenda, principle, ideology
Manatū Hauora	Ministry of Health
Māori	Indigenous people(s) of Aotearoa New Zealand
Marae	Complex of buildings significant to Māori, may include, but not limited to, wharenui, wharekai, and urupā
Mauri ora	Overall health status
Mō āke tonu atu	Forever
Ngā āpitihanga	Appendices
Ngā kupu whakamihi	Acknowledgements
Ngā mihi	Greetings
Ngā tatauranga taupori matua	Key demographics
Pae ora	Healthy futures
Rohe	Region
Tangi	Funeral, mourning
Taonga	Treasure
Tatau Kahukura	Māori Health Chartbook 2015
Te Aka Whai Ora	Māori Health Authority
Te ihirangi	Contents
Te Kupenga Hauora Māori	Department of Māori Health, Faculty of Medical and Health Sciences, The University of Auckland
Te kupu takamua	Foreword
Te kupu whakataki	Introduction
Te rārangi tohutoro	References
Te Rōpū Rangahau Hauora a Eru Pōmare	Eru Pomare Māori Health Research Centre, The University of Otago
Te Tiriti o Waitangi	Treaty of Waitangi
Te Whatu Ora	Health New Zealand
Wai ora	Healthy environments
Whakamaua	Māori Health Action Plan: 2020-2025
Whānau	Family
Whānau ora	Healthy families

Te kupu whakataki
Introduction

1. Te kupu whakataki - Introduction

1.1. Overview of Iwi-Māori Partnership Boards

One of the three purposes of the Pae Ora (Healthy Futures) Act 2022 (Pae Ora) is to "achieve equity in health outcomes among New Zealand's population groups, including by striving to eliminate health disparities, in particular for Māori". Iwi-Māori Partnership Boards (IMPBs) are an important legislated mechanism for the Crown to give effect to the principles of Te Tiriti o Waitangi (the Treaty of Waitangi). The Pae Ora Act requires Health New Zealand (Te Whatu Ora) and the Māori Health Authority (Te Aka Whai Ora) to engage with IMPBs.

The purpose of IMPBs is to represent local Māori perspectives on:

a) the needs and aspirations of Māori in relation to hauora Māori outcomes; and

b) how the health sector is performing in relation to those needs and aspirations; and

c) the design and delivery of services and public health interventions within localities.

The Pae Ora Act sets out the criteria for recognition of an organisation as an IMPB. The criteria ensure the Boards are broadly representative of all Māori within the relevant area and include;

a) that the proposed boundaries of the area covered by the organisation do not overlap with the boundaries of any area covered by any other IMPB;

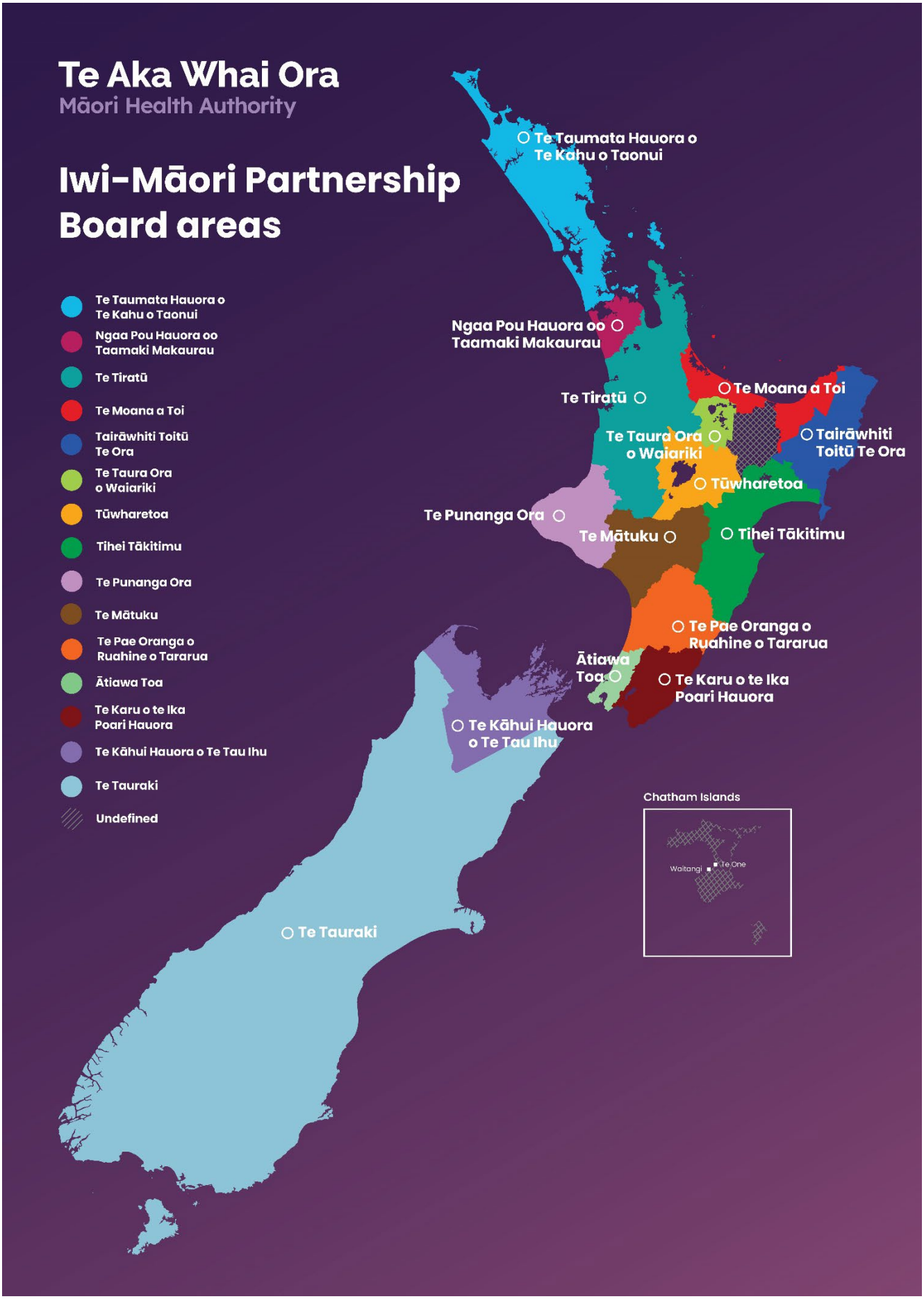
b) that the organisation has taken reasonable steps to engage with relevant Māori communities and groups; and

c) the organisation must demonstrate that it has the capacity and capability to perform the necessary functions of IMPBs as set out in the Act, and that the organisation can represent and be accountable to hāpori Māori (Māori communities).

Once the Board of Te Aka Whai Ora is satisfied that an organisation has met the criteria for recognition, they advise the Minister of Health who then recommends the making of an Order in Council so that the organisation can be listed as an IMPB (under Schedule 4 of the Pae Ora Act). On the advice of the Te Aka Whai Ora Board, the Minister of Health can also recommend an Order in Council to vary or remove an IMPB from Schedule 4 of the Pae Ora Act. An important feature of IMPBs is that they can renegotiate boundaries between each other as and when works for the collective. Such is the case for any emerging organisation who must consult with neighbouring IMPBs should their intended boundary result in overlap. This ensures the self-determination of communities, and strategic alignment with community need.

As at July 2023, 15 IMPBs were listed in Schedule 4, as shown in Figure 1.

Figure 1 - Map of Iwi-Māori Partnership Board areas



1.2. Purpose and audience for this report

Under the Pae Ora Act, Te Aka Whai Ora must take reasonable steps to support IMPBs to achieve their purpose, including by providing administrative, analytical, or financial support where needed; and providing sufficient and timely information. These data profiles have been prepared for each IMPB formed in 2023, as part of a commitment by Te Aka Whai Ora to provide IMPBs with health information to inform priorities and actions.

Te Aka Whai Ora has produced these profiles, together with support from Te Whatu Ora, to provide IMPBs with a baseline snapshot of the health of Māori in their rohe (region). These profiles are limited to the data sources and indicators currently available in the government health system, and may not capture all aspects of hauora Māori, determinants of wellbeing, or government responsibility.

1.3. Positioning

This profile has been drafted from a Kaupapa Māori research and epidemiology positioning (Simmonds, Robson et al. 2008). This positioning includes:

- a commitment to high quality ethnicity data reporting and analysis (that includes understanding how ethnicity data are collected and recorded and the implications of these factors on data quality from various sources);
- a commitment to using appropriate comparator groupings (or not) within ethnic data comparisons (that reflect Te Tiriti o Waitangi/rights-based and equity appropriate interpretations) (Harris, Paine et al. 2022), and;
- a strengths-based interpretation of data that rejects 'victim-blame' or 'cultural-deficit' interpretations of any data presented (Curtis 2016).

It is important to note that the identification of inequities between Māori and non-Māori is not a signal of Māori failure or shortcomings. Rather, a Kaupapa Māori positioning foregrounds racism, privilege and power imbalances as the fundamental drivers of ethnic inequities in health for Māori compared to non-Māori (Curtis, Jones et al. 2023).

The data presented in this profile require contextualisation - they are a starting point for IMPBs to interpret, together with other sources of information, and decide how best to respond to the needs (and rights) of their specific population. Although quantitative in nature, the data presented within these profiles are a dimension of 'whānau voice'. They represent Māori stories and Māori lived experience and should be valued as a taonga for the health system to use and respond to as part of the broader commitment to Te Tiriti o Waitangi and equity.

1.4. Understanding Māori health and health inequities

It is important to have a common understanding on what the fundamental drivers or Māori health and health inequities are in order to respond appropriately. A helpful framework is the 'Te Kupenga Hauora Māori (TKHM) modified model' (Curtis, Jones et al. 2023) – a Māori model that draws upon international theorisation on the causation of ethnic health inequities (Figure 2). The TKHM modified model outlines a framework to understand the causes of Māori:non-Māori health inequities within an Aotearoa and Indigenous specific context.

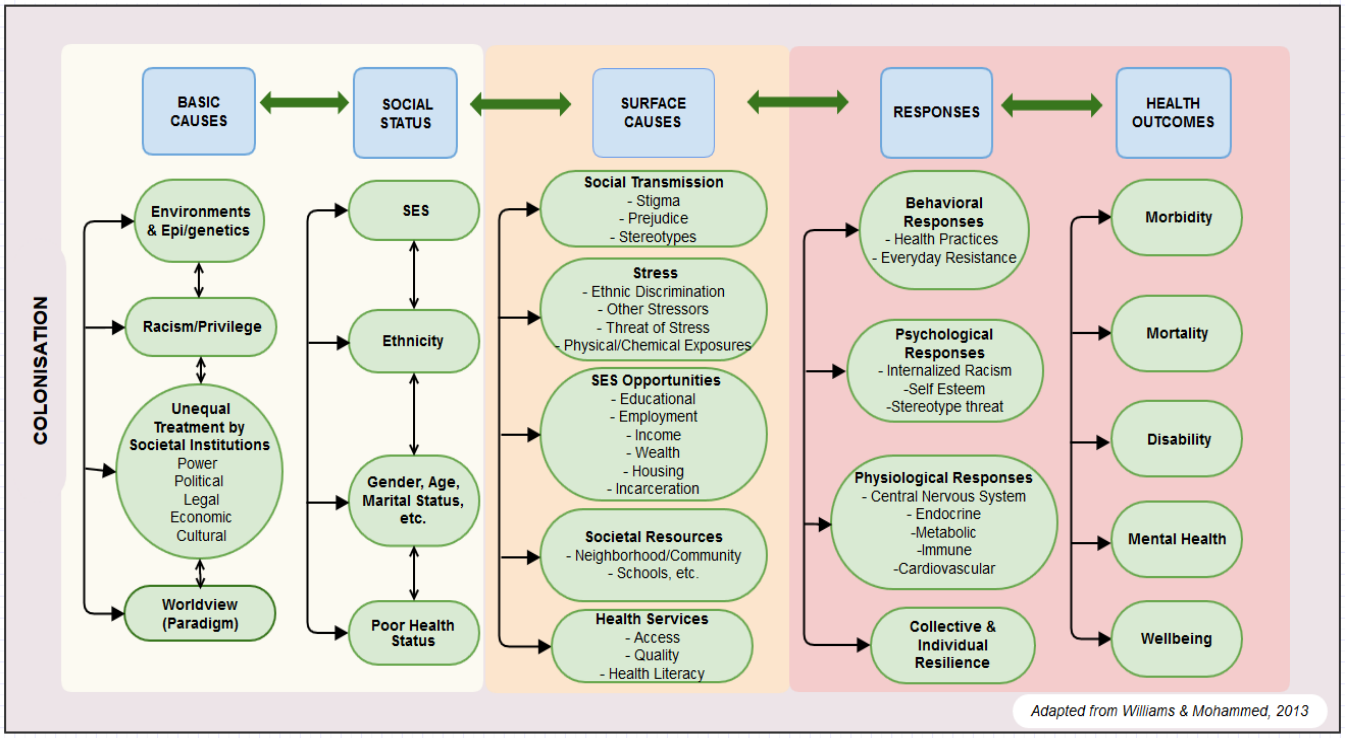
The framework emphasises the importance of distinguishing *basic* causes from *surface* (or intervening causes). Overall, changes in *basic* causes create important changes in health *outcomes*. *Social status* categories are created, and reinforced, by *basic* causes. *Social status* categories considered to have particular relevance to Māori health outcomes include: *ethnicity, socio-economic status, gender, age*, and *poor health status*. In the TKHM modified model, *surface causes* represent a number of intervening

mechanisms that link *social status* categories such as *ethnicity*, to *health outcomes*. Important intervening mechanisms include: *stress*, *socio-economic opportunities*, *societal resources*, *health services* and *social transmission*. Health *outcomes* reflect the mechanisms by which differences in health status and therefore health inequities are observed or measured. For example, health can vary with respect to *morbidity* (ill health), *mortality* (death rates), presence or absence of *disability*, *mental health* and generalised *wellbeing*.

The TKHM modified model foregrounds colonisation as a key determinant of health inequities underpinning all levels from *basic* to *surface* causes. In doing so, the model acknowledges the historical trauma of colonisation whilst also foregrounding the ongoing contemporary effects of colonisation in today's society. It is not a simple, unidirectional relationship between causes at different levels – but rather there is a dynamic interplay between causes and pathways. Worldviews and positioning are also a basic cause, and privilege alongside racism plays a causative role in Māori health inequities.

Explanations define solutions. Therefore, a conceptual framework can support the understanding of fundamental causes of Indigenous and Māori health inequities and how best to respond to those inequities once they have been identified. Many of the routine data that are collected and reported in Aotearoa, including in this report, focus on the downstream surface causes. It is important to understand that many of these indicators are outcomes/consequences of structural processes of marginalisation that we do not properly measure, and that intervention needs to occur upstream to achieve health equity for Māori.

Figure 2 - Te Kupenga Hauora Māori modified model for explaining Indigenous/ethnic determinants of health



Source: (Curtis, Jones et al. 2023)

1.5. Scope for these profiles

These profiles are the first reports which specifically focus on data related to IMPBs. These profiles focus on key population demographic data, indicators reflecting key socio-economic determinants of wellbeing, health status and health services indicators. Not every health issue or determinant is included. These IMPB profiles are presented in two volumes:

- Volume One – contains key demographic data and projections, overall life expectancy and health outcomes measures, and indicators relating to whānau wellbeing and socio-economic and environmental determinants of wellbeing.
- Volume Two – contains health service utilisation and outcomes measures, with a focus on the four health priority areas identified in the 2022 Te Aka Whai Ora Māori Health Priorities Report (Curtis E, Loring B et al. 2022): the first 1000 days, cancer, long term conditions, and mental health and addiction.

These reports are by no means exhaustive, and IMPBs may wish to also refer to other sources of information available through respective government agencies for more in-depth data related to areas such as education, social development, environment, employment or housing. We are limited to currently available data, which may not reflect all indicators of importance to IMPBs, and not all data (for example, on uncommon health conditions) can be meaningfully disaggregated by ethnicity to the level of IMPBs. These IMPB profiles are intended to be used in conjunction with other sources of publicly available health system reporting by the Ministry of Health, Te Whatu Ora, the Health Quality and Safety Commission, Statistics New Zealand (StatsNZ) and other agencies.

There have also been a number of previous sources of reporting specifically on Māori health, which IMPBs may wish to refer to for additional information relevant to their area, including trends over time. Some of these key sources include:

- **Whakamaua Dashboard**[1]

  This online dashboard presents quantitative measures which assess system performance against the four objectives of Whakamaua: Māori Health Action Plan 2020-2025. From 2023, the Whakamaua dashboard contains some indicators disaggregated by Iwi-Māori Partnership Boards (IMPB). These data for IMPBs use the Health Service Utilisation population as the denominator, which differs slightly from the Census population denominator chosen in these IMPB profiles. The Whakamaua dashboard compares Māori data to non-Māori non-Pacific data.

- **WAI 2575 Māori Health Trends Report**[2]

  This report was compiled by the Ministry of Health in 2019, to inform the Wai 2575 Health Services and Outcomes Kaupapa Inquiry (Wai 2575). The report shows changes of Māori health over the years 1990–2015. Most data are presented at a national level, for Māori compared to non-Māori, and Māori compared to non-Māori non-Pacific, although some variables are available at a District Health Board (DHB) level.

[1] https://minhealthnz.shinyapps.io/WhakamauaDashboard/

[2] https://www.health.govt.nz/publication/wai-2575-maori-health-trends-report

- **A Window on the Quality of Aotearoa New Zealand's Health Care 2019 – a view on Māori health equity[3]**

  A Window on the Quality of Aotearoa New Zealand's Health Care 2019 – a view on Māori health equity was compiled by the Health Quality and Safety Commission and highlights a number of areas where change is needed in the health system. The report is divided into three chapters. The first analyses inequity between how Māori and non-Māori access and receive health services, and the effects on equity of improvement activities in our system. The second chapter asks why these inequities exist, and the third chapter addresses opportunities for improvement.

- **2015 District Health Board Māori Health Profiles[4]**

  The 2015 District Health Board Māori Health Profiles were produced by Te Rōpū Rangahau Hauora a Eru Pōmare at the University of Otago in Wellington. The District Health Board Māori Health Profiles present a snapshot of Māori health compared with non-Māori across a range of health and disability-related indicators. They can create a picture of the health status of a DHB's population at a given time and allow some comparison of trends over time. The profiles are available as word and pdf documents, and Excel tables containing data from the profiles together with national rates for most indicators.

- **Tatau Kahukura: Māori health statistics[5]**

  Statistical profiles on Māori health compiled by the Ministry of Health, most recently completed in 2015. Presents Māori compared to non-Māori national level data for a range of health indicators (socio-economic determinants, risk factors, health services and health outcomes), and data are age-standardised to the 2001 Māori population.

- **Hauora: Māori Standards of Health IV: A study of the years 2000-2005[6]**

  Hauora: Māori Standards of Health IV, published in 2007, is the most recent edition in the Hauora series, produced by Te Rōpū Rangahau Hauora a Eru Pōmare, and covers the period 2000 to 2005. Careful consideration has been given to the manner in which evidence has been presented and the commentaries are rightly written from Māori perspectives. The first three chapters situate health statistics within the broader context, including the theoretical, demographic and socio-economic contexts. This is followed by chapters on mortality, public hospitalisations, cancer and mental health. This volume of Hauora also includes a number of topic-based chapters from invited authors, including chapters on cardiovascular disease; diabetes; respiratory disease; oral health; disability; sleep problems; occupational safety and health; health in prisons; and the National Primary Medical Care Survey.

To maximise consistency and make it easier for IMPBs to assess how various indicators in their rohe are tracking over time, we have endeavoured to replicate the scope and approach taken in the 2015 District Health Board Māori Health profiles as closely as possible. There are some minor variations in statistical methods, definitions and geographical boundaries for some indicators, which mean that exact comparison with these earlier profiles is not always possible.

[3] https://www.hqsc.govt.nz/resources/resource-library/a-window-on-the-quality-of-aotearoa-new-zealands-health-care-2019-a-view-on-maori-health-equity-2/

[4] https://www.health.govt.nz/publication/dhb-maori-health-profiles

[5] https://www.health.govt.nz/our-work/populations/maori-health/tatau-kahukura-maori-health-statistics

[6] https://www.otago.ac.nz/wellington/departments/publichealth/research-groups-in-the-department-of-public-health/erupomare/research/hauora-maori-standards-of-health-iv-a-study-of-the-years-2000-2005

1.6. Data sources

The data presented in this report come from routinely collected national government health datasets and routine national surveys. The main data sources for this report are:

- The 2018 Census of Population and Dwellings
- Te Kupenga 2018 (the Māori Social Survey)
- Mortality registrations
- Te Whatu Ora Primary Care Enrolment data

Data are presented for Māori and non-Māori residents, using the geographical boundaries in each dataset which most closely correspond to the boundaries of the IMPB. For some measures, the closest available match at this time has been the boundaries of the former DHBs covering the IMPB rohe. Where an IMPB area encompasses more than one former DHB, data are presented separately for each DHB area, to provide a sense of variation for Māori within the IMPB.

1.7. How to understand this report

The technical appendix at the end of this report contains further information to help users interpret the data presented. This includes a basic explanation of how to interpret the graphs and tables provided. There is also a description of key methods, including age-standardisation, comparator groups and statistical calculations. The appendix also contains a description of the quality of ethnicity data in each data source used in this profile, and how this may affect the accuracy of information for Māori. Further technical details are provided about the methods and data sources used to compile these reports, so that the methods can be replicated by others.

Ngā tatauranga taupori matua
Key demographics

2. Ngā tatauranga taupori matua – Key demographics

2.1. About Te Tauraki

Te Tauraki IMPB is home to an estimated 122,640 Māori in 2023 and consists of the geographic area of Te Waipounamu (South Island). Figure 3 shows that the health planning area of Te Tauraki IMPB includes all of the former West Coast, Southern, and South Canterbury DHBs, and virtually all of Canterbury DHB. The Chatham Islands are also part of Canterbury DHB, but the small population of the Chatham Islands is not likely to make a significant change to the relevance of Canterbury DHB data for Te Tauraki IMPB. As Figure 3 shows, Te Tauraki IMPB also includes parts of the former Nelson-Marlborough DHB, however as these areas of overlap do not include major population centres, data for Nelson-Marlborough DHB are not presented in this IMPB report for indicators where DHB level data are used. These geographic areas in the former Nelson-Marlborough DHB are included however in the IMPB level data on population demographics and whānau ora presented in this report. IMPB level data on population numbers presented in this report are mapped to SA2 geographic areas. In subsequent chapters, some IMPB data is mapped to DHB boundaries instead. See the technical appendix at the end of this report for more details about how the geographic areas for the IMPB have been calculated.

Figure 3 - Map of Te Tauraki IMPB with DHB boundaries, 2023

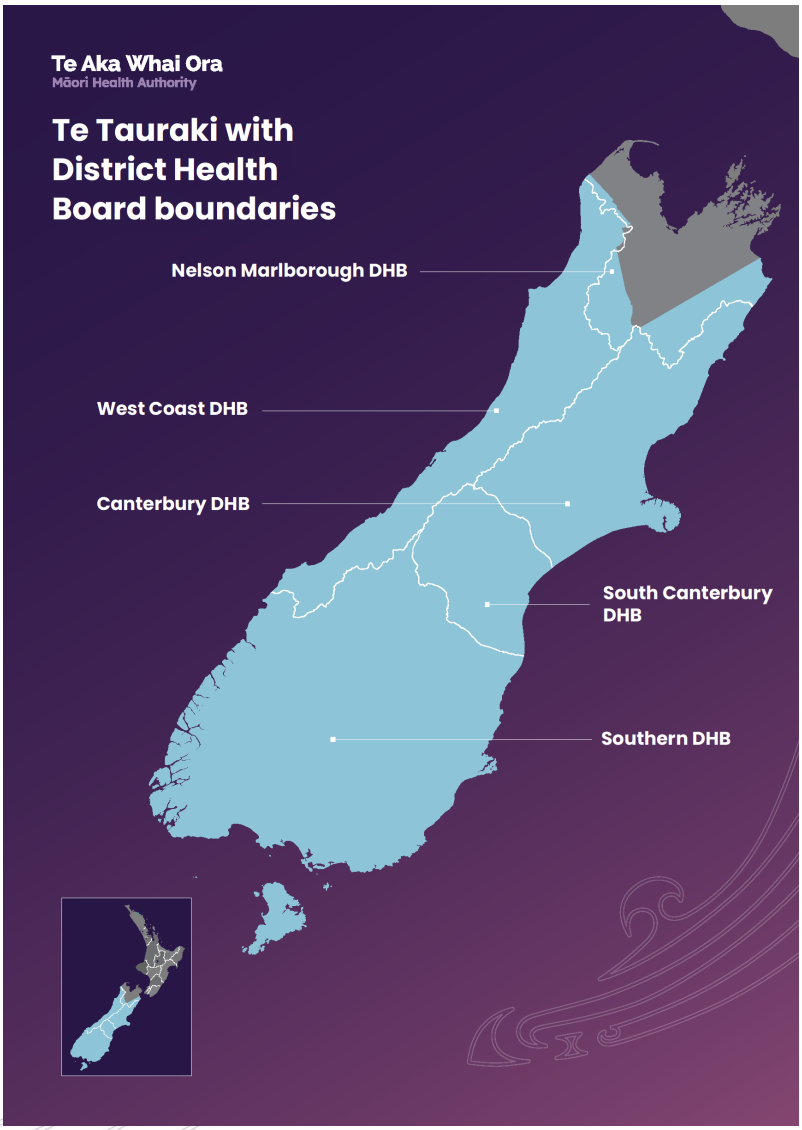


Table 1 shows the age breakdown of the population of Te Tauraki. The Māori population of Te Tauraki is very young, with 48% of the Māori population under the age of 25 years (compared to only 27% of the non-Māori population in the area). Overall, Māori make up 11% of the IMPB population, with slight variation by DHB. Māori make up 13% of the West Coast DHB population (Table 2), 10% of the Canterbury and South Canterbury DHB populations (Table 3 and Table 4), and 12% of the Southern DHB population (Table 5).

Table 1 - Population estimates by age group, Te Tauraki, 2023

Age group (years)	Māori			non-Māori		Total IMPB number
	Number	Age distribution	% of IMPB	Number	Age distribution	
0–14	35,660	29%		143,005	15%	178,665
15–24	22,830	19%		115,050	12%	137,880
25–44	32,635	27%		255,630	27%	288,265
45–64	21,945	18%		244,670	26%	266,615
65+	6,985	6%		183,600	20%	190,585
Total	**122,640**	**100%**	**12%**	**939,810**	**100%**	**1,062,450**

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

Table 2 - Population estimates by age group, West Coast DHB, 2023

Age group (years)	Māori			non-Māori		Total DHB number
	Number	Age distribution	% of DHB	Number	Age distribution	
0–14	1,200	29%		4,180	15%	5,380
15–24	640	15%		2,420	8%	3,060
25–44	1,000	24%		6,170	22%	7,170
45–64	940	22%		8,560	30%	9,500
65+	410	10%		7,220	25%	7,630
Total	**4,200**	**100%**	**13%**	**28,600**	**100%**	**32,800**

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

Table 3 - Population estimates by age group, Canterbury DHB, 2023

Age group (years)	Māori			non-Māori		Total DHB number
	Number	Age distribution	% of DHB	Number	Age distribution	
0–14	18,590	30%		83,790	16%	102,380
15–24	11,230	18%		66,780	12%	78,010
25–44	17,070	28%		150,250	28%	167,320
45–64	11,290	18%		138,020	26%	149,310
65+	3,890	6%		95,370	18%	99,260
Total	**62,000**	**100%**	**10%**	**534,300**	**100%**	**596,300**

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

Table 4 - Population estimates by age group, South Canterbury DHB, 2023

Age group (years)	Māori			non-Māori		Total DHB number
	Number	Age distribution	% of DHB	Number	Age distribution	
0–14	1,940	31%		8,540	15%	10,480
15–24	1,200	19%		4,970	9%	6,170
25–44	1,450	23%		13,450	24%	14,900
45–64	1,130	18%		15,430	27%	16,560
65+	490	8%		13,860	25%	14,350
Total	**6,200**	**100%**	**10%**	**56,300**	**100%**	**62,500**

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

Table 5 - Population estimates by age group, Southern DHB, 2023

Age group (years)	Māori			non-Māori		Total DHB number
	Number	Age distribution	% of DHB	Number	Age distribution	
0–14	11,790	29%		45,950	15%	57,740
15–24	8,330	20%		39,930	13%	48,260
25–44	10,920	27%		83,660	27%	94,580
45–64	7,240	18%		80,560	26%	87,800
65+	2,860	7%		61,740	20%	64,600
Total	**41,100**	**100%**	**12%**	**311,900**	**100%**	**353,000**

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

Over the next two decades, the Māori population of Te Tauraki is projected to grow to an estimated 176,940 (Table 6) and to be older. By 2043, 11% of the Māori population will be over 65 years old, compared to 6% in 2023. The Māori population is projected to make up an increasing share of the Te Tauraki IMPB population – from 12% in 2023 to 15% in 2043. In West Coast DHB, Māori make up 13% of the IMPB population in 2023, and this is projected to increase to 18% in 2043 (Table 7). In Canterbury DHB (Table 8), Māori will make up 13% in 2043 (compared to 10% in 2023). In South Canterbury (Table 9) this is slightly higher making up 15% in 2043 (compared to 10% in 2023). Māori in Southern DHB (Table 10) will make up 16% of Te Tauraki IMPB in 2043, an increase from 12% in 2023.

Table 6 - Population projections, Te Tauraki, 2023 to 2043

Year	Māori					non-Māori				
	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years
2023	122,640	12%	29%	63%	6%	939,810	88%	15%	65%	20%
2028	136,450	12%	27%	63%	8%	962,430	88%	14%	64%	22%
2033	150,360	13%	27%	63%	9%	981,590	87%	13%	64%	23%
2038	164,930	14%	26%	62%	10%	995,700	86%	13%	63%	25%
2043	176,940	15%	25%	63%	11%	1,003,670	85%	12%	63%	25%

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

Table 7 - Population projections, West Coast DHB, 2023 to 2043

Year	Māori					non-Māori				
	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years
2023	4,200	13%	29%	61%	10%	28,600	87%	15%	60%	25%
2028	4,580	14%	27%	59%	14%	28,120	86%	14%	57%	29%
2033	4,950	15%	26%	58%	16%	27,450	85%	13%	55%	32%
2038	5,310	17%	25%	58%	16%	26,490	83%	12%	54%	35%
2043	5,680	18%	25%	59%	16%	25,320	82%	11%	54%	34%

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

Table 8 - Population projections, Canterbury DHB, 2023 to 2043

Year	Māori					non-Māori				
	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years
2023	62,000	10%	30%	64%	6%	534,300	90%	16%	66%	18%
2028	69,300	11%	28%	64%	8%	552,000	89%	15%	66%	20%
2033	76,800	12%	27%	63%	10%	569,300	88%	14%	65%	21%
2038	84,400	13%	26%	63%	11%	584,200	87%	13%	64%	22%
2043	92,500	13%	25%	63%	12%	596,700	87%	13%	64%	23%

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

Table 9 - Population projections, South Canterbury DHB, 2023 to 2043

Year	Māori					non-Māori				
	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years
2023	6,200	10%	31%	61%	8%	56,300	90%	15%	60%	25%
2028	6,990	11%	29%	61%	10%	56,510	89%	14%	58%	27%
2033	7,820	12%	28%	61%	11%	56,380	88%	14%	57%	30%
2038	8,710	14%	27%	60%	12%	55,790	86%	13%	56%	31%
2043	9,640	15%	27%	60%	13%	54,960	85%	12%	56%	32%

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

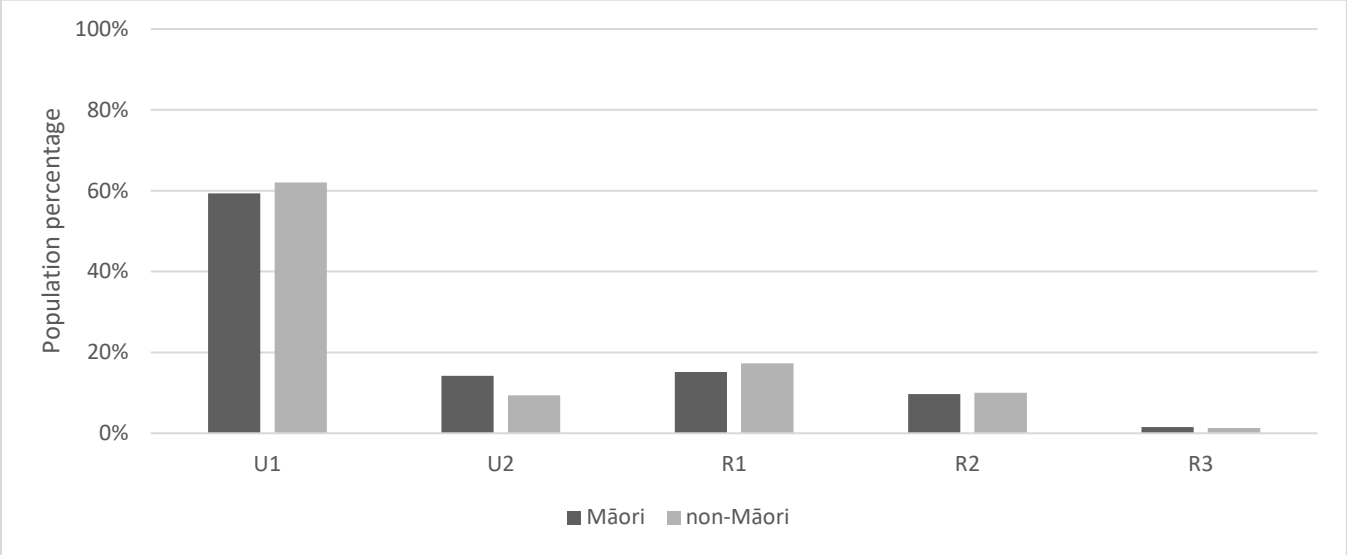
Table 10 - Population projections, Southern DHB, 2023 to 2043

Year	Māori					non-Māori				
	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years	Residents	% of IMPB	% 0–14 years	% 15–64 years	% 65+ years
2023	41,100	12%	29%	64%	7%	311,900	88%	15%	65%	20%
2028	46,000	13%	27%	65%	9%	316,900	87%	14%	64%	22%
2033	51,000	14%	26%	64%	10%	320,000	86%	13%	63%	24%
2038	56,100	15%	25%	64%	11%	321,400	85%	12%	62%	26%
2043	61,500	16%	24%	64%	12%	321,200	84%	12%	62%	27%

Source: Te Whatu Ora Populations Webtool (Statistics NZ base Census 2018 base).

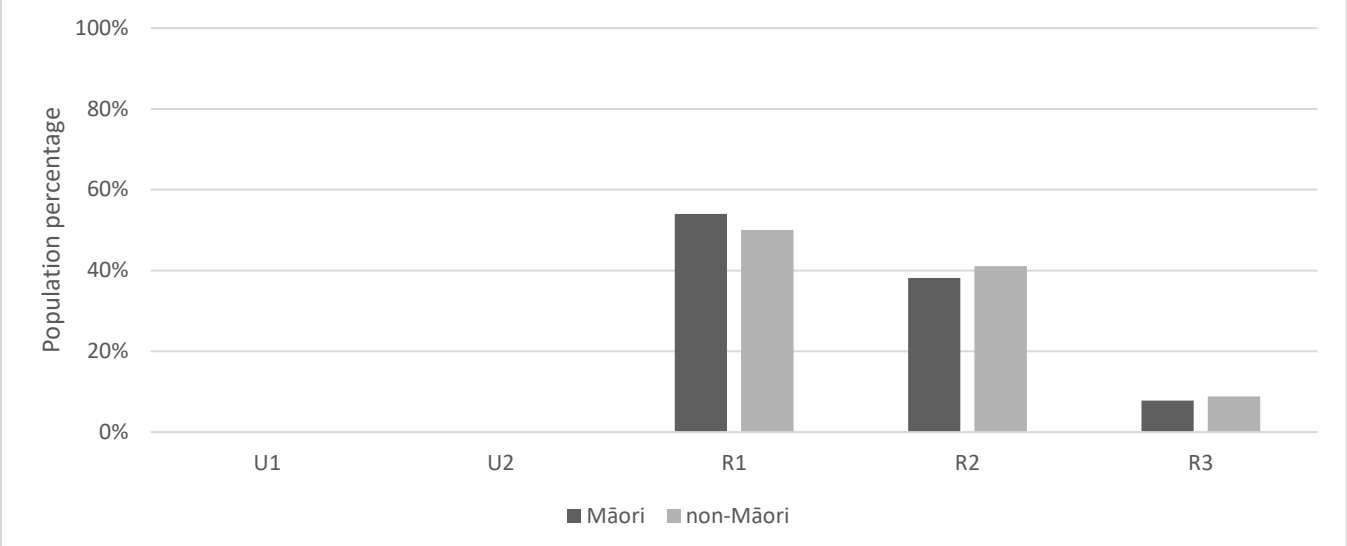
The Geographic Classification for Health (GCH) is a rural-urban geographic classification comprised of five categories, two urban and three rural, that reflect degrees of reducing urban influence and increasing rurality. It is applied to all of New Zealand's Statistical Areas on a scale from 'Urban 1' to 'Urban 2' based on population size, and from "Rural 1' to 'Rural 3' based on drive time to their closest major, large, medium, and small urban areas. Overall, most Māori in Te Tauraki (73%) live in urban areas compared to 71% for non-Māori (Figure 4). There are large differences in the rural-urban classification for Māori across DHBs within Te Tauraki IMPB. In West Coast DHB (Figure 5), no Māori live in urban areas with 100% of the Māori (and non-Māori) population living rurally. In Canterbury (Figure 6) and South Canterbury (Figure 7), the majority of the Māori population live in urban areas (87% and 77% respectively). In Southern DHB (Figure 8), 61% of Māori live in urban areas compared to rural areas (40%).

Figure 4 - Population distribution by urban and rural classification, Te Tauraki, 2023



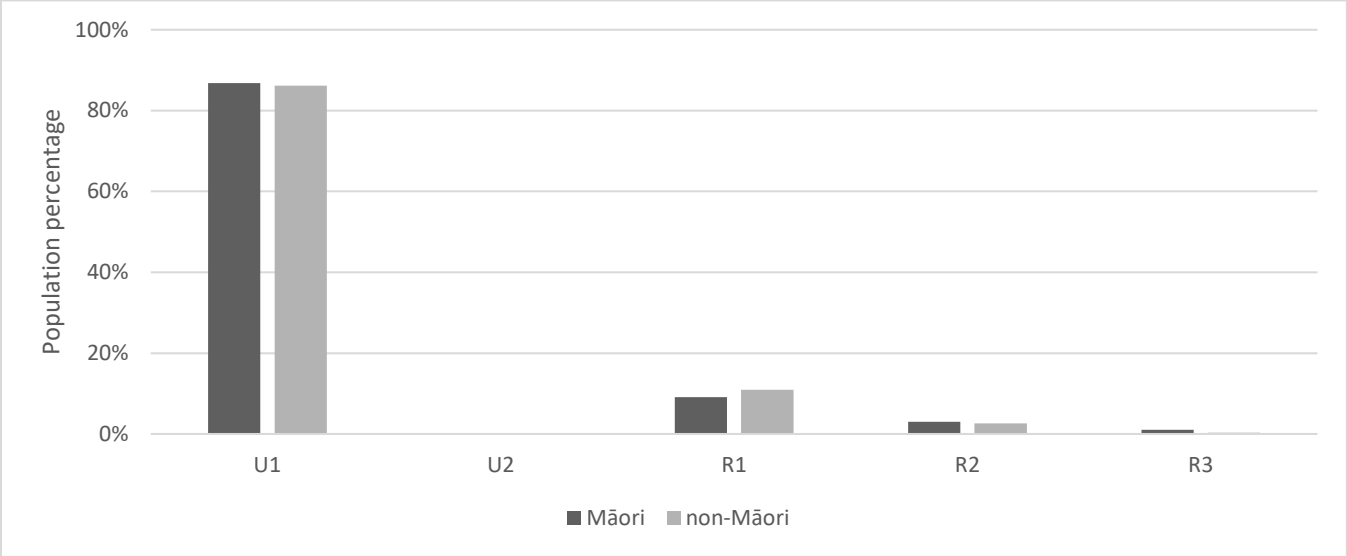
Source: Population count (Population Webtool SA2 2023); GCH (SA2 University of Otago). IMPB area is mapped to DHB geographic boundaries. Note that total values may add up to more than 100% due to rounding.

Figure 5 - Population distribution by urban and rural classification, West Coast DHB, 2023



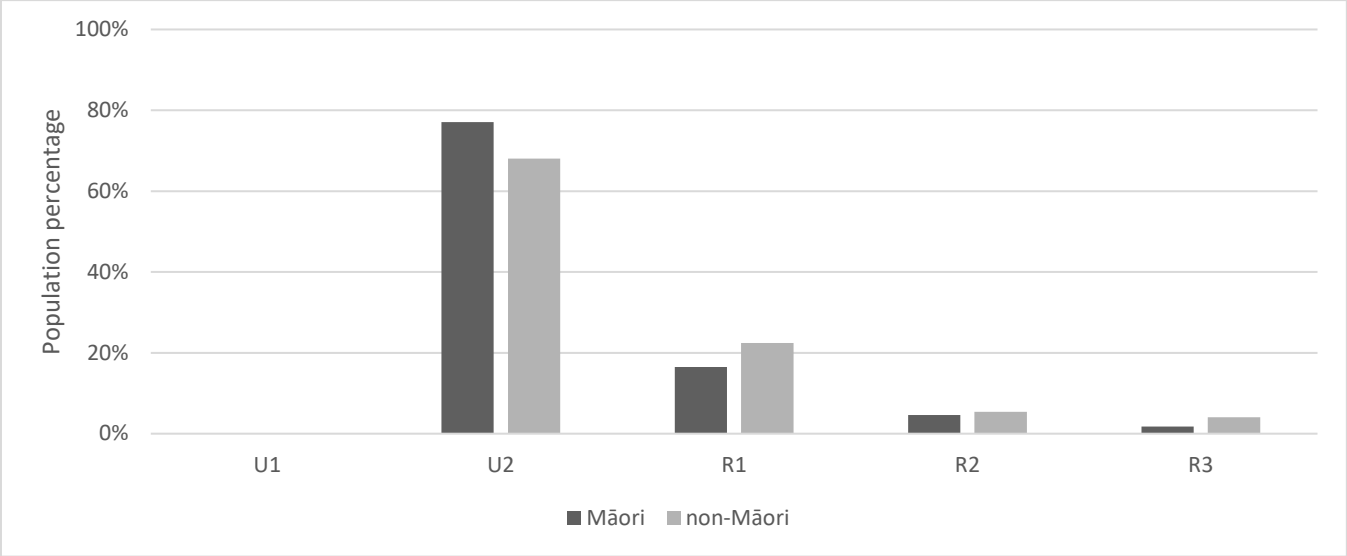
Source: Population count (Population Webtool SA2 2023); GCH (SA2 University of Otago). Note that total values may add up to more than 100% due to rounding.

Figure 6 - Population distribution by urban and rural classification, Canterbury DHB, 2023



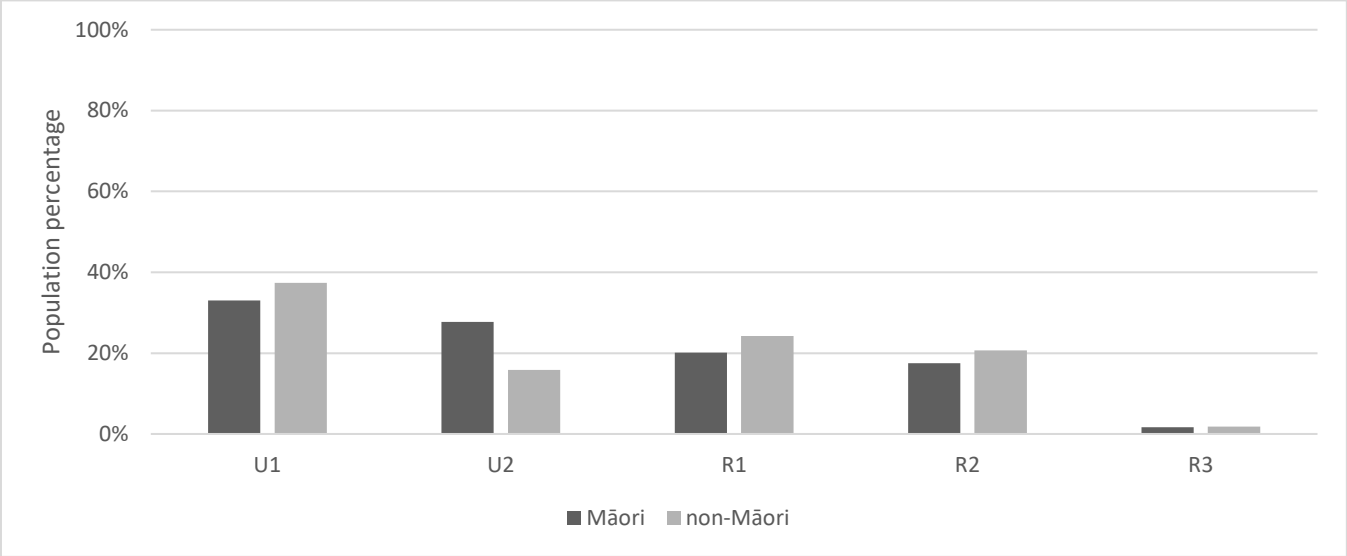
Source: Population count (Population Webtool SA2 2023); GCH (SA2 University of Otago). Note that total values may add up to more than 100% due to rounding.

Figure 7 - Population distribution by urban and rural classification, South Canterbury DHB, 2023



Source: Population count (Population Webtool SA2 2023); GCH (SA2 University of Otago). Note that total values may add up to more than 100% due to rounding.

Figure 8 - Population distribution by urban and rural classification, Southern DHB, 2023



Source: Population count (Population Webtool SA2 2023); GCH (SA2 University of Otago). Note that total values may add up to more than 100% due to rounding.

Mauri ora
Overall health status

3. Mauri ora – overall health status

3.1. Life Expectancy

The life expectancy at birth for Māori born in Te Tauraki (mapped to SA2 geographic areas) between 2018-2022 is 82.4 years for females and 78.0 years for males (Table 11). Māori life expectancy in Te Tauraki is 1.8 years shorter for Māori females and 2.7 years shorter for Māori males, compared to non-Māori in Te Tauraki. These Te Tauraki data present a relatively small life expectancy gap between Māori and non-Māori given that nationally for 2018-2020, Māori life expectancy was 7.0 years shorter than non-Māori (Walsh 2023).

Table 11 - Life expectancy at birth, Te Tauraki, Māori and non-Māori, 2018 to 2022

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	82.4	(81.4, 83.3)	84.2	(84.0, 84.4)	-1.8
Male	78.0	(77.3, 78.8)	80.7	(80.6, 80.9)	-2.7

Source: Mortality data sourced from Ministry of Health. Mortality Collection, https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/mortality-collection.
Population denominator data from Statistics New Zealand, Population estimates (2022 update).
Analysed by Michael Walsh, Equity, Scientific and Technical Team, Equity Directorate, Service Improvement and Innovation, Te Whatu Ora; October 2023.

Within the Te Tauraki IMPB, life-expectancy for Māori shows similar patterns across DHBs. In West Coast DHB (Table 12), life expectancy at birth is 79.4 years for Māori females (3 years shorter than non-Māori females) and 75.8 years for Māori males (2.3 years shorter than non-Māori males). In Canterbury DHB (Table 13), life expectancy for Māori was 82 years for females (2.3 years shorter than non-Māori females) and 77.7 years for Māori males (3.2 years shorter than non-Māori males). South Canterbury DHB (Table 14) has the lowest life expectancy gap for Māori females compared to non-Māori (0.5 years), and the largest life expectancy gap for Māori males compared to non-Māori males (4.1 years) within the IMPB. Life expectancy within South Canterbury equates to 82.4 years for Māori females and 75.7 years for Māori males respectively. Southern DHB (Table 15) has a life expectancy of 82.8 years for Māori females (1.3 years shorter than non-Māori females) and 79 years for Māori males (1.6 years shorter than non-Māori).

Table 12 - Life expectancy at birth, West Coast DHB, Māori and non-Māori, 2018 to 2022

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	79.4	(76.7, 82.0)	82.4	(81.4, 83.4)	-3.0
Male	75.8	(72.6, 79.0)	78.1	(77.0, 79.3)	-2.3

Source: Mortality data sourced from Ministry of Health. Mortality Collection, https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/mortality-collection.
Population denominator data from Statistics New Zealand, Population estimates (2022 update).
Analysed by Michael Walsh, Equity, Scientific and Technical Team, Equity Directorate, Service Improvement and Innovation, Te Whatu Ora; October 2023.

Table 13 - Life expectancy at birth, Canterbury DHB, Māori and non-Māori, 2018 to 2022

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	82.0	(80.5, 83.5)	84.3	(84.1, 84.5)	-2.3
Male	77.7	(76.7, 78.8)	80.9	(80.7, 81.1)	-3.2

Source: Mortality data sourced from Ministry of Health. Mortality Collection, https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/mortality-collection.
Population denominator data from Statistics New Zealand, Population estimates (2022 update).
Analysed by Michael Walsh, Equity, Scientific and Technical Team, Equity Directorate, Service Improvement and Innovation, Te Whatu Ora; October 2023.

Table 14 - Life expectancy at birth, South Canterbury DHB, Māori and non-Māori, 2018 to 2022

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	82.4	(79.3, 85.5)	82.9	(82.2, 83.6)	-0.5
Male	75.7	(72.9, 78.4)	79.8	(79.1, 80.5)	-4.1

Source: Mortality data sourced from Ministry of Health. Mortality Collection, https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/mortality-collection.
Population denominator data from Statistics New Zealand, Population estimates (2022 update). 2022.
Analysed by Michael Walsh, Equity, Scientific and Technical Team, Equity Directorate, Service Improvement and Innovation, Te Whatu Ora; October 2023.

Table 15 - Life expectancy at birth, Southern DHB, Māori and non-Māori, 2018 to 2022

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	82.8	(81.3, 84.3)	84.1	(83.9, 84.4)	-1.3
Male	79.0	(77.4, 80.5)	80.6	(80.3, 80.9)	-1.6

Source: Mortality data sourced from Ministry of Health. Mortality Collection, https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/mortality-collection.
Population denominator data from Statistics New Zealand, Population estimates (2022 update). 2022.
Analysed by Michael Walsh, Equity, Scientific and Technical Team, Equity Directorate, Service Improvement and Innovation, Te Whatu Ora; October 2023.

In terms of the conditions which make up the life expectancy gap for Māori, this degree of information is not available at IMPB level, however analysis has been done for the four Te Whatu Ora regions of Aotearoa.

In Te Waipounamu, the region where Te Tauraki is situated, for the period 2018 to 2020 the life expectancy for Māori was 80.1 years, 2.5 years lower than the non-Māori/non-Pacific population (82.6 years). The Te Waipounamu region also includes Nelson-Marlborough DHB, which is not part of Te Tauraki IMPB. Avoidable deaths include those considered *amenable* to high-quality healthcare, *preventable* through public health interventions, or both. Of the 2.5-year life expectancy gap for Māori in Te Waipounamu, 1.4 years can be attributed to conditions that are considered both amenable and preventable followed by 1.0 years from conditions considered preventable only and 0.4 years from conditions considered amenable only.

The leading avoidable causes of death contributing to the life expectancy gap among Māori in Te Waipounamu are coronary disease (0.5 years) and land transport injuries (0.3 years). A list of the top 10 conditions and their contribution to the gap are presented in Table 16. In total, these conditions contribute 2.0 years of the 2.5-year gap. These data are not able to be disaggregated by sex at a regional level because the numbers are too small.

Table 16 - Decomposition of the ethnic gap in life expectancy by avoidable category – Māori compared with non-Māori/non-Pacific, 2018 to 2020, Te Waipounamu region

Avoidable cause	Contribution (years)
Coronary disease	0.5
Land transport injuries	0.3
Suicide	0.2
Liver cancer	0.2
Diabetes	0.2
Chronic obstructive pulmonary disease (COPD)	0.2
Stroke	0.2
Other accidental injuries	0.1
Valvular heart disease	0.1
Alcohol use	0.1
Total contribution from top 10 avoidable conditions	**2.0 years***

Source: Te Whatu Ora, May 2023. The Contribution of Avoidable Mortality to the Life Expectancy Gap among the Māori and Pacific population. Regional Summary.

Note: * total number provided reflects source reporting (rounding issues may apply).

3.2. Self-assessed health

In 2018, 86.1% of Māori aged 15 years and over in Te Tauraki (mapped to SA2 geographic areas) reported their own health status as good, very good or excellent (Table 17), a higher percentage than Māori nationally (82.3%). A total of 13.9% of Māori in Te Tauraki reported their health status as fair or poor compared to 17.7% of Māori nationally. A higher percentage of Māori in Canterbury DHB (Table 19) reported their health status as good, very good or excellent (88.1%) than in Southern DHB (82.7%) (Table 21), although based on the numbers of participants in the 2018 Te Kupenga survey, it is not possible to determine whether this difference is statistically significant. Survey numbers are too small for reliable estimates for West Coast (Table 18) and South Canterbury (Table 20) DHBs.

Table 17 - Health status reported by Māori aged 15 years and over, Te Tauraki, 2018

Health Status	Te Tauraki		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	13.2	(11.4, 15.0)	15.1	(14.0, 16.2)
Very Good	42.4	(39.5, 45.3)	36.9	(35.4, 38.3)
Good	30.5	(27.9, 33.1)	30.3	(29.0, 31.7)
Fair/poor	13.9	(12.2, 15.5)	17.7	(16.6, 18.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Table 18 - Health status reported by Māori aged 15 years and over, West Coast DHB, 2018

Health Status	West Coast		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	S	(NA, NA)	15.1	(14.0, 16.2)
Very Good	42.1	(30.2, 54.0)	36.9	(35.4, 38.3)
Good	33.9 *	(23.1, 44.7)	30.3	(29.0, 31.7)
Fair/poor	S	(NA, NA)	17.7	(16.6, 18.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%, NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 19 - Health status reported by Māori aged 15 years and over, Canterbury DHB, 2018

Health Status	Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	13.4	(10.4, 16.3)	15.1	(14.0, 16.2)
Very Good	43.4	(38.8, 47.9)	36.9	(35.4, 38.3)
Good	31.3	(26.8, 35.8)	30.3	(29.0, 31.7)
Fair/poor	12.0	(9.4, 14.6)	17.7	(16.6, 18.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Table 20 - Health status reported by Māori aged 15 years and over, South Canterbury DHB, 2018

Health Status	South Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	S	(NA, NA)	15.1	(14.0, 16.2)
Very Good	61.9	(45.6, 78.2)	36.9	(35.4, 38.3)
Good	24.8 **	(10.5, 39.2)	30.3	(29.0, 31.7)
Fair/poor	S	(NA, NA)	17.7	(16.6, 18.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: ** shows a sampling error of 50% or more but less than 100%, NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 21 - Health status reported by Māori aged 15 years and over, Southern DHB, 2018

Health Status	Southern		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	14.9	(12.4, 17.4)	15.1	(14.0, 16.2)
Very Good	38.1	(34.7, 41.4)	36.9	(35.4, 38.3)
Good	29.7	(26.4, 32.9)	30.3	(29.0, 31.7)
Fair/poor	17.4	(15.0, 19.8)	17.7	(16.6, 18.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

3.3. Mortality

For the mortality data presented in this report, the IMPB area has been mapped to the DHB boundaries, so will differ slightly from IMPB data mapped to smaller SA2 geographic areas.

The leading causes of death for Māori in Te Tauraki in 2014-2018 were ischaemic heart disease, lung cancer, chronic obstructive pulmonary disease (COPD), suicide and cerebrovascular disease (Table 22). This differs slightly to the leading causes of death for Māori nationally (Table 27)., where suicide does not feature in the five leading causes, but diabetes does. In contrast, the leading causes of death for non-Māori in Te Tauraki were ischaemic heart disease, dementia, cerebrovascular disease, COPD and lung cancer in 2014-2018.

The leading causes of death for Māori females in Te Tauraki in 2014-2018 were ischaemic heart disease, lung cancer, COPD, cerebrovascular disease and breast cancer (Table 22), the first four of which are similar to Māori females nationally (Table 27). For Māori males in Te Tauraki, the leading causes of death in 2014-2018 were ischaemic heart disease, lung cancer, suicide, COPD and transport accidents (Table 22), which differed slightly to Māori males nationally, where diabetes featured as the third leading cause of death (Table 27).

Table 22 - Leading causes of death for Māori, all ages, Te Tauraki, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av.no. per year	Age-standardised rate per 100,000 (95% CI)		Av.no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Ischaemic heart disease	16	22.5	(12.8, 36.6)	492	11.0	(9.6, 12.4)	**2.05**	**(1.23, 3.41)**	11.5
Lung cancer	13	20.9	(11.1, 35.6)	149	7.8	(6.4, 9.4)	**2.68**	**(1.51, 4.77)**	13.1
COPD	11	15.5	(7.6, 28.2)	179	6.6	(5.4, 7.9)	**2.36**	**(1.25, 4.45)**	8.9
Cerebrovascular disease	8	11.5	(4.7, 23.2)	327	7.9	(6.6, 9.3)	1.46	(0.70, 3.05)	3.6
Breast cancer	6	10.2	(3.5, 22.8)	131	9.1	(7.1, 11.3)	1.13	(0.47, 2.68)	1.1
Male									
Ischaemic heart disease	36	53.1	(36.9, 74.0)	582	25.1	(22.6, 27.8)	**2.11**	**(1.49, 3.00)**	28.0
Lung cancer	17	24.3	(14.0, 39.2)	171	9.5	(7.9, 11.3)	**2.55**	**(1.53, 4.26)**	14.8
Suicide	13	28.7	(15.2, 49.0)	84	15.9	(12.3, 20.1)	1.81	**(1.00, 3.27)**	12.8
COPD	10	14.1	(6.6, 26.3)	191	7.6	(6.4, 8.9)	1.86	(0.97, 3.59)	6.5
Transport accidents	7	13.8	(5.3, 28.8)	57	11.1	(8.0, 14.8)	1.25	(0.55, 2.82)	2.7
Total									
Ischaemic heart disease	52	38.1	(28.3, 50.2)	1,073	17.7	(16.3, 19.2)	**2.15**	**(1.61, 2.87)**	20.4
Lung cancer	30	22.7	(15.3, 32.5)	320	8.6	(7.5, 9.8)	**2.64**	**(1.80, 3.88)**	14.1
COPD	20	14.8	(9.0, 22.8)	370	7.0	(6.1, 7.9)	**2.12**	**(1.34, 3.34)**	7.8
Suicide	18	19.7	(11.6, 31.3)	111	10.7	(8.6, 13.1)	**1.85**	**(1.11, 3.09)**	9.0
Cerebrovascular disease	15	10.8	(6.0, 18.0)	540	8.2	(7.3, 9.3)	1.32	(0.77, 2.24)	2.6

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

The leading causes of death for Māori in West Coast DHB in 2014-2018 were ischaemic heart disease, suicide, lung cancer, chronic obstructive pulmonary disease (COPD) and diabetes (Table 23). This is in contrast to the leading causes of death for non-Māori in West Coast DHB, which were ischaemic heart disease, cerebrovascular disease, dementia, COPD and lung cancer in 2014-2018. The leading cause of death for Māori females in West Coast DHB in 2014-2018 was ischaemic heart disease (Table 23). For Māori males, the leading causes of death in 2014-2018 were suicide, ischaemic heart disease and lung cancer. Because of the small population size in West Coast DHB, just 1-2 deaths from a particular cause can have a large impact on the ranking of leading causes. For this reason, local causes of death for Māori should be interpreted together with the leading causes of death for Māori nationally (Table 27).

Table 23 - Leading causes of death for Māori, all ages, West Coast DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av.no. per year	Age-standardised rate per 100,000 (95% CI)		Av.no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Ischaemic heart disease	1	29.3	(0.9, 144.4)	16	13.9	(6.3, 25.0)	2.12	(0.32, 14.10)	15.4
Male									
Suicide	2	100.1	(6.2, 414.5)	4	27.2	(4.6, 75.6)	3.67	(0.54, 25.08)	72.9
Ischaemic heart disease	2	45.8	(2.8, 189.6)	24	25.9	(14.1, 41.8)	1.77	(0.34, 9.17)	19.9
Lung cancer	1	32.5	(0.8, 160.8)	8	12.8	(3.5, 28.5)	2.53	(0.34, 18.77)	19.7
Total									
Ischaemic heart disease	3	37.3	(6.8, 113.2)	40	19.8	(12.6, 29.0)	1.88	(0.54, 6.52)	17.5
Suicide	2	49.2	(3.2, 203.1)	6	17.8	(4.7, 42.0)	2.76	(0.45, 16.96)	31.4
Lung cancer	2	20.7	(1.4, 85.0)	14	10.1	(4.5, 18.4)	2.04	(0.38, 10.93)	10.6
COPD	1	20.3	(0.6, 92.0)	16	9.3	(4.7, 16.0)	2.19	(0.37, 13.04)	11.0
Diabetes mellitus	1	13.1	(0.2, 72.7)	7	3.8	(1.0, 8.9)	3.41	(0.39, 29.92)	9.3

Source: Mortality dataset, Ministry of Health.

The leading causes of death for Māori in Canterbury DHB in 2014-2018 were ischaemic heart disease, lung cancer, chronic obstructive pulmonary disease (COPD), suicide and cerebrovascular disease (Table 24). This is in contrast to the leading causes of death for non-Māori in Canterbury DHB, which were ischaemic heart disease, dementia, cerebrovascular disease, COPD and lung cancer in 2014-2018. The leading causes of death for Māori females in Canterbury DHB in 2014-2018 were ischaemic heart disease, lung cancer, COPD, breast cancer and cerebrovascular disease (Table 24). For Māori males, the leading causes of death in 2014-2018 were ischaemic heart disease, lung cancer, suicide, transport accidents and COPD.

Table 24 - Leading causes of death for Māori, all ages, Canterbury DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av.no. per year	Age-standardised rate per 100,000 (95% CI)		Av.no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Ischaemic heart disease	9	23.9	(10.7, 45.6)	267	10.6	(8.8, 12.6)	**2.25**	**(1.13, 4.46)**	13.3
Lung cancer	7	22.8	(9.2, 46.4)	75	7.2	(5.3, 9.3)	**3.18**	**(1.46, 6.94)**	15.6
COPD	6	16.0	(5.5, 36.0)	86	6.0	(4.5, 7.8)	**2.66**	**(1.11, 6.37)**	10.0
Breast cancer	4	14.8	(3.9, 37.6)	70	8.5	(6.1, 11.4)	1.74	(0.63, 4.82)	6.3
Cerebrovascular disease	4	10.4	(2.3, 28.3)	184	7.6	(6.0, 9.3)	1.37	(0.46, 4.05)	2.8
Male									
Ischaemic heart disease	21	60.3	(37.0, 92.5)	310	25.2	(21.8, 28.9)	**2.39**	**(1.52, 3.76)**	35.1
Lung cancer	10	27.4	(13.0, 50.7)	93	9.5	(7.4, 12.0)	**2.89**	**(1.48, 5.64)**	17.9
Suicide	6	21.4	(7.5, 47.6)	45	14.6	(10.2, 20.0)	1.47	(0.61, 3.57)	6.8
Transport accidents	4	15.7	(4.2, 39.9)	26	8.5	(5.0, 13.1)	1.86	(0.63, 5.44)	7.2
COPD	4	12.7	(3.6, 31.5)	92	6.8	(5.2, 8.5)	1.88	(0.71, 4.99)	5.9
Total									
Ischaemic heart disease	30	42.9	(28.8, 61.5)	577	17.6	(15.7, 19.6)	**2.44**	**(1.67, 3.56)**	25.3
Lung cancer	17	25.3	(14.7, 40.5)	168	8.2	(6.8, 9.8)	**3.08**	**(1.85, 5.11)**	17.1
COPD	10	14.4	(6.8, 26.5)	178	6.3	(5.2, 7.5)	**2.29**	**(1.19, 4.38)**	8.1
Suicide	9	17.6	(7.9, 33.7)	59	9.8	(7.2, 13.0)	1.80	(0.88, 3.69)	7.8
Cerebrovascular disease	7	9.9	(3.9, 20.6)	303	8.1	(6.9, 9.5)	1.22	(0.57, 2.63)	1.8

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

The leading causes of death for Māori in South Canterbury DHB in 2014-2018 were ischaemic heart disease, lung cancer, chronic obstructive pulmonary disease (COPD) and dementia (Table 25). This is in contrast to the leading causes of death for non-Māori in South Canterbury DHB, which were ischaemic heart disease, dementia, cerebrovascular disease, COPD and colorectal cancer in 2014-2018. The leading cause of death for Māori females in South Canterbury DHB in 2014-2018 was lung cancer (Table 25). For Māori males, the leading causes of death in 2014-2018 were ischaemic heart disease and COPD. Because of the small population size in South Canterbury DHB, just 1-2 deaths from a particular cause can have a large impact on the ranking of leading causes. For this reason, local causes of death for Māori should be interpreted together with the leading causes of death for Māori nationally (Table 27).

Table 25 - Leading causes of death for Māori, all ages, South Canterbury DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av.no. per year	Age-standardised rate per 100,000 (95% CI)		Av.no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Lung cancer	1	29.3	(0.3, 163.3)	11	8.0	(3.1, 15.8)	3.65	(0.45, 29.68)	21.3
Male									
Ischaemic heart disease	2	42.6	(2.9, 175.4)	50	28.4	(16.9, 42.6)	1.50	(0.30, 7.53)	14.2
COPD	1	27.9	(0.2, 155.7)	16	8.1	(4.0, 14.0)	3.44	(0.44, 26.74)	19.8
Total									
Ischaemic heart disease	2	28.9	(3.7, 99.4)	90	19.5	(13.1, 27.0)	1.48	(0.37, 5.84)	9.4
Lung cancer	2	21.6	(1.5, 89.0)	22	7.6	(4.0, 12.5)	2.85	(0.55, 14.64)	14.0
COPD	2	20.6	(1.3, 85.2)	31	6.9	(4.1, 10.5)	3.01	(0.59, 15.21)	13.7
Dementia	1	13.5	(0.2, 67.5)	59	8.2	(5.9, 11.1)	1.64	(0.26, 10.41)	5.3

Source: Mortality dataset, Ministry of Health.
Note: Dementia includes Alzheimer's Disease.

The leading causes of death for Māori in Southern DHB in 2014-2018 were ischaemic heart disease, lung cancer, suicide. chronic obstructive pulmonary disease (COPD) and cerebrovascular disease (Table 26). This is in contrast to the leading causes of death for non-Māori in Southern DHB, which were ischaemic heart disease, dementia, cerebrovascular disease, COPD and colorectal cancer in 2014-2018. The leading causes of death for Māori females in Southern DHB in 2014-2018 were ischaemic heart disease, lung cancer, chronic obstructive pulmonary disease (COPD) and diabetes (Table 26). For Māori males, the leading causes of death in 2014-2018 were ischaemic heart disease, suicide, lung cancer, COPD and diabetes. Because of the small population size in Southern DHB, just 1-2 deaths from a particular cause can have a large impact on the ranking of leading causes. For this reason, local causes of death for Māori should be interpreted together with the leading causes of death for Māori nationally (Table 27).

Table 26 - Leading causes of death for Māori, all ages, Southern DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av.no. per year	Age-standardised rate per 100,000 (95% CI)		Av.no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Ischaemic heart disease	5	19.9	(6.5, 45.6)	169	11.1	(9.0, 13.6)	1.79	(0.74, 4.33)	8.8
Lung cancer	5	18.6	(5.5, 45.1)	57	8.8	(6.3, 11.9)	2.11	(0.80, 5.56)	9.8
COPD	4	14.4	(3.4, 38.8)	71	7.4	(5.4, 9.7)	1.95	(0.66, 5.76)	7.0
Cerebrovascular disease	3	12.9	(2.8, 35.7)	105	8.6	(6.0, 11.5)	1.50	(0.49, 4.60)	4.3
Diabetes mellitus	2	7.7	(0.8, 27.9)	26	2.7	(1.4, 4.5)	2.85	(0.63, 12.77)	5.0
Male									
Ischaemic heart disease	11	45.0	(22.0, 80.8)	198	24.4	(20.1, 29.1)	1.85	(0.99, 3.45)	20.6
Suicide	6	36.4	(12.5, 81.2)	31	17.0	(10.9, 25.1)	2.14	(0.85, 5.38)	19.4
Lung cancer	5	20.2	(6.3, 47.5)	59	9.7	(7.1, 12.9)	2.08	(0.81, 5.29)	10.5
COPD	4	13.8	(3.4, 36.5)	74	8.4	(6.3, 10.9)	1.64	(0.57, 4.72)	5.4
Diabetes mellitus	3	13.2	(2.2, 39.8)	28	3.7	(2.1, 5.9)	3.53	(0.99, 12.65)	9.5
Total									
Ischaemic heart disease	17	32.5	(18.5, 52.7)	367	17.5	(15.1, 20.0)	**1.86**	**(1.12, 3.10)**	15.0
Lung cancer	10	19.3	(8.9, 36.1)	116	9.2	(7.4, 11.4)	**2.09**	**(1.06, 4.10)**	10.1
Suicide	7	22.0	(8.6, 45.8)	41	11.7	(8.0, 16.3)	1.89	(0.82, 4.31)	10.3
COPD	7	14.0	(5.7, 28.5)	145	7.8	(6.3, 9.4)	1.80	(0.85, 3.84)	6.2
Cerebrovascular disease	7	12.6	(4.8, 26.8)	172	8.3	(6.5, 10.3)	1.53	(0.68, 3.41)	4.3

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

Table 27 - Leading causes of death for Māori, all ages, Aotearoa, 2014 to 2018

Cause	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		non-Māori leading cause
	Age-standardised rate per 100,000 (95% CI)		Age-standardised rate per 100,000 (95% CI)				
Female							
Lung cancer	29.4	(25.4, 33.9)	7.7	(7.0, 8.4)	**3.84**	**(3.24, 4.55)**	Ischaemic heart disease
Ischaemic heart disease	24.4	(20.8, 28.3)	10.1	(9.5, 10.7)	**2.42**	**(2.05, 2.84)**	Dementia
COPD	16.6	(13.7, 19.9)	5.3	(4.8, 5.8)	**3.14**	**(2.55, 3.86)**	Cerebrovascular disease
Cerebrovascular disease	13.9	(11.2, 17.1)	7.7	(7.1, 8.4)	**1.80**	**(1.44, 2.25)**	COPD
Diabetes mellitus	12.9	(10.3, 16.0)	2.7	(2.3, 3.2)	**4.76**	**(3.64, 6.23)**	Lung cancer
Male							
Ischaemic heart disease	56.7	(50.5, 63.4)	25.3	(24.1, 26.6)	**2.24**	**(1.98, 2.53)**	Ischaemic heart disease
Lung cancer	28.4	(24.2, 33.2)	9.1	(8.4, 9.9)	**3.12**	**(2.61, 3.72)**	Dementia
Diabetes mellitus	19.3	(15.8, 23.4)	4.1	(3.6, 4.6)	**4.76**	**(3.77, 6.00)**	Cerebrovascular disease
COPD	15.5	(12.5, 19.1)	6.4	(5.8, 6.9)	**2.44**	**(1.95, 3.04)**	Lung cancer
Suicide	23.6	(18.8, 29.3)	13.0	(11.4, 14.6)	**1.82**	**(1.42, 2.34)**	COPD
Total							
Ischaemic heart disease	39.4	(35.9, 43.1)	17.3	(16.6, 18.0)	**2.27**	**(2.06, 2.51)**	Ischaemic heart disease
Lung cancer	29.0	(26.0, 32.2)	8.3	(7.8, 8.9)	**3.48**	**(3.08, 3.93)**	Dementia
COPD	16.0	(13.9, 18.3)	5.7	(5.4, 6.1)	**2.79**	**(2.40, 3.24)**	Cerebrovascular disease
Diabetes mellitus	15.9	(13.7, 18.4)	3.4	(3.0, 3.7)	**4.75**	**(3.99, 5.67)**	Lung cancer
Cerebrovascular disease	13.4	(11.4, 15.7)	8.0	(7.5, 8.4)	**1.68**	**(1.43, 1.99)**	COPD

Source: Mortality dataset, Ministry of Health.

Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates. Cerebrovascular disease includes stroke. Dementia includes Alzheimer's Disease

When looking at all deaths, the age-standardised death rate (254 deaths each year per 100,000 people) was 1.5 times higher for Māori compared to non-Māori in Te Tauraki in 2014-2018 (Table 28). This equates to an average of 134 Māori females and 179 Māori males dying each year in Te Tauraki.

Table 28 - All-cause deaths, all ages, Te Tauraki, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	134	215.9	(179.7, 257.2)	3,424	136.5	(128.0, 145.2)	**1.58**	**(1.31, 1.91)**	79.4
Male	179	289.9	(247.8, 336.9)	3,379	195.0	(184.8, 205.5)	**1.49**	**(1.27, 1.74)**	94.9
Total	314	254.3	(226.0, 284.9)	6,803	165.0	(158.4, 171.8)	**1.54**	**(1.36, 1.74)**	89.3

Source: Mortality dataset, Ministry of Health.

Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB. Average no. per year columns may not total exactly because of rounding.

When looking at all deaths, the age-standardised death rate was 270 deaths each year per 100,000 people in West Coast DHB in 2014-2018 (Table 29). This equates to an average of 8 Māori females and 8 Māori males dying each year in West Coast DHB.

Table 29 - All-cause deaths, all ages, West Coast DHB, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	8	237.1	(92.0, 484.4)	124	167.2	(113.5, 228.5)	1.42	(0.63, 3.21)	69.9
Male	8	307.5	(120.8, 621.5)	147	259.9	(190.4, 338.4)	1.18	(0.54, 2.60)	47.6
Total	16	270.0	(146.1, 449.6)	271	214.1	(169.5, 262.8)	1.26	(0.72, 2.22)	55.9

Source: Mortality dataset, Ministry of Health.

When looking at all deaths, the age-standardised death rate (269 deaths each year per 100,000 people) was 1.7 times higher for Māori compared to non-Māori in Canterbury DHB in 2014-2018 (Table 30). This equates to an average of 74 Māori females and 98 Māori males dying each year in Canterbury DHB.

Table 30 - All-cause deaths, all ages, Canterbury DHB, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per. year	Age-standardised rate per 100,000 (95% CI)		Av.no. per. year	Age-standardised rate per 100,000 (95% CI)				
Female	74	233.6	(181.9, 295.2)	1,812	128.6	(117.8, 139.9)	**1.82**	**(1.41, 2.33)**	105.0
Male	98	299.8	(242.2, 366.7)	1,785	185.9	(172.9, 199.3)	**1.61**	**(1.30, 2.00)**	113.9
Total	172	269.0	(229.4, 313.3)	3,597	156.4	(147.9, 165.1)	**1.72**	**(1.46, 2.02)**	112.6

Source: Mortality dataset, Ministry of Health.
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB. Average no. per year columns may not total exactly because of rounding.

When looking at all deaths, the age-standardised death rate the age-standardised death rate was 213 deaths each year per 100,000 people for Māori in South Canterbury DHB in 2014-2018 (Table 31). This equates to an average of 6 Māori females and 10 Māori males dying each year in South Canterbury DHB.

Table 31 - All-cause deaths, all ages, South Canterbury DHB, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	6	163.1	(53.1, 369.1)	291	149.3	(113.7, 188.1)	1.09	(0.45, 2.66)	13.8
Male	10	271.9	(125.8, 509.4)	273	209.7	(165.1, 258.5)	1.30	(0.66, 2.55)	62.2
Total	15	213.1	(118.0, 352.5)	564	178.9	(150.0, 209.6)	1.19	(0.70, 2.04)	34.2

Source: Mortality dataset, Ministry of Health.
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB. Average no. per year columns may not total exactly because of rounding.

When looking at all deaths, the age-standardised death rate the age-standardised death rate (238 deaths each year per 100,000 people) was 1.4 times higher for Māori compared to non-Māori in Southern DHB in 2014-2018 (Table 32). This equates to an average of 47 Māori females and 63 Māori males dying each year in Southern DHB.

Table 32 - All-cause deaths, all ages, Southern DHB, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av.no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	47	196.6	(142.0, 264.5)	1,197	143.9	(129.0, 159.5)	1.37	(0.99, 1.88)	52.7
Male	63	278.3	(210.8, 359.6)	1,174	201.9	(183.9, 220.7)	**1.38**	**(1.05, 1.81)**	76.4
Total	110	237.9	(193.6, 288.8)	2,371	172.2	(160.4, 184.2)	**1.38**	**(1.12, 1.70)**	65.7

Source: Mortality dataset, Ministry of Health.
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates in the DHB. Average no. per year columns may not total exactly because of rounding.

The gap between Māori and non-Māori was higher for avoidable deaths (those deaths considered amenable to high-quality healthcare, preventable through public health interventions, or both) compared to all deaths in Te Tauraki in 2014-2018 (Table 33). The age-standardised potentially avoidable death rate (151.8 deaths each year per 100,000 people) was 1.9 times higher for Māori compared to non-Māori in Te Tauraki in 2014-2018. This equates to an average of 65 avoidable deaths each year in Māori females aged 0-74 years, and 105 in Māori males in Te Tauraki.

Table 33 - Potentially avoidable deaths, ages 0-74 years, Te Tauraki, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av.no. per year	Age-standardised rate per 100,000 (95% CI)		Av.no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	65	118.6	(90.8, 151.9)	596	65.8	(58.8, 73.3)	**1.80**	**(1.37, 2.36)**	52.8
Male	105	183.6	(149.2, 223.4)	864	98.2	(89.9, 107.0)	**1.87**	**(1.51, 2.32)**	85.4
Total	170	151.8	(129.3, 177.1)	1,460	82.1	(76.6, 87.8)	**1.85**	**(1.56, 2.19)**	69.7

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

The age-standardised potentially avoidable death rate was 173.5 deaths each year per 100,000 people for Māori in West Coast DHB in 2014-2018 (Table 34). This equates to an average of 3 avoidable deaths each year in Māori females aged 0-74 years, and 6 in Māori males in West Coast DHB.

Table 34 - Potentially avoidable deaths, ages 0-74 years, West Coast DHB, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	3	118.3	(17.5, 347.9)	29	86.9	(43.6, 144.3)	1.36	(0.37, 4.99)	31.4
Male	6	234.1	(71.8, 538.3)	48	150.2	(93.1, 220.9)	1.56	(0.59, 4.11)	83.9
Total	9	173.5	(72.0, 340.3)	77	118.9	(82.2, 162.4)	1.46	(0.67, 3.16)	54.6

Source: Mortality dataset, Ministry of Health.

The gap between Māori and non-Māori was higher for avoidable deaths (those deaths considered amenable to high-quality healthcare, preventable through public health interventions, or both) compared to all deaths in Canterbury DHB in 2014-2018 (Table 35). The age-standardised potentially avoidable death rate (163 deaths each year per 100,000 people) was 2.1 times higher for Māori compared to non-Māori in Canterbury DHB in 2014-2018. This equates to an average of 36 avoidable deaths each year in Māori females aged 0-74 years, and 61 in Māori males in Canterbury DHB.

Table 35 - Potentially avoidable deaths, ages 0-74 years, Canterbury DHB, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	36	128.8	(89.6, 179.1)	302	60.4	(51.5, 70.1)	**2.13**	**(1.48, 3.07)**	68.4
Male	61	194.2	(147.5, 250.8)	451	92.5	(81.9, 103.8)	**2.10**	**(1.58, 2.78)**	101.7
Total	97	163.2	(131.7, 199.8)	753	76.5	(69.5, 83.9)	**2.13**	**(1.71, 2.67)**	86.7

Source: Mortality dataset, Ministry of Health.

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

The age-standardised potentially avoidable death rate was 115 deaths each year per 100,000 people for Māori in South Canterbury DHB in 2014-2018 (Table 36). This equates to an average of 3.0 avoidable deaths each year in Māori females aged 0-74 years, and 4 in Māori males in South Canterbury DHB.

Table 36 - Potentially avoidable deaths, ages 0-74 years, South Canterbury DHB, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	3	103.4	(20.5, 292.2)	49	76.6	(46.6, 113.6)	1.35	(0.41, 4.41)	26.8
Male	4	130.3	(34.9, 330.3)	63	106.5	(71.8, 148.5)	1.22	(0.43, 3.44)	23.8
Total	8	115.3	(46.6, 234.1)	111	91.5	(68.1, 118.4)	1.26	(0.58, 2.74)	23.8

Source: Mortality dataset, Ministry of Health.

The gap between Māori and non-Māori was higher for avoidable deaths (those deaths considered amenable to high-quality healthcare, preventable through public health interventions, or both) compared to all deaths in Southern DHB in 2014-2018 (Table 37). The age-standardised potentially avoidable death rate (138 deaths each year per 100,000 people) was 1.6 times higher for Māori compared to non-Māori in Southern DHB in 2014-2018. This equates to an average of 22 avoidable deaths each year in Māori females aged 0-74 years, and 34 in Māori males in Southern DHB.

Table 37 - Potentially avoidable deaths, ages 0-74 years, Southern DHB, 2014 to 2018

Sex	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av.no. per year	Age-standardised rate per 100,000 (95% CI)				
Female	22	106.3	(65.5, 162.5)	216	70.7	(58.2, 84.4)	1.50	(0.94, 2.40)	35.6
Male	34	169.7	(115.7, 239.5)	303	101.8	(87.1, 117.9)	**1.67**	**(1.14, 2.43)**	67.9
Total	56	138.1	(103.3, 180.6)	519	86.2	(76.5, 96.6)	**1.60**	**(1.19, 2.15)**	51.9

Source: Mortality dataset, Ministry of Health.

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

The leading causes of potentially avoidable deaths (those deaths considered amenable to high-quality healthcare, preventable through public health interventions, or both) for Māori aged 0-74 years in Te

Tauraki in 2014-2018 were ischaemic heart disease, lung cancer, suicide, chronic obstructive pulmonary disease (COPD) and motor vehicle accidents (Table 38). This differs slightly to the leading causes of potentially avoidable deaths for Māori nationally (Table 43), where motor vehicle accidents do not feature in the five leading causes, but diabetes does. The leading causes of potentially avoidable death for Māori in Te Tauraki also differ to those for non-Māori in Te Tauraki, which were ischaemic heart disease, lung cancer, colorectal cancer, COPD and suicide in 2014-2018.

The leading causes of death for Māori females in Te Tauraki in 2014-2018 were lung cancer, ischaemic heart disease, COPD, suicide and breast cancer (Table 38). For Māori males, the leading causes of death in 2014-2018 were ischaemic heart disease, suicide, lung cancer, motor vehicle accidents and COPD. Again, these leading causes differ slightly from those for Māori males and females nationally as diabetes features as a leading cause for Māori males and females nationally (Table 43).

Table 38 - Leading causes of potentially avoidable deaths, ages 0-74 years, Te Tauraki, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Lung cancer	10	16.9	(8.1, 31.1)	80	6.1	(4.8, 7.7)	**2.76**	**(1.42, 5.35)**	10.8
Ischaemic heart disease	8	12.1	(5.1, 24.4)	57	4.1	(3.0, 5.5)	**2.94**	**(1.36, 6.32)**	8.0
COPD	6	9.3	(3.3, 20.5)	57	4.1	(3.0, 5.3)	2.30	(0.97, 5.42)	5.2
Suicide and self-inflicted injuries	5	10.5	(3.1, 25.6)	26	5.3	(3.3, 8.1)	1.97	(0.71, 5.45)	5.2
Breast cancer	5	9.3	(2.9, 22.0)	77	7.9	(6.0, 10.2)	1.17	(0.46, 2.98)	1.4
Male									
Ischaemic heart disease	25	39.9	(25.7, 59.1)	180	14.7	(12.4, 17.3)	**2.71**	**(1.77, 4.16)**	25.2
Suicide and self-inflicted injuries	13	29.0	(15.4, 49.5)	81	15.9	(12.3, 20.2)	**1.82**	**(1.00, 3.30)**	13.1
Lung cancer	13	20.4	(10.9, 34.6)	93	7.2	(5.7, 8.9)	**2.84**	**(1.59, 5.08)**	13.2
Motor vehicle accidents	6	11.4	(3.8, 25.7)	41	8.9	(6.1, 12.4)	1.28	(0.51, 3.18)	2.5
COPD	6	9.1	(3.2, 20.2)	55	3.9	(2.9, 5.1)	2.34	(0.98, 5.59)	5.2
Total									
Ischaemic heart disease	33	26.3	(18.0, 37.1)	237	9.3	(8.1, 10.7)	**2.82**	**(1.94, 4.09)**	17.0
Lung cancer	24	18.8	(11.9, 28.1)	173	6.6	(5.6, 7.8)	**2.83**	**(1.83, 4.38)**	12.2
Suicide and self-inflicted injuries	18	19.9	(11.7, 31.6)	107	10.7	(8.6, 13.2)	**1.86**	**(1.11, 3.10)**	9.2
COPD	12	9.2	(4.6, 16.2)	113	4.0	(3.2, 4.8)	**2.31**	**(1.26, 4.26)**	5.2
Motor vehicle accidents	9	8.9	(3.9, 17.4)	57	6.3	(4.6, 8.4)	1.42	(0.68, 2.99)	2.6

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

The leading causes of potentially avoidable deaths (those deaths considered amenable to high-quality healthcare, preventable through public health interventions, or both) for Māori in West Coast DHB in 2014-2018 were suicide, ischaemic heart disease and lung cancer (Table 39). This is in contrast to the leading causes of death for non-Māori in West Coast DHB, which were ischaemic heart disease, COPD, lung cancer, colorectal cancer and suicide in 2014-2018. Data numbers were too small for analysis by sex in West Coast DHB. Because of the small population size in West Coast DHB, just 1-2 deaths from a particular cause can have a large impact on the ranking of leading causes. For this reason, local causes of potentially avoidable death for Māori should be interpreted together with the leading causes of death for Māori nationally (Table 43).

Table 39 - Leading causes of potentially avoidable deaths, ages 0-74 years, West Coast DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Total									
Suicide and self-inflicted injuries	2	49.6	(3.2, 205.0)	6	18.0	(4.8, 42.4)	2.76	(0.45, 16.96)	31.6
Ischaemic heart disease	2	30.2	(3.9, 103.8)	11	10.6	(4.6, 20.0)	2.85	(0.65, 12.58)	19.6
Lung cancer	1	18.4	(0.9, 82.3)	8	7.3	(2.3, 15.9)	2.53	(0.40, 16.21)	11.1

Source: Mortality dataset, Ministry of Health.

The leading causes of potentially avoidable deaths (those deaths considered amenable to high-quality healthcare, preventable through public health interventions, or both) for Māori in Canterbury DHB in 2014-2018 were ischaemic heart disease, lung cancer, suicide, motor vehicle accidents and chronic obstructive pulmonary disease (COPD) (Table 40). This is in contrast to the leading causes of death for non-Māori in Canterbury DHB which were ischaemic heart disease, lung cancer, colorectal cancer, suicide and COPD in 2014-2018. The leading causes of death for Māori females in Canterbury DHB in 2014-2018 were lung cancer, breast cancer, ischaemic heart disease, suicide and COPD. For Māori males, the leading causes of death in 2014-2018 were ischaemic heart disease, lung cancer, suicide, motor vehicle accidents and liver cancer. Because of the small population size in the DHB, just 1-2 deaths from a particular cause can have a large impact on the ranking of leading causes. For this reason, local causes of potentially avoidable death for Māori should be interpreted together with the leading causes of death for Māori nationally (Table 43).

Table 40 - Leading causes of potentially avoidable deaths, ages 0-74 years, Canterbury DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Lung cancer	6	19.0	(6.7, 42.2)	39	5.6	(3.9, 7.8)	**3.41**	**(1.41, 8.29)**	13.4
Breast cancer	4	13.9	(3.4, 36.7)	42	7.4	(5.1, 10.4)	1.87	(0.64, 5.50)	6.5
Ischaemic heart disease	4	12.7	(3.5, 31.8)	29	3.9	(2.5, 5.8)	**3.21**	**(1.14, 9.09)**	8.8
Suicide and self-inflicted injuries	3	13.5	(2.8, 38.6)	14	4.9	(2.4, 8.6)	2.79	(0.79, 9.79)	8.6
COPD	3	8.8	(1.6, 26.7)	29	3.9	(2.5, 5.6)	2.29	(0.67, 7.85)	4.9
Male									
Ischaemic heart disease	16	45.5	(25.5, 74.7)	99	14.9	(12, 18.4)	**3.04**	**(1.76, 5.25)**	30.6
Lung cancer	8	22.6	(9.7, 44.5)	49	7.1	(5.2, 9.6)	**3.17**	**(1.49, 6.74)**	15.5
Suicide and self-inflicted injuries	6	22.1	(7.9, 48.6)	43	14.6	(10.2, 20.1)	1.51	(0.63, 3.64)	7.5
Motor vehicle accidents	4	13.5	(3.1, 36.6)	20	7.4	(4.3, 11.8)	1.81	(0.57, 5.78)	6.1
Liver cancer	3	8.7	(1.9, 24.6)	9	1.3	(0.6, 2.4)	**6.87**	**(1.91, 24.74)**	7.4
Total									
Ischaemic heart disease	20	29.9	(18.1, 46.4)	128	9.3	(7.7, 11.2)	**3.21**	**(1.98, 5.20)**	20.6
Lung cancer	14	21.0	(11.4, 35.5)	88	6.3	(5.0, 7.9)	**3.32**	**(1.87, 5.91)**	14.7
Suicide and self-inflicted injuries	9	18.1	(8.2, 34.3)	57	9.9	(7.2, 13.1)	1.83	(0.90, 3.74)	8.2
Motor vehicle accidents	5	10.0	(3.2, 23.3)	27	5.1	(3.2, 7.8)	1.95	(0.74, 5.16)	4.9
COPD	5	8.2	(2.7, 18.7)	55	3.6	(2.7, 4.8)	2.26	(0.92, 5.53)	4.6

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

The leading causes of potentially avoidable deaths (those deaths considered amenable to high-quality healthcare, preventable through public health interventions, or both) for Māori in South Canterbury DHB in 2014-2018 were ischaemic heart disease, lung cancer and chronic obstructive pulmonary disease (COPD) (Tabe 41). This is in contrast to the leading causes of death for non-Māori in South Canterbury DHB which were ischaemic heart disease, lung cancer, cerebrovascular disease, colorectal cancer and COPD in 2014-2018. Data numbers were too small for analysis by sex in West Coast DHB. Because of the small population size in the DHB, just 1-2 deaths from a particular cause can have a large impact on the ranking of leading causes. For this reason, local causes of potentially avoidable death for Māori should be interpreted together with the leading causes of death for Māori nationally (Table 43).

Tabe 41 - Leading causes of potentially avoidable deaths, ages 0-74 years, South Canterbury DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Total									
Ischaemic heart disease	1	19.6	(1.0, 87.5)	19	10.9	(5.2, 18.9)	1.81	(0.31, 10.51)	8.7
Lung cancer	1	13.9	(0.2, 77.4)	11	5.9	(2.6, 11.1)	2.35	(0.30, 18.53)	8.0
COPD	1	13.7	(0.2, 76.2)	9	3.9	(1.6, 7.7)	3.55	(0.44, 28.58)	9.8

Source: Mortality dataset, Ministry of Health.

The leading causes of potentially avoidable deaths (those deaths considered amenable to high-quality healthcare, preventable through public health interventions, or both) for Māori in Southern DHB in 2014-2018 were ischaemic heart disease, suicide, lung cancer, chronic obstructive pulmonary disease (COPD) and cerebrovascular disease (Table 42). This is in contrast to the leading causes of death for non-Māori in Southern DHB which were ischaemic heart disease, lung cancer, colorectal cancer, COPD and suicide in 2014-2018. The leading causes of death for Māori females in Southern DHB in 2014-2018 were lung cancer, COPD, ischaemic heart disease, cerebrovascular disease and suicide (Table 42). For Māori males, the leading causes of death in 2014-2018 were ischaemic heart disease, suicide, lung cancer, diabetes and cerebrovascular disease. Because of the small population size in the DHB, just 1-2 deaths from a particular cause can have a large impact on the ranking of leading causes. For this reason, local causes of potentially avoidable death for Māori should be interpreted together with the leading causes of death for Māori nationally (Table 43).

Table 42 - Leading causes of potentially avoidable deaths, ages 0-74 years, Southern DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Lung cancer	3	13.8	(3.0, 39.2)	32	7.0	(4.6, 10.1)	1.98	(0.62, 6.32)	6.8
COPD	2	10.4	(1.5, 34.0)	21	4.3	(2.6, 6.7)	2.39	(0.62, 9.17)	6.1
Ischaemic heart disease	2	9.9	(1.3, 34.1)	20	4.2	(2.5, 6.5)	2.40	(0.59, 9.73)	5.7
Cerebrovascular disease	2	8.6	(1.0, 30.9)	17	4.6	(2.3, 7.7)	1.88	(0.42, 8.36)	4.0
Suicide and self-inflicted injuries	1	7.7	(0.2, 38.3)	10	6.4	(2.9, 12.1)	1.20	(0.18, 8.23)	1.3
Male									
Ischaemic heart disease	7	32.5	(12.9, 67.0)	59	13.9	(10.2, 18.5)	**2.33**	**(1.05, 5.18)**	18.6
Suicide and self-inflicted injuries	6	36.2	(12.2, 81.6)	29	17.1	(10.9, 25.2)	2.12	(0.83, 5.38)	19.1
Lung cancer	4	17.9	(4.9, 45.2)	34	7.5	(5.1, 10.6)	2.40	(0.86, 6.73)	10.4
Diabetes	2	10.7	(1.1, 37.7)	9	2.2	(0.9, 4.5)	**4.80**	**(1.02, 22.66)**	8.5
Cerebrovascular disease	2	8.9	(0.9, 32.2)	14	3.8	(1.7, 6.8)	2.35	(0.51, 10.91)	5.1
Total									
Ischaemic heart disease	9	21.2	(9.7, 40.0)	80	9.0	(6.9, 11.5)	**2.36**	**(1.18, 4.72)**	12.2
Suicide and self-inflicted injuries	7	21.9	(8.4, 45.9)	39	11.7	(8.1, 16.4)	1.87	(0.81, 4.30)	10.2
Lung cancer	7	16.0	(6.5, 32.4)	66	7.2	(5.5, 9.3)	**2.22**	**(1.03, 4.78)**	8.8
COPD	4	9.5	(2.8, 23.3)	41	4.2	(2.9, 5.7)	2.27	(0.84, 6.11)	5.3
Cerebrovascular disease	4	8.7	(2.3, 22.2)	31	4.2	(2.6, 6.2)	2.07	(0.71, 6.03)	4.5

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

Table 43 - Leading causes of potentially avoidable deaths, ages 0-74 years, Aotearoa, 2014 to 2018

Cause	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		non-Māori leading cause
	Age-standardised rate per 100,000 (95% CI)		Age-standardised rate per 100,000 (95% CI)				
Female							
Lung cancer	24.6	(20.8, 28.9)	6.0	(5.3, 6.7)	**4.11**	**(3.38, 5.00)**	Breast cancer
Ischaemic heart disease	14.5	(11.5, 17.9)	3.9	(3.4, 4.5)	**3.67**	**(2.85, 4.74)**	Lung cancer
COPD	11.2	(8.7, 14.1)	3.1	(2.7, 3.6)	**3.59**	**(2.72, 4.74)**	Ischaemic heart disease
Breast cancer	11.7	(8.9, 15.1)	8.1	(7.2, 9.1)	**1.45**	**(1.09, 1.92)**	Colorectal cancer
Diabetes	9.7	(7.3, 12.6)	1.7	(1.4, 2.2)	**5.56**	**(3.91, 7.91)**	COPD
Male							
Ischaemic heart disease	42.1	(36.7, 48.1)	15.5	(14.4, 16.7)	**2.71**	**(2.33, 3.16)**	Ischaemic heart disease
Lung cancer	24.0	(20.1, 28.5)	6.7	(6.0, 7.5)	**3.59**	**(2.93, 4.40)**	Lung cancer
Suicide and self-inflicted injuries	23.8	(18.9, 29.5)	12.9	(11.4, 14.6)	**1.84**	**(1.43, 2.36)**	Suicide and self-inflicted injuries
Diabetes	15.5	(12.3, 19.3)	2.8	(2.3, 3.3)	**5.64**	**(4.24, 7.51)**	Colorectal cancer
Motor vehicle accidents	16.1	(12.2, 20.7)	7.0	(5.8, 8.4)	**2.29**	**(1.68, 3.13)**	Cerebrovascular disease
Total							
Ischaemic heart disease	27.6	(24.5, 30.9)	9.6	(9.0, 10.2)	**2.88**	**(2.52, 3.28)**	Ischaemic heart disease
Lung cancer	24.3	(21.6, 27.4)	6.3	(5.8, 6.8)	**3.85**	**(3.34, 4.43)**	Lung cancer
Diabetes	12.4	(10.4, 14.7)	2.2	(1.9, 2.6)	**5.58**	**(4.47, 6.96)**	Colorectal cancer
Suicide and self-inflicted injuries	16.9	(14.0, 20.2)	8.6	(7.7, 9.6)	**1.96**	**(1.59, 2.41)**	Suicide and self-inflicted injuries
COPD	10.4	(8.6, 12.4)	3.2	(2.8, 3.5)	**3.30**	**(2.68, 4.05)**	COPD

Source: Mortality dataset, Ministry of Health.

Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates. Cerebrovascular disease includes stroke.

Whānau ora
Healthy families

4. Whānau ora – Healthy families

Māori models of health encompass cultural vitality and whānau wellbeing. Indicators of these dimensions of health specific for Māori in each IMPB are included in these profiles, sourced from Te Kupenga 2018, the Māori Social Survey conducted in 2018 by StatsNZ. In 2018, this was a survey of almost 8,500 adults (aged 15 years and over) of Māori ethnicity and/or descent. Further information on Te Kupenga can be found here[7]. Data from Te Kupenga are presented for Māori only. For Te Kupenga survey data presented in this report, the IMPB area has been mapped to SA2 geographic areas.

Based on a scale where 0 is doing extremely badly and 10 is doing extremely well most Māori (76.3%) in Te Tauraki (Table 44) reported their whānau was doing well (7/10 or greater). Just under a quarter of Māori (23.8%) in Te Tauraki reported that their whānau was not doing well (6/10 or less).

Table 44 - Whānau well-being reported by Māori aged 15 years and over, Te Tauraki and Aotearoa, 2018

How the whānau is doing	Te Tauraki		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	10.4	(8.4, 12.4)	12.9	(12.1, 13.7)
(9 out of 10)	16.7	(14.2, 19.1)	12.8	(11.9, 13.6)
(8 out of 10)	25.1	(22.5, 27.8)	24.4	(23.3, 25.6)
(7 out of 10)	24.1	(21.3, 26.9)	23.5	(22.5, 24.6)
(0–6 out of 10)	23.8	(21.2, 26.3)	26.4	(25.2, 27.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Reported whānau wellbeing in Canterbury DHB shows that 75% of Māori (Table 46) reported their whānau was doing well (7/10 or greater), compared to 76.3% of Māori in Southern DHB (Table 48). However, based on the numbers of participants in the 2018 Te Kupenga survey, it is not possible to determine whether these findings represent true differences. Two of the DHBs in Te Tauraki, West Coast (Table 45) and South Canterbury (Table 47) have survey numbers that are too small for reliable estimates.

Table 45 - Whānau well-being reported by Māori aged 15 years and over, West Coast DHB and Aotearoa, 2018

How the whānau is doing	West Coast		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	S	(NA, NA)	12.9	(12.1, 13.7)
(9 out of 10)	S	(NA, NA)	12.8	(11.9, 13.6)
(8 out of 10)	S	(NA, NA)	24.4	(23.3, 25.6)
(7 out of 10)	S	(NA, NA)	23.5	(22.5, 24.6)
(0–6 out of 10)	25.9 *	(15.1, 36.7)	26.4	(25.2, 27.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%, NA = Not Available, S = suppressed: number too small for reliable estimate.

[7] https://www.stats.govt.nz/information-releases/te-kupenga-2018-final-english

Table 46 - Whānau well-being reported by Māori aged 15 years and over, Canterbury DHB and Aotearoa, 2018

How the whānau is doing	Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	10.1 *	(7.0, 13.2)	12.9	(12.1, 13.7)
(9 out of 10)	16.0	(12.2, 19.8)	12.8	(11.9, 13.6)
(8 out of 10)	23.9	(19.6, 28.2)	24.4	(23.3, 25.6)
(7 out of 10)	25.0	(21.2, 28.8)	23.5	(22.5, 24.6)
(0–6 out of 10)	25.0	(21.1, 28.9)	26.4	(25.2, 27.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%.

Table 47 - Whānau well-being reported by Māori aged 15 years and over, South Canterbury DHB and Aotearoa, 2018

How the whānau is doing	South Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	S	(NA, NA)	12.9	(12.1, 13.7)
(9 out of 10)	S	(NA, NA)	12.8	(11.9, 13.6)
(8 out of 10)	26.9 *	(15.2, 38.6)	24.4	(23.3, 25.6)
(7 out of 10)	29.5 **	(5.8, 53.3)	23.5	(22.5, 24.6)
(0–6 out of 10)	S	(NA, NA)	26.4	(25.2, 27.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%, ** shows a sampling error of 50% or more but less than 100%, NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 48 - Whānau well-being reported by Māori aged 15 years and over, Southern DHB and Aotearoa, 2018

How the whānau is doing	Southern		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	9.9	(8.0, 11.9)	12.9	(12.1, 13.7)
(9 out of 10)	16.6	(13.8, 19.4)	12.8	(11.9, 13.6)
(8 out of 10)	27.2	(23.3, 31.1)	24.4	(23.3, 25.6)
(7 out of 10)	22.6	(18.3, 27.0)	23.5	(22.5, 24.6)
(0–6 out of 10)	23.7	(20.5, 26.8)	26.4	(25.2, 27.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

When thinking about who made up the whānau, just under a quarter of Māori (22.5%) in Te Tauraki included “close friends or others” (Table 49). This figure was highest for West Coast DHB (Table 50) at 45.1% for Māori (compared to 22.6% for Māori nationally), 19.7% for Māori in Canterbury DHB (Table 51) and 23.6% for Māori in Southern DHB (Table 53). South Canterbury DHB (Table 52) has survey numbers that are too small for reliable estimates.

Table 49 - Whānau composition reported by Māori aged 15 years and over, Te Tauraki and Aotearoa, 2018

Whānau description	Te Tauraki		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	57.0	(53.6, 60.4)	52.1	(50.6, 53.6)
11 to 20	23.6	(20.7, 26.4)	24.2	(23.0, 25.4)
More than 20	19.4	(16.6, 22.3)	23.7	(22.3, 25)
Groups included in whānau				
Parents, partner, children, brothers and sisters	97.7	(96.4, 99.1)	97.4	(97.0, 97.8)
Grandparents, grandchildren	40.2	(36.3, 44.1)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	42.8	(39.1, 46.5)	48.6	(47.1, 50.2)
Close friends, others	22.5	(19.3, 25.6)	22.6	(21.3, 23.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Table 50 - Whānau composition reported by Māori aged 15 years and over, West Coast DHB and Aotearoa, 2018

Whānau description	West Coast		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	41.8 *	(25.6, 58.1)	52.1	(50.6, 53.6)
11 to 20	25.6 *	(13.0, 38.2)	24.2	(23.0, 25.4)
More than 20	32.6 **	(16.1, 49.0)	23.7	(22.3, 25.0)
Groups included in whānau				
Parents, partner, children, brothers and sisters	99.4	(98.3, 100.6)	97.4	(97.0, 97.8)
Grandparents, grandchildren	42.7 *	(24.2, 61.2)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	53.0	(40.1, 65.8)	48.6	(47.1, 50.2)
Close friends, others	45.1	(32.8, 57.4)	22.6	(21.3, 23.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%, ** shows a sampling error of 50% or more but less than 100%

Table 51 - Whānau composition reported by Māori aged 15 years and over, Canterbury DHB and Aotearoa, 2018

Whānau description	Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	57.1	(51.8, 62.5)	52.1	(50.6, 53.6)
11 to 20	24.1	(19.7, 28.5)	24.2	(23.0, 25.4)
More than 20	18.8	(14.2, 23.4)	23.7	(22.3, 25.0)
Groups included in whānau				
Parents, partner, children, brothers and sisters	97.5	(96.3, 98.8)	97.4	(97.0, 97.8)
Grandparents, grandchildren	41.1	(34.8, 47.3)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	41.7	(35.9, 47.6)	48.6	(47.1, 50.2)
Close friends, others	19.7	(14.8, 24.6)	22.6	(21.3, 23.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Table 52 - Whānau composition reported by Māori aged 15 years and over, South Canterbury DHB and Aotearoa, 2018

Whānau description	South Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	66.5	(51.9, 81.1)	52.1	(50.6, 53.6)
11 to 20	S	(NA, NA)	24.2	(23.0, 25.4)
More than 20	S	(NA, NA)	23.7	(22.3, 25.0)
Groups included in whānau				
Parents, partner, children, brothers and sisters	100.0	(100, 100)	97.4	(97.0, 97.8)
Grandparents, grandchildren	24.6 **	(11.0, 38.3)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	28.4 **	(12.0, 44.8)	48.6	(47.1, 50.2)
Close friends, others	S	(NA, NA)	22.6	(21.3, 23.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: ** shows a sampling error of 50% or more but less than 100%, NA = Not Available, S = suppressed: number too small for reliable estimate

Table 53 - Whānau composition reported by Māori aged 15 years and over, Southern DHB and Aotearoa, 2018

Whānau description	Southern		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	57.6	(52.7, 62.4)	52.1	(50.6, 53.6)
11 to 20	23.3	(19.8, 26.7)	24.2	(23.0, 25.4)
More than 20	19.2	(15.3, 23.1)	23.7	(22.3, 25.0)
Groups included in whānau				
Parents, partner, children, brothers and sisters	97.4	(94.2, 100.7)	97.4	(97.0, 97.8)
Grandparents, grandchildren	41.0	(36.2, 45.9)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	45.1	(41.0, 49.2)	48.6	(47.1, 50.2)
Close friends, others	23.6	(19.4, 27.7)	22.6	(21.3, 23.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Most Māori (79.8%) in Te Tauraki reported it was easy or very easy to get support in times of need (Table 54). This was similar across the four DHBs, with 81.0% of Māori in West Coast DHB (Table 55), 78.5% in Canterbury DHB (Table 56), 88.3% in South Canterbury (Table 57) and 80.1% in Southern DHB (Table 58) reporting that it was easy or very easy to get support in times of need. Fewer Māori in Te Tauraki (46.5%) reported it was easy or very easy to get help with Māori cultural practices, such as going to a tangi, speaking at a hui or blessing a taonga than Māori nationally (Table 54). Looking at this by DHB, 57.6% of Māori in West Coast DHB (Table 55), 43.3% in Canterbury DHB (Table 56), 47.6% in South Canterbury DHB (Table 57) and 49.5% in Southern DHB (Table 58) reported it was easy or very easy to get help with Māori cultural practices.

Table 54 - Access to whānau support, Māori aged 15 years and over, Te Tauraki and Aotearoa, 2018

How easy is it to get help	Te Tauraki		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	79.8	(77.0, 82.6)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	13.6	(11.3, 16.0)	16.4	(15.5, 17.4)
Hard, very hard	6.6	(5.1, 8.0)	7.5	(6.7, 8.3)
Help with Māori cultural practices such as going to a tangi, speaking at a hui, or blessing a taonga				
Easy, very easy	46.5	(43.1, 50.0)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	21.2	(18.3, 24.0)	18.9	(17.9, 19.9)
Hard, very hard	25.5	(22.4, 28.6)	18.1	(17.0, 19.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Table 55 - Access to whānau support, Māori aged 15 years and over, West Coast DHB and Aotearoa, 2018

How easy is it to get help	West Coast		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	81.0	(69.0, 93.1)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	S	(NA, NA)	16.4	(15.5, 17.4)
Hard, very hard	S	(NA, NA)	7.5	(6.7, 8.3)
Help with Māori cultural practices such as going to a tangi, speaking at a hui, or blessing a taonga				
Easy, very easy	57.6	(45.2, 70.0)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	S	(NA, NA)	18.9	(17.9, 19.9)
Hard, very hard	S	(NA, NA)	18.1	(17.0, 19.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 56 - Access to whānau support, Māori aged 15 years and over, Canterbury DHB and Aotearoa, 2018

How easy is it to get help	Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	78.5	(73.9, 83.2)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	15.0	(11.0, 18.9)	16.4	(15.5, 17.4)
Hard, very hard	6.5 *	(4.3, 8.7)	7.5	(6.7, 8.3)
Help with Māori cultural practices such as going to a tangi, speaking at a hui, or blessing a taonga				
Easy, very easy	43.3	(37.3, 49.3)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	22.0	(18.1, 25.9)	18.9	(17.9, 19.9)
Hard, very hard	25.8	(20.3, 31.3)	18.1	(17.0, 19.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Table 57 - Access to whānau support, Māori aged 15 years and over, South Canterbury DHB and Aotearoa, 2018

How easy is it to get help	South Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	88.3	(77.1, 99.6)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	S	(NA, NA)	16.4	(15.5, 17.4)
Hard, very hard	S	(NA, NA)	7.5	(6.7, 8.3)
Help with Māori cultural practices such as going to a tangi, speaking at a hui, or blessing a taonga				
Easy, very easy	47.6 *	(31.1, 64.0)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	23.2 **	(10.1, 36.2)	18.9	(17.9, 19.9)
Hard, very hard	27.6 *	(14.6, 40.6)	18.1	(17.0, 19.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%, ** shows a sampling error of 50% or more but less than 100%, NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 58 - Access to whānau support, Māori aged 15 years and over, Southern DHB and Aotearoa, 2018

How easy is it to get help	Southern		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	80.1	(77.3, 82.9)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	12.8	(10.8, 14.8)	16.4	(15.5, 17.4)
Hard, very hard	7.1	(5.2, 9.0)	7.5	(6.7, 8.3)
Help with Māori cultural practices such as going to a tangi, speaking at a hui, or blessing a taonga				
Easy, very easy	49.5	(46.1, 52.8)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	20.1	(16.2, 24.0)	18.9	(17.9, 19.9)
Hard, very hard	25.2	(20.9, 29.4)	18.1	(17.0, 19.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Being involved in Māori culture was very/quite important to 32.7% of Māori in Te Tauraki, and spirituality was very/quite important to 21.3% of Māori in Te Tauraki (Table 59). Only 14.3% of Māori respondents in Te Tauraki reported that being involved in Māori culture was not at all important to them.

In Canterbury DHB (Table 61), being involved in Māori culture was very/quite important to 33.9% of Māori and spirituality was very/quite important to 37.1%. Māori in Southern DHB (32.7%) were less likely than Māori nationally (48.7%) to report that spirituality was very/quite important to them (although small numbers may mean that these findings are not statistically significant) (Table 63). West Coast DHB (Table 60) and South Canterbury DHB (Table 62) have survey numbers that are too small for reliable estimates for the importance of being involved in Māori culture. In South Canterbury DHB (Table 62), 47.1% of Māori report that spirituality was very/quite important to them.

Table 59 - Importance of Māori culture and spirituality, Māori aged 15 years and over, Te Tauraki and Aotearoa, 2018

	Te Tauraki		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	11.7	(9.9, 13.5)	22.1	(21.1, 23.1)
Quite important	21.0	(18.5, 23.5)	23.2	(22.1, 24.3)
Somewhat	27.1	(24.0, 30.1)	25.8	(24.7, 26.9)
A little important	26.0	(22.5, 29.4)	18.3	(17.1, 19.5)
Not at all important	14.3	(11.6, 16.9)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	19.8	(17.1, 22.5)	30.7	(29.5, 31.9)
Quite important	17.5	(14.9, 20.1)	18.0	(16.9, 19.0)
Somewhat	17.2	(14.6, 19.8)	16.8	(15.9, 17.8)
A little important	17.2	(14.9, 19.5)	15.3	(14.3, 16.2)
Not at all important	28.4	(25.5, 31.2)	19.2	(18.1, 20.4)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Table 60 - Importance of Māori culture and spirituality, Māori aged 15 years and over, West Coast DHB and Aotearoa, 2018

	West Coast		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	S	(NA, NA)	22.1	(21.1, 23.1)
Quite important	S	(NA, NA)	23.2	(22.1, 24.3)
Somewhat	S	(NA, NA)	25.8	(24.7, 26.9)
A little important	31.2 *	(17.2, 45.2)	18.3	(17.1, 19.5)
Not at all important	S	(NA, NA)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	S	(NA, NA)	30.7	(29.5, 31.9)
Quite important	S	(NA, NA)	18.0	(16.9, 19)
Somewhat	S	(NA, NA)	16.8	(15.9, 17.8)
A little important	29.6 *	(18.6, 40.5)	15.3	(14.3, 16.2)
Not at all important	S	(NA, NA)	19.2	(18.1, 20.4)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%, NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 61 - Importance of Māori culture and spirituality, Māori aged 15 years and over, Canterbury DHB and Aotearoa, 2018

	Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	11.3	(8.4, 14.1)	22.1	(21.1, 23.1)
Quite important	22.6	(18.6, 26.7)	23.2	(22.1, 24.3)
Somewhat	27.3	(23.3, 31.2)	25.8	(24.7, 26.9)
A little important	26.0	(21.0, 31.0)	18.3	(17.1, 19.5)
Not at all important	12.8 *	(8.7, 16.9)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	21.1	(17.1, 25.0)	30.7	(29.5, 31.9)
Quite important	16.0	(12.7, 19.3)	18	(16.9, 19.0)
Somewhat	19.4	(15.4, 23.4)	16.8	(15.9, 17.8)
A little important	14.4	(10.9, 18.0)	15.3	(14.3, 16.2)
Not at all important	29.1	(24.8, 33.4)	19.2	(18.1, 20.4)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%.

Table 62 - Importance of Māori culture and spirituality, Māori aged 15 years and over, South Canterbury DHB and Aotearoa, 2018

	South Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	S	(NA, NA)	22.1	(21.1, 23.1)
Quite important	21.6 **	(8.5, 34.8)	23.2	(22.1, 24.3)
Somewhat	27.2 **	(10.2, 44.2)	25.8	(24.7, 26.9)
A little important	35.4 *	(19.6, 51.2)	18.3	(17.1, 19.5)
Not at all important	S	(NA, NA)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	21.0 **	(3.7, 38.4)	30.7	(29.5, 31.9)
Quite important	26.1 **	(7.5, 44.8)	18.0	(16.9, 19.0)
Somewhat	S	(NA, NA)	16.8	(15.9, 17.8)
A little important	S	(NA, NA)	15.3	(14.3, 16.2)
Not at all important	23.0 **	(6.3, 39.7)	19.2	(18.1, 20.4)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%, ** shows a sampling error of 50% or more but less than 100%, NA = Not Available, S = suppressed: number too small for reliable estimate

Table 63 - Importance of Māori culture and spirituality, Māori aged 15 years and over, Southern DHB and Aotearoa, 2018

	Southern		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	13.8	(11.5, 16.0)	22.1	(21.1, 23.1)
Quite important	18.9	(16.4, 21.3)	23.2	(22.1, 24.3)
Somewhat	27.8	(22.8, 32.8)	25.8	(24.7, 26.9)
A little important	23.7	(19.4, 28.0)	18.3	(17.1, 19.5)
Not at all important	15.9	(12.5, 19.3)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	18.6	(15.7, 21.5)	30.7	(29.5, 31.9)
Quite important	17.7	(13.6, 21.8)	18.0	(16.9, 19.0)
Somewhat	14.7	(12.4, 17.1)	16.8	(15.9, 17.8)
A little important	19.3	(16.8, 21.9)	15.3	(14.3, 16.2)
Not at all important	29.6	(25.2, 34.1)	19.2	(18.1, 20.4)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

In Te Tauraki in 2018, 11.7% of Māori aged 15 years and over used te reo Māori regularly in the home compared to 18.4% of Māori nationally (Table 64). In Canterbury DHB (Table 66), 12.5% used te reo Māori regularly, and 11.1% in Southern DHB (Table 68). Small numbers in the Te Kupenga survey sample make it difficult to assess te reo Māori use accurately for West Coast (Table 65) and South Canterbury (Table 67) DHBs.

Table 64 - Use of te reo Māori in the home, Māori aged 15 years and over, Te Tauraki and Aotearoa, 2018

Language spoken at home	Te Tauraki		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	S	(NA, NA)	1.8	(1.3, 2.2)
Māori is used regularly	11.7	(9.8, 13.7)	18.4	(17.3, 19.5)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 65 - Use of te reo Māori in the home, Māori aged 15 years and over, West Coast DHB and Aotearoa, 2018

Language spoken at home	West Coast		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	S	(NA, NA)	1.8	(1.3, 2.2)
Māori is used regularly	S	(NA, NA)	18.4	(17.3, 19.5)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 66 - Use of te reo Māori in the home, Māori aged 15 years and over, Canterbury DHB and Aotearoa, 2018

Language spoken at home	Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	S	(NA, NA)	1.8	(1.3, 2.2)
Māori is used regularly	12.5	(9.4, 15.7)	18.4	(17.3, 19.5)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 67 - Use of te reo Māori in the home, Māori aged 15 years and over, South Canterbury DHB and Aotearoa, 2018

Language spoken at home	South Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	S	(NA, NA)	1.8	(1.3, 2.2)
Māori is used regularly	S	(NA, NA)	18.4	(17.3, 19.5)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 68 - Use of te reo Māori in the home, Māori aged 15 years and over, Southern DHB and Aotearoa, 2018

Language spoken at home	Southern		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	S	(NA, NA)	1.8	(1.3, 2.2)
Māori is used regularly	11.1	(9.0, 13.2)	18.4	(17.3, 19.5)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: NA = Not Available, S = suppressed: number too small for reliable estimate.

In 2018, almost all Māori aged 15 years and over in Te Tauraki (89.9%) had been to a marae, and of those (30.1%) had been in the last 12 months (Table 69). Of those who had ever been to a marae and who knew their ancestral marae, 69.5% had been to an ancestral marae at some time, with 23.9% noting that they had been in the last 12 months, and 69.7% reporting that they would like to go more often.

In West Coast DHB, 88.3% of Māori aged 15 years and over had been to a marae, and of those 34.9% had been in the last 12 months (Table 70). Of those who had ever been to a marae and who knew their ancestral marae, 76.1% said they had been to an ancestral marae at some time, and 68.2% would like to go more often. Other numbers are too small to be reliable.

In Canterbury DHB, 89.4% of Māori aged 15 years and over had been to a marae, and of those 30.1% had been in the last 12 months (Table 71). Of those who had ever been to a marae and who knew their ancestral marae, 69.0% said they had been to an ancestral marae at some time, although only 27% in the last 12 months, and 70.4% would like to go more often.

In South Canterbury DHB, 90.3% of Māori aged 15 years and over had been to a marae, and of those 32.2% had been in the last 12 months (Table 72). Of those who had ever been to a marae and who knew their ancestral marae, 61.1 % said they had been to an ancestral marae at some time and 78.4% would like to go more often. Other numbers are too small to be reliable.

In Southern DHB, 90.6% of Māori aged 15 years and over had been to a marae, and of those 32.8% had been in the last 12 months (Table 73). Of those who had ever been to a marae and who knew their ancestral marae, 69.5% said they had been to an ancestral marae at some time, 21% in the last 12 months and 67.7% would like to go more often.

Table 69 - Access to marae, Māori aged 15 years and over, Te Tauraki and Aotearoa, 2018

Been to marae	Te Tauraki		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	89.9	(87.6, 92.2)	96.6	(96.0, 97.1)
In previous 12 months [1]	31.4	(28.3, 34.5)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	69.5	(65.4, 73.6)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	23.9	(20.1, 27.7)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1][2]	69.7	(66.7, 72.8)	63.6	(62.1, 65.1)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: [1] Those who had been to a marae at some time. [2] Includes only those who knew their ancestral marae.

Table 70 - Access to marae, Māori aged 15 years and over, West Coast DHB and Aotearoa, 2018

Been to marae	West Coast		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	88.3	(77.8, 98.7)	96.6	(96.0, 97.1)
In previous 12 months [1]	34.9 *	(19.8, 50.1)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	76.1	(63.4, 88.9)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	S	(NA, NA)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1][2]	68.2	(55.7, 80.8)	63.6	(62.1, 65.1)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: [1] Those who had been to a marae at some time. [2] Includes only those who knew their ancestral marae. An asterisk (*) shows the sampling error is 30% or more but less than 50%, NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 71 - Access to marae, Māori aged 15 years and over, Canterbury DHB and Aotearoa, 2018

Been to marae	Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	89.4	(85.6, 93.3)	96.6	(96.0, 97.1)
In previous 12 months [1]	30.1	(25.1, 35.0)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	69.6	(62.8, 76.5)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	27.0	(21.3, 32.8)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1][2]	70.4	(64.7, 76.1)	63.6	(62.1, 65.1)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: [1] Those who had been to a marae at some time. [2] Includes only those who knew their ancestral marae.

Table 72 - Access to marae, Māori aged 15 years and over, South Canterbury DHB and Aotearoa, 2018

Been to marae	South Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	90.3	(81.6, 99.0)	96.6	(96.0, 97.1)
In previous 12 months [1]	32.2 **	(13.9, 50.6)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	61.1	(45.3, 76.8)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	S	(NA, NA)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1][2]	78.4	(65.7, 91.2)	63.6	(62.1, 65.1)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: [1] Those who had been to a marae at some time. [2] Includes only those who knew their ancestral marae. ** shows a sampling error of 50% or more but less than 100%, NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 73 - Access to marae, Māori aged 15 years and over, Southern and Aotearoa, 2018

Been to marae	Southern		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	90.6	(88.8, 92.5)	96.6	(96.0, 97.1)
In previous 12 months [1]	32.8	(28.9, 36.8)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	69.5	(65.1, 73.8)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	21.0	(16.5, 25.5)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1][2]	67.7	(63.4, 72.0)	63.6	(62.1, 65.1)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: [1] Those who had been to a marae at some time. [2] Includes only those who knew their ancestral marae.

In 2018, 5.9% of Māori aged 15 years and over in Te Tauraki had taken part in traditional healing or massage in the past 12 months compared to 12.3% nationally (Table 74). This figure was 6.4% for Māori in Canterbury DHB (Table 76) and 5.6% for Māori in Southern DHB (Table 78). Other numbers are too small to be reliable.

Table 74 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Te Tauraki and Aotearoa, 2018

Te Tauraki		Aotearoa	
%	(95% CI)	%	(95% CI)
5.9	(4.6, 7.1)	12.3	(11.4, 13.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Table 75 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, West Coast DHB and Aotearoa, 2018

West Coast		Aotearoa	
%	(95% CI)	%	(95% CI)
S	(NA, NA)	12.3	(11.4, 13.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 76 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Canterbury DHB and Aotearoa, 2018

Canterbury		Aotearoa	
%	(95% CI)	%	(95% CI)
6.4 *	(4.4, 8.3)	12.3	(11.4, 13.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%.

Table 77 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, South Canterbury DHB and Aotearoa, 2018

South Canterbury		Aotearoa	
%	(95% CI)	%	(95% CI)
S	(NA, NA)	12.3	(11.4, 13.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: NA = Not Available, S = suppressed: number too small for reliable estimate.

Table 78 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Southern DHB and Aotearoa, 2018

Southern		Aotearoa	
%	(95% CI)	%	(95% CI)
5.6 *	(3.8, 7.3)	12.3	(11.4, 13.2)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%.

Wai ora
Healthy environments

5. Wai ora − Healthy environments

This section focuses on key aspects of social and physical environments that influence health and well-being. Information in this section comes from Māori and non-Māori individuals responding to the NZ Census 2018, or Māori respondents in the 2018 Te Kupenga survey. Data is presented for the IMPB, and each DHB, although slightly different methods are used to define the IMPB geographic area in the different data sources. Because of data availability at the time of writing, NZ Census 2018, PHO enrolment and NZDep2018 data are presented for the overall IMPB mapped to DHB boundaries, and for each DHB within the IMPB area, whereas Te Kupenga survey data is presented for the IMPB mapped to smaller SA2 geographic areas. The data quality and degree of certainty for Māori is not the same for all variables from the NZ Census 2018. Please see the technical appendix at the end of this report, for further details about how geographic areas were defined for each data source, and for more information on how to interpret variables from NZ Census 2018.

5.1. Education

In 2018, 63.2% of Māori aged 20 years and over in Te Tauraki had achieved a Level 2 Certificate or higher, compared to 77.4% for non-Māori (Table 79). South Canterbury DHB (Table 82) had the lowest proportion with 57.8% of Māori aged 20 years and over achieving a Level 2 Certificate or higher, followed by 58.1% for Māori in West Coast DHB (Table 80), 63.1% in Canterbury (Table 81) and 64.5% in Southern DHB (Table 83).

Table 79 - Adults aged 20 years and over with a Level 2 Certificate or higher, Te Tauraki IMPB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	31,794	63.2	(62.5, 63.9)	438,609	77.4	(77.1, 77.7)	**0.82**	**(0.81, 0.82)**	-14.2

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 80 - Adults aged 20 years and over with a Level 2 Certificate or higher, West Coast DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	1,119	58.1	(54.5, 61.8)	11,772	67.1	(65.6, 68.5)	**0.87**	**(0.83, 0.90)**	-8.9

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 81 - Adults aged 20 years and over with a Level 2 Certificate or higher, Canterbury DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	17,565	63.1	(62.1, 64.0)	257,427	78.8	(78.5, 79.2)	**0.80**	**(0.79, 0.81)**	-15.8

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 82 - Adults aged 20 years and over with a Level 2 Certificate or higher, South Canterbury DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	1,482	57.8	(54.7, 60.8)	24,177	70.6	(69.6, 71.7)	**0.82**	**(0.79, 0.85)**	-12.9

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 83 - Adults aged 20 years and over with a Level 2 Certificate or higher, Southern DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	11,628	64.5	(63.3, 65.7)	145,233	77.0	(76.6, 77.5)	**0.84**	**(0.83, 0.85)**	-12.5

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

5.2. Work

In 2018, 51.9% of Māori aged 15 years and over in Te Tauraki were employed full time, and 16.7% were employed part time (Table 84). In 2018, 6.5% of Māori in Te Tauraki were unemployed, 1.60 times the rate of non-Māori, and Māori were 1.06 times more likely than non-Māori to not be in the labour force. These figures were similar across the four DHBs: 49.6% of Māori aged 15 years and over were employed full time in West Coast DHB (Table 85), 51.6% in Canterbury DHB (Table 86), 55.1% in South Canterbury DHB (Table 87) and 52.2% in Southern DHB (Table 88). Unemployment was highest for Māori in Canterbury DHB (7.1%) compared to West Coast DHB (5.4%), South Canterbury DHB (5.7%) and Southern DHB (5.9%).

Table 84 - Labour force status, 15 years and over, Te Tauraki IMPB, 2018

Labour force status	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Employed full-time	32,550	51.9	(51.3, 52.4)	364,482	55.1	(54.9, 55.3)	**0.94**	**(0.93, 0.95)**	-3.2
Employed part-time	10,515	16.7	(16.4, 17.0)	112,080	17.3	(17.2, 17.4)	**0.96**	**(0.95, 0.98)**	-0.6
Unemployed	3,975	6.5	(6.3, 6.7)	21,189	4.1	(4.0, 4.1)	**1.60**	**(1.55, 1.66)**	2.5
Not in the labour force	16,842	25.0	(24.6, 25.4)	221,307	23.5	(23.4, 23.7)	**1.06**	**(1.05, 1.08)**	1.5

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. 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.

Table 85 - Labour force status, 15 years and over, West Coast DHB, 2018

Labour force status	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Employed full-time	1,200	49.6	(46.6, 52.7)	11,298	56.3	(55.1, 57.5)	**0.88**	**(0.84, 0.92)**	-6.7
Employed part-time	471	19.4	(17.5, 21.3)	3,615	17.3	(16.6, 18.0)	**1.12**	**(1.03, 1.23)**	2.1
Unemployed	123	5.4	(4.4, 6.4)	693	4.0	(3.6, 4.3)	**1.35**	**(1.12, 1.63)**	1.4
Not in the labour force	738	25.7	(23.6, 27.8)	7,830	22.4	(21.6, 23.1)	**1.15**	**(1.08, 1.22)**	3.3

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. 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.

Table 86 - Labour force status, 15 years and over, Canterbury DHB, 2018

Labour force status	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Employed full-time	17,904	51.6	(50.8, 52.3)	208,455	55.0	(54.7, 55.2)	**0.94**	**(0.93, 0.95)**	-3.4
Employed part-time	5,481	16.0	(15.6, 16.4)	62,883	17.3	(17.1, 17.4)	**0.93**	**(0.90, 0.95)**	-1.3
Unemployed	2,352	7.1	(6.8, 7.4)	12,351	4.1	(4.1, 4.2)	**1.71**	**(1.63, 1.78)**	2.9
Not in the labour force	9,141	25.4	(24.9, 25.9)	122,511	23.6	(23.4, 23.8)	**1.08**	**(1.06, 1.10)**	1.8

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. 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.

Table 87 - Labour force status, 15 years and over, South Canterbury DHB, 2018

Labour force status	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Employed full-time	1,743	55.1	(52.4, 57.8)	22,245	59.1	(58.2, 60.0)	**0.93**	**(0.90, 0.96)**	-4.0
Employed part-time	567	17.0	(15.5, 18.4)	6,804	16.8	(16.3, 17.3)	1.01	(0.93, 1.09)	0.1
Unemployed	177	5.7	(4.9, 6.6)	975	3.4	(3.2, 3.6)	**1.69**	**(1.45, 1.98)**	2.3
Not in the labour force	840	22.6	(21.0, 24.2)	15,171	20.7	(20.2, 21.2)	**1.09**	**(1.03, 1.16)**	1.9

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. 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.

Table 88 - Labour force status, 15 years and over, Southern DHB, 2018

Labour force status	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Employed full-time	11,703	52.2	(51.3, 53.2)	122,484	54.8	(54.5, 55.1)	**0.95**	**(0.94, 0.97)**	-2.6
Employed part-time	3,996	17.4	(16.8, 17.9)	38,778	17.4	(17.2, 17.6)	1.00	(0.97, 1.03)	0.0
Unemployed	1,323	5.9	(5.6, 6.2)	7,170	4.0	(3.9, 4.1)	**1.47**	**(1.39, 1.56)**	1.9
Not in the labour force	6,123	24.6	(23.9, 25.2)	75,795	23.8	(23.6, 24.0)	**1.03**	**(1.01, 1.06)**	0.8

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. 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.

In 2018, the main employers of Māori women in Te Tauraki were health care and social assistance (13.6%); retail (12.3%); accommodation and food services (12.1%); education and training (10.9%); and manufacturing (8.2%) (Table 89). For Māori men, the leading industries were construction (21.8%); manufacturing (16.1%); agriculture, forestry and fishing (9.2%); transport, postal and warehousing (6.7%); and retail (6.5%). A similar mix of leading industries employing Māori females and males can be seen across the four DHBS, however, manufacturing stands out as the main employer for both Māori males and females in South Canterbury DHB in particular (Table 92).

Table 89 - Leading industries in which Māori were employed, Te Tauraki IMPB, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Health Care and Social Assistance	2,775	13.6%	1	37,452	16.8%	1
Retail Trade	2,508	12.3%	2	25,815	11.6%	3
Accommodation and Food Services	2,469	12.1%	3	21,096	9.5%	4
Education and Training	2,223	10.9%	4	27,324	12.2%	2
Manufacturing	1,668	8.2%	5	14,037	6.3%	6
Males						
Construction	4,944	21.8%	1	43,416	17.1%	1
Manufacturing	3,651	16.1%	2	34,509	13.6%	2
Agriculture, Forestry and Fishing	2,085	9.2%	3	25,515	10.1%	3
Transport, Postal and Warehousing	1,527	6.7%	4	15,000	5.9%	6
Retail Trade	1,482	6.5%	5	19,320	7.6%	5

Source: 2018 Census, Statistics New Zealand.

Note: Australian and New Zealand Standard Industrial Classification (ANZSIC).

Table 90 - Leading industries in which Māori were employed, West Coast DHB, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Accommodation and Food Services	174	20.6%	1	1,182	16.9%	2
Health Care and Social Assistance	132	15.6%	2	1,215	17.3%	1
Retail Trade	90	10.6%	3	825	11.8%	3
Education and Training	78	9.2%	4	720	10.3%	4
Manufacturing	75	8.9%	5	384	5.5%	6
Males						
Manufacturing	171	21.0%	1	1,077	13.6%	3
Construction	135	16.6%	2	1,227	15.5%	1
Agriculture, Forestry and Fishing	96	11.8%	3	1,113	14.1%	2
Retail Trade	60	7.4%	4	561	7.1%	5
Accommodation and Food Services	60	7.4%	5	588	7.4%	4

Source: 2018 Census, Statistics New Zealand.
Note: Australian and New Zealand Standard Industrial Classification (ANZSIC).

Table 91 - Leading industries in which Māori were employed, Canterbury DHB, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Health Care and Social Assistance	1,461	13.4%	1	21,192	16.8%	1
Retail Trade	1,389	12.8%	2	14,328	11.3%	3
Accommodation and Food Services	1188	10.9%	3	9,909	7.8%	5
Education and Training	1143	10.5%	4	15,075	11.9%	2
Professional, Scientific and Technical Services	813	7.5%	5	12,201	9.7%	4
Males						
Construction	3,228	25.8%	1	26,673	18.4%	1
Manufacturing	1,659	13.3%	2	20,034	13.8%	2
Transport, Postal and Warehousing	897	7.2%	3	8,376	5.8%	7
Retail Trade	825	6.6%	4	11,406	7.9%	4
Professional, Scientific and Technical Services	753	6.0%	5	14,589	10.1%	3

Source: 2018 Census, Statistics New Zealand.
Note: Australian and New Zealand Standard Industrial Classification (ANZSIC).

Table 92 - Leading industries in which Māori were employed, South Canterbury DHB, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Manufacturing	153	14.2%	1	1,275	9.5%	6
Accommodation and Food Services	144	13.4%	2	1,365	10.2%	4
Health Care and Social Assistance	138	12.8%	3	2,310	17.3%	1
Retail Trade	126	11.7%	4	1,611	12.1%	2
Education and Training	108	10.0%	5	1,452	10.9%	3
Males						
Manufacturing	339	27.6%	1	3,279	20.9%	1
Construction	201	16.4%	2	2,298	14.6%	3
Agriculture, Forestry and Fishing	180	14.7%	3	2,988	19.0%	2
Transport, Postal and Warehousing	81	6.6%	4	1,125	7.2%	4
Retail Trade	72	5.9%	5	987	6.3%	5

Source: 2018 Census, Statistics New Zealand.
Note: Australian and New Zealand Standard Industrial Classification (ANZSIC).

Table 93 - Leading industries in which Māori were employed, Southern DHB, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Health Care and Social Assistance	1,044	13.8%	1	12,735	16.6%	1
Accommodation and Food Services	963	12.8%	2	8,640	11.3%	4
Retail Trade	903	12.0%	3	9,051	11.8%	3
Education and Training	894	11.8%	4	10,077	13.2%	2
Manufacturing	648	8.6%	5	4,044	5.3%	7
Males						
Manufacturing	1,482	18.2%	1	10,119	11.9%	3
Construction	1,380	16.9%	2	13,218	15.6%	1
Agriculture, Forestry and Fishing	1,170	14.4%	3	11,787	13.9%	2
Retail Trade	525	6.4%	4	6,366	7.5%	4
Transport, Postal and Warehousing	504	6.2%	5	4,947	5.8%	7

Source: 2018 Census, Statistics New Zealand.
Note: Australian and New Zealand Standard Industrial Classification (ANZSIC).

In terms of the type of work Māori perform within those industries (Table 94), for employed Māori women in Te Tauraki, the leading occupational groupings were professionals (19.0%); community and personal service workers (17.3%); labourers (16.1%); clerical and administrative workers (14.9%); and sales (13.3%). Māori men were most likely to be employed as labourers (23.6%); technicians and trade workers (21.4%); managers (15.9%); machinery operators and drivers (13.4%); and professionals (10.5%).

The top categories differ for Māori women across the four DHBs, with professionals (20%) leading Canterbury DHB (Table 96), labourers in South Canterbury DHB (23.1%) (Table 97) and Southern DHB (19.9%) (Table 97) and community and personal service in West Coast DHB (19.5%) (Table 95). For Māori men across the four DHBs, the top two occupational groupings switch between labouring and technicians and trade workers.

Table 94 - Leading occupations in which Māori were employed, Te Tauraki IMPB, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Professionals	3,858	19.0%	1	55,083	24.7%	1
Community and Personal Service Workers	3,522	17.3%	2	32,517	14.6%	3
Labourers	3,276	16.1%	3	23,130	10.4%	6
Clerical and Administrative Workers	3,036	14.9%	4	39,162	17.5%	2
Sales Workers	2,700	13.3%	5	26,883	12.0%	5
Managers	2,247	11.0%	6	30,357	13.6%	4
Technicians and Trades Workers	1,215	6.0%	7	12,225	5.5%	7
Machinery Operators and Drivers	474	2.3%	8	3,852	1.7%	8
Males						
Labourers	5,352	23.6%	1	36,144	14.3%	4
Technicians and Trades Workers	4,848	21.4%	2	52,164	20.6%	2
Managers	3,612	15.9%	3	56,973	22.5%	1
Machinery Operators and Drivers	3,039	13.4%	4	26,721	10.5%	5
Professionals	2,376	10.5%	5	41,862	16.5%	3
Community and Personal Service Workers	1,443	6.4%	6	12,900	5.1%	7
Sales Workers	1,260	5.5%	7	16,629	6.6%	6
Clerical and Administrative Workers	774	3.4%	8	10,008	3.9%	8

Source: 2018 Census, Statistics New Zealand.
Note: Australian and New Zealand Standard Classification of Occupations (ANZSCO), major grouping.

Table 95 - Leading occupations in which Māori were employed, West Coast DHB, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Community and Personal Service Workers	165	19.5%	1	1,164	16.6%	2
Labourers	162	19.1%	2	1,005	14.3%	5
Professionals	141	16.7%	3	1,332	19.0%	1
Managers	105	12.4%	4	1,104	15.8%	4
Clerical and Administrative Workers	102	12.1%	5	1,149	16.4%	3
Sales Workers	99	11.7%	6	789	11.3%	6
Technicians and Trades Workers	54	6.4%	7	357	5.1%	7
Machinery Operators and Drivers	15	1.8%	8	117	1.7%	8
Males						
Labourers	246	30.3%	1	1,491	18.8%	2
Technicians and Trades Workers	144	17.7%	2	1,449	18.3%	3
Machinery Operators and Drivers	141	17.3%	3	1,251	15.8%	4
Managers	135	16.6%	4	1,857	23.5%	1
Professionals	54	6.6%	5	882	11.1%	5
Community and Personal Service Workers	51	6.3%	6	411	5.2%	6
Sales Workers	30	3.7%	7	348	4.4%	7
Clerical and Administrative Workers	15	1.8%	8	225	2.8%	8

Source: 2018 Census, Statistics New Zealand.

Note: Australian and New Zealand Standard Classification of Occupations (ANZSCO), major grouping.

Table 96 - Leading occupations in which Māori were employed, Canterbury DHB, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Professionals	2,172	20.0%	1	33,342	26.4%	1
Community and Personal Service Workers	1,866	17.2%	2	17,847	14.1%	3
Clerical and Administrative Workers	1,815	16.7%	3	23,250	18.4%	2
Sales Workers	1,527	14.1%	4	15,297	12.1%	5
Labourers	1,359	12.5%	5	11,130	8.8%	6
Managers	1,212	11.2%	6	16,236	12.9%	4
Technicians and Trades Workers	597	5.5%	7	6,831	5.4%	7
Machinery Operators and Drivers	315	2.9%	8	2,373	1.9%	8
Males						
Technicians and Trades Workers	2,787	22.3%	1	31,092	21.4%	2
Labourers	2,328	18.6%	2	17,370	12.0%	4
Managers	2,028	16.2%	3	31,401	21.6%	1
Machinery Operators and Drivers	1,833	14.6%	4	14,796	10.2%	5
Professionals	1,404	11.2%	5	26,610	18.3%	3
Community and Personal Service Workers	876	7.0%	6	7,323	5.0%	7
Sales Workers	741	5.9%	7	10,167	7.0%	6
Clerical and Administrative Workers	513	4.1%	8	6,279	4.3%	8

Source: 2018 Census, Statistics New Zealand.

Note: Australian and New Zealand Standard Classification of Occupations (ANZSCO), major grouping.

Table 97 - Leading occupations in which Māori were employed, South Canterbury DHB, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Labourers	249	23.1%	1	2,010	15.0%	3
Community and Personal Service Workers	180	16.7%	2	2,007	15.0%	4
Professionals	162	15.0%	3	2,601	19.5%	1
Clerical and Administrative Workers	132	12.3%	4	2,190	16.4%	2
Sales Workers	129	12.0%	5	1,542	11.5%	6
Managers	105	9.7%	6	1,962	14.7%	5
Technicians and Trades Workers	90	8.4%	7	828	6.2%	7
Machinery Operators and Drivers	24	2.2%	8	225	1.7%	8
Males						
Labourers	450	36.7%	1	3,324	21.2%	2
Technicians and Trades Workers	234	19.1%	2	3,006	19.1%	3
Managers	171	13.9%	3	4,014	25.6%	1
Machinery Operators and Drivers	162	13.2%	4	1,992	12.7%	4
Professionals	84	6.8%	5	1,638	10.4%	5
Sales Workers	60	4.9%	6	756	4.8%	6
Community and Personal Service Workers	39	3.2%	7	513	3.3%	7
Clerical and Administrative Workers	27	2.2%	8	453	2.9%	8

Source: 2018 Census, Statistics New Zealand.

Note: Australian and New Zealand Standard Classification of Occupations (ANZSCO), major grouping.

Table 98 - Leading occupations in which Māori were employed, Southern DHB, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Labourers	1,506	19.9%	1	8,985	11.7%	6
Professionals	1,383	18.3%	2	17,808	23.3%	1
Community and Personal Service Workers	1,311	17.4%	3	11,499	15.0%	3
Clerical and Administrative Workers	987	13.1%	4	12,573	16.4%	2
Sales Workers	945	12.5%	5	9,255	12.1%	5
Managers	825	10.9%	6	11,055	14.4%	4
Technicians and Trades Workers	474	6.3%	7	4,209	5.5%	7
Machinery Operators and Drivers	120	1.6%	8	1,137	1.5%	8
Males						
Labourers	2,328	28.6%	1	13,959	16.5%	3
Technicians and Trades Workers	1,683	20.6%	2	16,617	19.6%	2
Managers	1,278	15.7%	3	19,701	23.2%	1
Machinery Operators and Drivers	903	11.1%	4	8,682	10.2%	5
Professionals	834	10.2%	5	12,732	15.0%	4
Community and Personal Service Workers	477	5.9%	6	4,653	5.5%	7
Sales Workers	429	5.3%	7	5,358	6.3%	6
Clerical and Administrative Workers	219	2.7%	8	3,051	3.6%	8

Source: 2018 Census, Statistics New Zealand.

Note: Australian and New Zealand Standard Classification of Occupations (ANZSCO), major grouping.

Unpaid work is very common, with 89.1% of Māori aged over 15 years in Te Tauraki in 2018 reporting they performed unpaid work (Table 99). Māori in Te Tauraki were significantly more likely than non-Māori to participate in unpaid work looking after a disabled or ill household (1.4 times) or non-household (1.2 times) member.

These figures were very similar across the four DHBs, with 91.1% of Māori aged over 15 years in 2018 in the West Coast DHB reporting they performed unpaid work (Table 100); 88.9% in Canterbury (Table 101), 89.3% in South Canterbury DHB (Table 102) and 89.2% in Southern DHB (Table 103). Māori in Canterbury DHB (Table 101) were significantly more likely than non-Māori to participate in unpaid work looking after a disabled or ill household (1.5 times) or non-household (1.2 times) member. This is similar to Southern DHB (1.43 times) and (1.3 times) respectively (Table 103).

Table 99 - Unpaid work, 15 years and over, Te Tauraki IMPB, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	43,617	89.1	554,916	88.8	1.00	(1.00, 1.01)	0.3
Looking after disabled/ill household member	4,527	9.2	39,144	6.3	**1.48**	**(1.43, 1.52)**	3.0
Looking after disabled/ill non-household member	4,923	10.1	51,489	8.2	**1.22**	**(1.19, 1.26)**	1.8

Source: 2018 Census, Statistics New Zealand.
Notes: *Percentages are NOT age-standardised due to not having detailed age-group data available.*
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 100 - Unpaid work, 15 years and over, West Coast DHB, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	1,728	91.1	17,538	89.0	**1.02**	**(1.01, 1.04)**	2.1
Looking after disabled/ill household member	186	9.8	1,497	7.6	**1.29**	**(1.12, 1.49)**	2.2
Looking after disabled/ill non-household member	222	11.7	2,139	10.9	1.08	(0.95, 1.23)	0.8

Source: 2018 Census, Statistics New Zealand.
Notes: *Percentages are NOT age-standardised due to not having detailed age-group data available.*
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 101 - Unpaid work, 15 years and over, Canterbury DHB, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	23,646	88.9	314,772	88.8	1.00	(1.00, 1.01)	0.1
Looking after disabled/ill household member	2,529	9.5	21,963	6.2	1.53	(1.48, 1.60)	3.3
Looking after disabled/ill non-household member	2,595	9.8	28,230	8.0	1.23	(1.18, 1.27)	1.8

Source: 2018 Census, Statistics New Zealand.
Notes: *Percentages are NOT age-standardised due to not having detailed age-group data available.*
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 102 - Unpaid work, 15 years and over, South Canterbury DHB, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	2,247	89.3	35,325	88.9	1.00	(0.99, 1.02)	0.4
Looking after disabled/ill household member	219	8.7	2,607	6.6	**1.33**	**(1.16, 1.51)**	2.1
Looking after disabled/ill non-household member	255	10.1	3,633	9.1	1.11	(0.98, 1.25)	1.0

Source: 2018 Census, Statistics New Zealand.

Notes: *Percentages are NOT age-standardised due to not having detailed age-group data available.*

Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 103 - Unpaid work, 15 years and over, Southern DHB, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	15,996	89.2	187,281	88.7	1.01	(1.00, 1.01)	0.5
Looking after disabled/ill household member	1,593	8.9	13,077	6.2	**1.43**	**(1.36, 1.50)**	2.7
Looking after disabled/ill non-household member	1,851	10.3	17,487	8.3	**1.25**	**(1.19, 1.30)**	2.0

Source: 2018 Census, Statistics New Zealand.

Notes: *Percentages are NOT age-standardised due to not having detailed age-group data available.*

Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

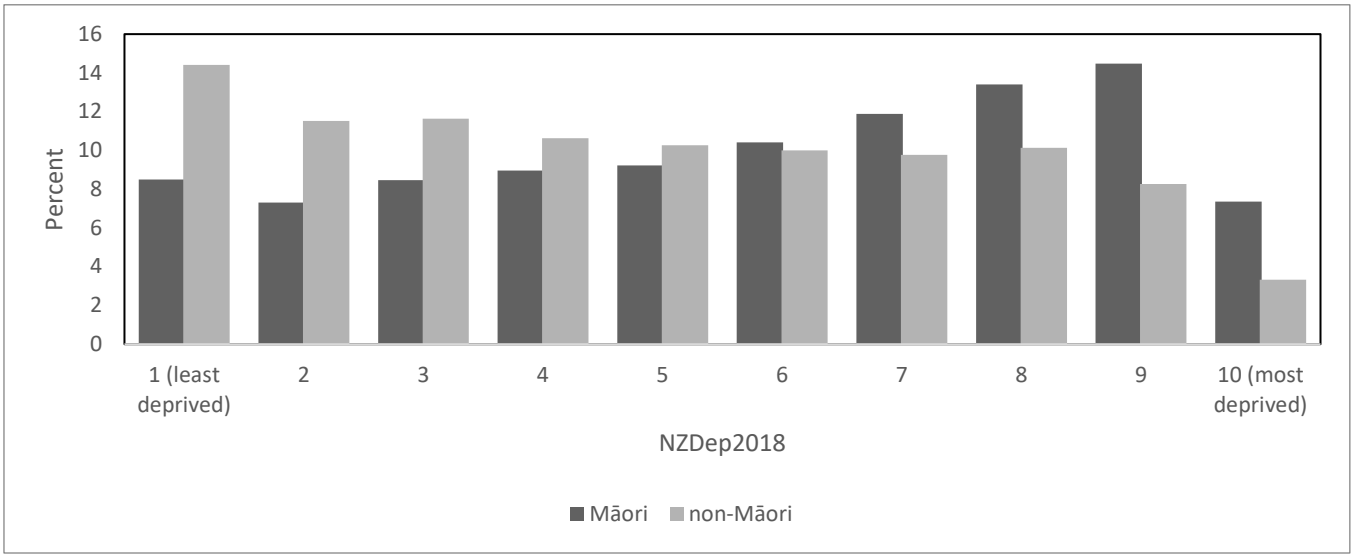
5.3. Income and standard of living

NZDep2018 is a small-area-based measure of neighbourhood deprivation, by looking at the comparative socio-economic positions of small geographic areas and assigning them decile numbers from 1 (least deprived) to 10 (most deprived). The index is based on 9 socio-economic variables from the 2018 Census (Atkinson, Salmond et al. 2019). It describes the general socio-economic deprivation of an area. An area's decile score does not necessarily mean all individuals living in that area experience an equivalent level of deprivation.

In Te Tauraki, 21% of Māori lived in the two most deprived deciles in 2018, compared to 11% for non-Māori (Figure 9). A total of 16% of Māori in Te Tauraki lived in the two least deprived deciles in 2018, compared to 26% of non-Māori in Te Tauraki.

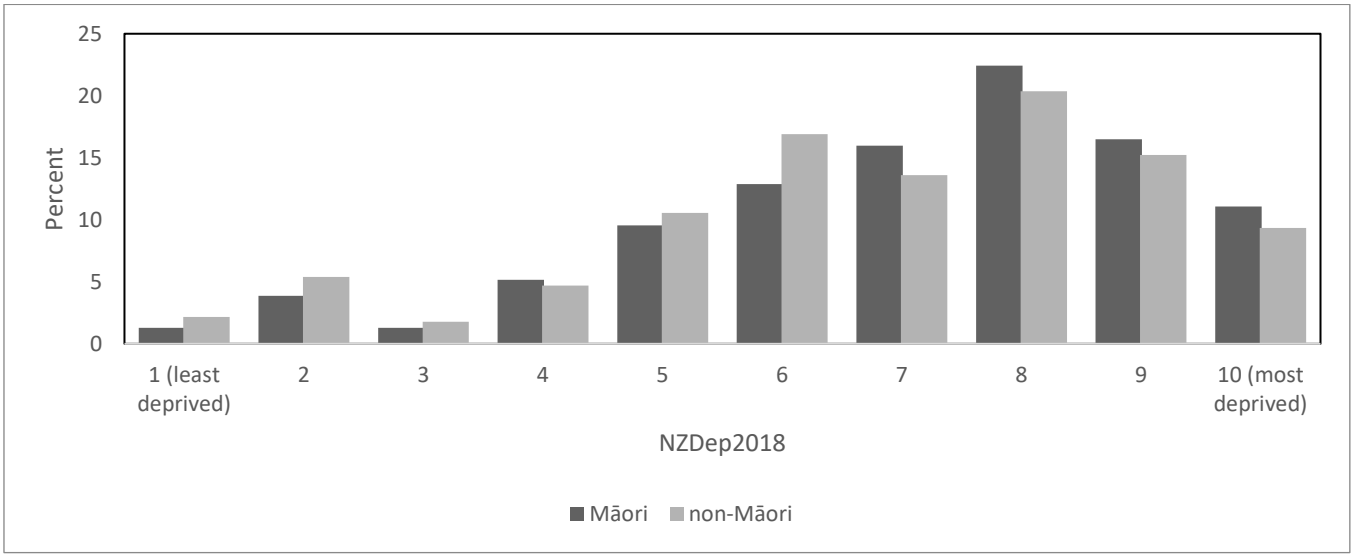
There are different patterns of deprivation distribution across the four DHBs. In West Coast DHB (Figure 10), 27% of Māori lived in the two most deprived deciles in 2018, compared to 24% for non-Māori. A total of 5% of Māori in West Coast DHB lived in the two least deprived deciles in 2018, compared to 7% of non-Māori. In Canterbury DHB (Figure 11), 21% of Māori lived in the two most deprived deciles in 2018, compared to 10% for non-Māori. A total of 18% of Māori in Canterbury DHB lived in the two least deprived deciles in 2018, compared to 29% of non-Māori. In South Canterbury DHB (Figure 12), 17% of Māori lived in the two most deprived deciles in 2018, compared to 12% for non-Māori. A total of 8% of Māori in Canterbury DHB lived in the two least deprived deciles in 2018, compared to 14 % of non-Māori. In Southern DHB (Figure 13), 24% of Māori lived in the two most deprived deciles in 2018, compared to 13% for non-Māori. A total of 16% of Māori in Southern DHB lived in the two least deprived deciles in 2018, compared to 24% of non-Māori. While West Coast DHB is the most deprived DHB overall, 4500/7330 (61.4%) of Māori in Te Tauraki living in the most deprived decile (NZDep 10) live in Canterbury DHB.

Figure 9 - NZDep2018 distribution of Māori and non-Māori by decile, Te Tauraki IMPB, 2018



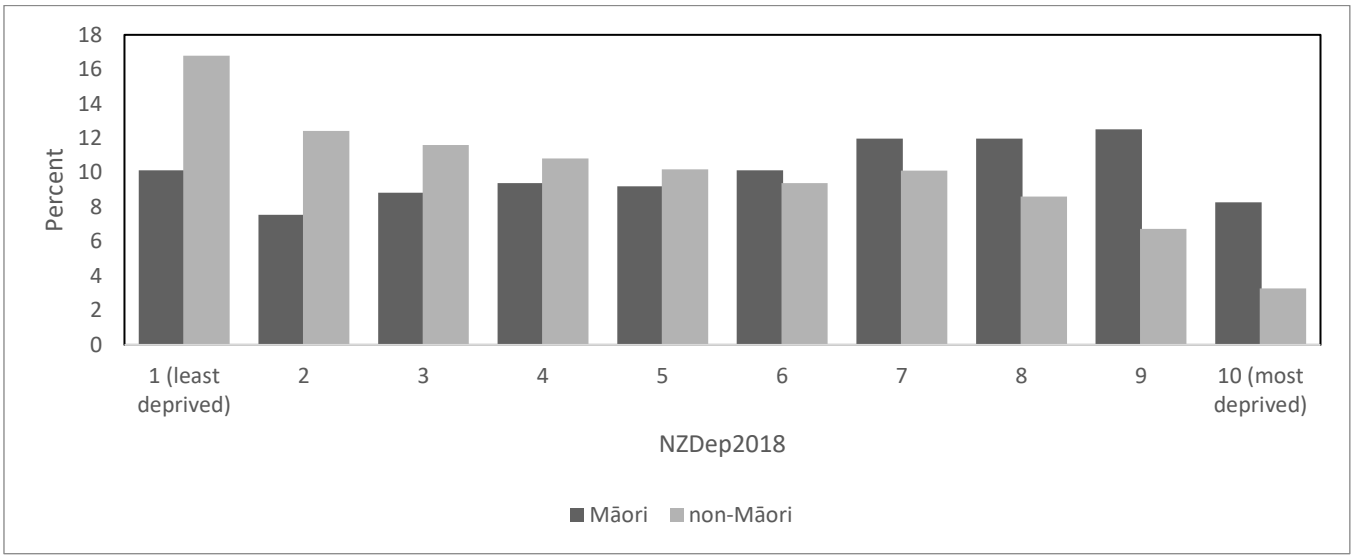
Source: Deprivation decile for estimated resident population (ERP), former DHB areas, prioritised ethnicity, provided by Stats NZ for Te Whatu Ora. Deprivation is derived according to the neighbourhood where the individual lives, based on University of Otago's NZDep2018 Socio-economic Deprivation Indices.

Figure 10 - NZDep2018 distribution of Māori and non-Māori by decile, West Coast DHB, 2018



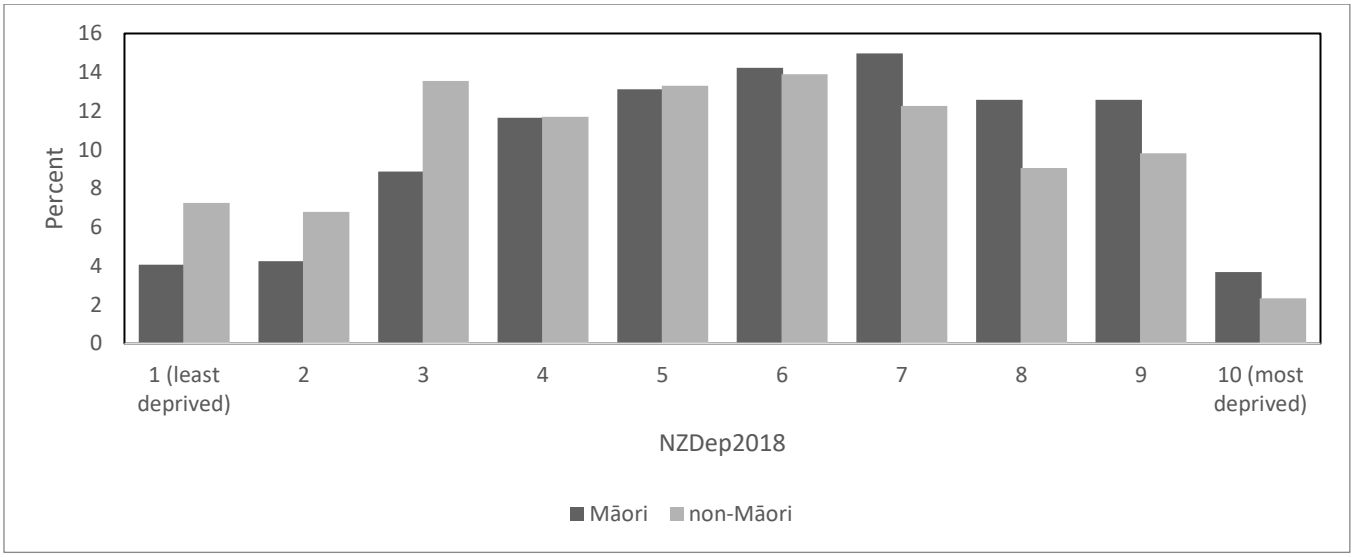
Source: Deprivation decile for estimated resident population (ERP), former DHB areas, prioritised ethnicity, provided by Stats NZ for Te Whatu Ora. Deprivation is derived according to the neighbourhood where the individual lives, based on University of Otago's NZDep2018 Socio-economic Deprivation Indices.

Figure 11 - NZDep2018 distribution of Māori and non-Māori by decile, Canterbury DHB, 2018



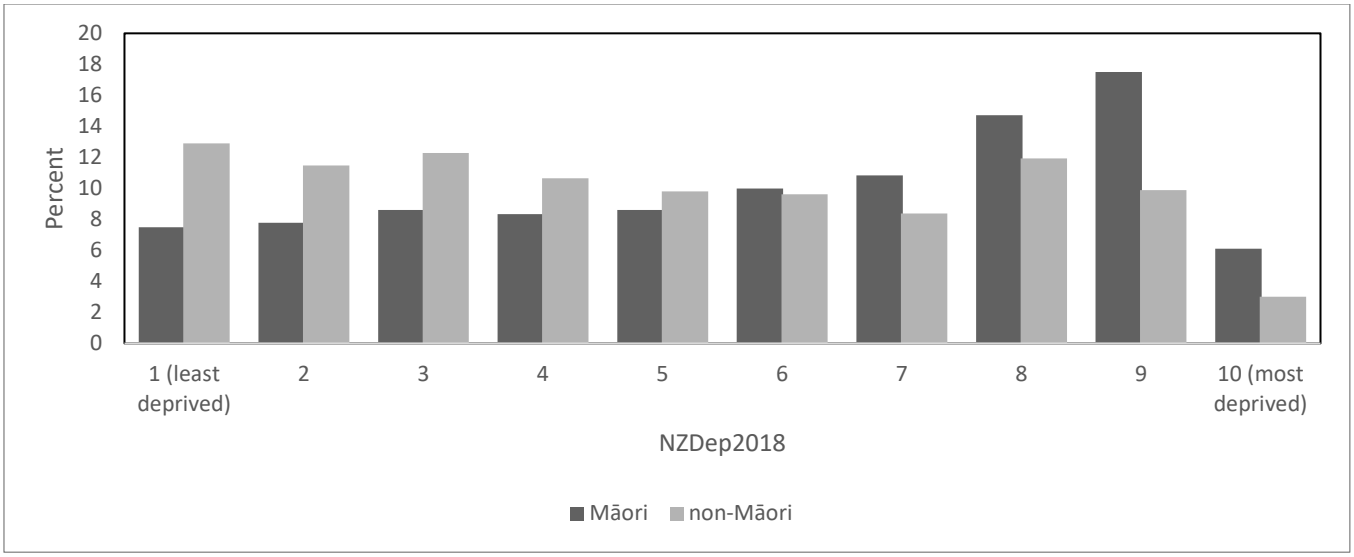
Source: Deprivation decile for estimated resident population (ERP), former DHB areas, prioritised ethnicity, provided by Stats NZ for Te Whatu Ora. Deprivation is derived according to the neighbourhood where the individual lives, based on University of Otago's NZDep2018 Socio-economic Deprivation Indices.

Figure 12 - NZDep2018 distribution of Māori and non-Māori by decile, South Canterbury DHB, 2018



Source: Deprivation decile for estimated resident population (ERP), former DHB areas, prioritised ethnicity, provided by Stats NZ for Te Whatu Ora. Deprivation is derived according to the neighbourhood where the individual lives, based on University of Otago's NZDep2018 Socio-economic Deprivation Indices.

Figure 13 - NZDep2018 distribution of Māori and non-Māori by decile, Southern DHB, 2018



Source: Deprivation decile for estimated resident population (ERP), former DHB areas, prioritised ethnicity, provided by Stats NZ for Te Whatu Ora. Deprivation is derived according to the neighbourhood where the individual lives, based on University of Otago's NZDep2018 Socio-economic Deprivation Indices.

In 2018, 7.2% of Māori aged over 15 years in Te Tauraki reported often postponing or putting off a doctor's visit, 4.4% often went without fresh fruit and vegetables, and 7.8% often put up with feeling cold, because of cost (Table 104). Similar patterns were seen in Canterbury DHB (Table 106) and Southern DHB (Table 108). Numbers are too small for reliable estimates for West Coast DHB (Table 105) and South Canterbury DHB (Table 107).

Table 104 - Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, Te Tauraki and Aotearoa, 2018

Actions taken a lot to keep costs down	Te Tauraki		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	7.8	(5.8, 9.8)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	4.4 *	(3.0, 5.7)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	7.2	(5.6, 8.7)	9.7	(8.8, 10.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Note: An asterisk (*) shows the sampling error is 30% or more but less than 50%. Participants were asked if they did any of these "a lot", "a little" or "not at all" to keep costs down. Only those who answered "a lot" are shown here.

Table 105 - Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, West Coast DHB and Aotearoa, 2018

Actions taken a lot to keep costs down	West Coast		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	S	(NA, NA)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	S	(NA, NA)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	S	(NA, NA)	9.7	(8.8, 10.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: NA = Not Available, S = suppressed: number too small for reliable estimate. Participants were asked if they did any of these "a lot", "a little" or "not at all" to keep costs down. Only those who answered "a lot" are shown here.

Table 106 - Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, Canterbury DHB and Aotearoa, 2018

Actions taken a lot to keep costs down	Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	7.3 *	(4.7, 9.9)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	4.9 *	(2.8, 6.9)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	7.7 *	(5.3, 10.2)	9.7	(8.8, 10.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Note: An asterisk (*) shows the sampling error is 30% or more but less than 50%. Participants were asked if they did any of these "a lot", "a little" or "not at all" to keep costs down. Only those who answered "a lot" are shown here.

Table 107 - Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, South Canterbury DHB and Aotearoa, 2018

Actions taken a lot to keep costs down	South Canterbury		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	S	(NA, NA)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	S	(NA, NA)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	S	(NA, NA)	9.7	(8.8, 10.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Notes: NA = Not Available, S = suppressed: number too small for reliable estimate. Participants were asked if they did any of these "a lot", "a little" or "not at all" to keep costs down. Only those who answered "a lot" are shown here.

Table 108 - Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, Southern DHB and Aotearoa, 2018

Actions taken a lot to keep costs down	Southern		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	8.8 *	(5.9, 11.7)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	4.6 *	(3.2, 5.9)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	7.3	(5.5, 9.1)	9.7	(8.8, 10.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

Note: An asterisk (*) shows the sampling error is 30% or more but less than 50%. Participants were asked if they did any of these "a lot", "a little" or "not at all" to keep costs down. Only those who answered "a lot" are shown here.

Māori in Te Tauraki are significantly more likely than non-Māori to receive an income of $20,000 or less (Table 109). This equates to 31.5% of Māori aged 20 years and over lived on an income of $20,000 or less compared to 27.0% of non-Māori in 2018. West Coast DHB has the highest proportion of Māori (37.4%) aged 20 years and over living on an income of $20,000 or less compared to 27.0% of non-Māori in 2018 (Table 110). Canterbury DHB (31.2%) (Table 111), South Canterbury DHB (31.1%) (Table 112) and Southern DHB (31.2%) (Table 113) have similar proportions of Māori aged 20 years and over living on an income of $20,000 or less (compared to 26.2%, 25.7% and 27.8% for non-Māori respectively).

Table 109 - People 20 years and over whose total annual personal income in $20,000 or less, Te Tauraki IMPB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Total income $20,000 or less	17,499	31.5	(31.0, 32.0)	187,521	27.0	(26.8, 27.1)	**1.17**	**(1.15, 1.18)**	4.5

Source: 2018 Census, Statistics New Zealand

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 110 - People 20 years and over whose total annual personal income in $20,000 or less, West Coast DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Total income $20,000 or less	831	37.4	(34.6, 40.2)	7,524	30.7	(29.7, 31.6)	**1.22**	**(1.15, 1.29)**	6.7

Source: 2018 Census, Statistics New Zealand

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 111 - People 20 years and over whose total annual personal income in $20,000 or less, Canterbury DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Total income $20,000 or less	9,522	31.2	(30.6, 31.8)	102,705	26.2	(26.0, 26.4)	**1.19**	**(1.17, 1.21)**	5.0

Source: 2018 Census, Statistics New Zealand

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 112 - People 20 years and over whose total annual personal income in $20,000 or less, South Canterbury DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Total income $20,000 or less	903	31.1	(29.0, 33.2)	12,663	25.7	(25.1, 26.3)	**1.21**	**(1.14, 1.28)**	5.4

Source: 2018 Census, Statistics New Zealand

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 113 - People 20 years and over whose total annual personal income in $20,000 or less, Southern DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Total income $20,000 or less	6,243	31.2	(30.4, 32.0)	64,629	27.8	(27.6, 28.1)	**1.12**	**(1.10, 1.15)**	3.4

Source: 2018 Census, Statistics New Zealand

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Māori in Te Tauraki are 1.8 times more likely than non-Māori to be without access to a motor vehicle (Table 114). This equates to 5.1% of Māori (4,110 people) living in Te Tauraki with no access to a motor vehicle compared to 2.8% of non-Māori in 2018. Statistically significant differences between Māori and non-Māori to be without access to a motor vehicle are seen in Canterbury DHB (2.1 times more likely) (Table 116), South Canterbury (2.01 times more likely) (Table 116) and Southern DHB (1.5 times more likely) (Table 118).

Table 114 - People with no access to a motor vehicle, Te Tauraki IMPB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	4,110	5.1	(4.9, 5.2)	28,617	2.8	(2.8, 2.8)	**1.81**	**(1.75, 1.87)**	2.3

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 115 - People with no access to a motor vehicle, West Coast DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	135	4.0	(3.3, 4.8)	1,038	3.5	(3.2, 3.8)	1.16	(0.97, 1.38)	0.5

Source: 2018 Census, Statistics New Zealand.
Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 116 - People with no access to a motor vehicle, Canterbury DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	2,289	5.3	(5.0, 5.5)	14,796	2.5	(2.4, 2.5)	**2.14**	**(2.05, 2.23)**	2.8

Source: 2018 Census, Statistics New Zealand.
Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 117 - People with no access to a motor vehicle, South Canterbury DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	210	4.8	(4.2, 5.5)	1,614	2.4	(2.2, 2.6)	**2.03**	**(1.76, 2.34)**	2.5

Source: 2018 Census, Statistics New Zealand.
Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 118 - People with no access to a motor vehicle, Southern DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	1,476	5.0	(4.7, 5.2)	11,169	3.4	(3.3, 3.5)	**1.45**	**(1.38, 1.53)**	1.5

Source: 2018 Census, Statistics New Zealand.
Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Māori in Te Tauraki are 1.4 times more likely than non-Māori to have no access to telecommunications (Table 119). This equates to 1.0% of Māori (846 people) who had no access to any form of telecommunications (a functional cellphone, telephone, or the Internet) compared to 0.7% of non-Māori in 2018. Similar patterns are seen for Canterbury DHB (1.5 times more likely) (Table 120) and Southern DHB (1.6 times more likely) (Table 121). Numbers are too small to provide any data for West Coast DHB and South Canterbury DHB.

Table 119 - People with no access to telecommunications, Te Tauraki IMPB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	846	1.0	(0.9, 1.0)	5,169	0.7	(0.7, 0.7)	**1.41**	**(1.31, 1.52)**	0.3

Source: 2018 Census, Statistics New Zealand.
Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 120 - People with no access to telecommunications, Canterbury DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	450	1.0	(0.9, 1.1)	2,820	0.6	(0.6, 0.7)	**1.53**	**(1.39, 1.69)**	0.3

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 121 - People with no access to telecommunications, Southern DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	318	1.1	(1.0, 1.2)	1,716	0.7	(0.6, 0.7)	**1.63**	**(1.45, 1.84)**	0.4

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

5.4. Housing

Māori in Te Tauraki are less likely than non-Māori to own their home (Table 122). In 2018, 59.2% of Māori aged 20 years and over in Te Tauraki lived in a home they did not own/partly own or hold in a family trust compared to 49.3% of non-Māori.

Similar patterns are seen across the four DHBs. In 2018, 57.2% of Māori aged 20 years and over in West Coast DHB lived in a home they did not own/partly own or hold in a family trust compared to 50.3% of non-Māori (Table 123). In 2018, 62.1% of Māori aged 20 years and over in Canterbury DHB lived in a home they did not own/partly own or hold in a family trust compared to 49.6% of non-Māori (Table 124). In 2018, 56.8% of Māori aged 20 years and over in South Canterbury DHB lived in a home they did not own/partly own or hold in a family trust compared to 46.6% of non-Māori (Table 125). In 2018, 55.4% of Māori aged 20 years and over in Southern DHB lived in a home they did not own/partly own or hold in a family trust compared to 49.0% of non-Māori (Table 126).

Table 122 - Housing tenure, 20 years and over, Te Tauraki IMPB, 2018

Housing tenure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Owned or partly owned	16,029	35.7	(35.1, 36.3)	294,054	42.2	(42.1, 42.4)	**0.85**	**(0.83, 0.86)**	-6.5
Held in a family trust	2,463	5.1	(4.9, 5.3)	71,286	8.5	(8.4, 8.6)	**0.60**	**(0.58, 0.62)**	-3.4
Not owned; not held in a family trust	23,952	59.2	(58.4, 60.0)	221,037	49.3	(49.1, 49.5)	**1.20**	**(1.19, 1.21)**	9.9

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 123 - Housing tenure, 20 years and over, West Coast DHB, 2018

Housing tenure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Owned or partly owned	792	40.6	(37.4, 43.8)	10,917	45.4	(44.3, 46.5)	**0.89**	**(0.85, 0.94)**	-4.8
Held in a family trust	60	2.6	(1.9, 3.4)	1,407	4.4	(4.0, 4.7)	**0.60**	**(0.47, 0.77)**	-1.7
Not owned; not held in a family trust	837	57.2	(52.9, 61.4)	6,669	50.3	(48.9, 51.8)	**1.14**	**(1.08, 1.20)**	6.9

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 124 - Housing tenure, 20 years and over, Canterbury DHB, 2018

Housing tenure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Owned or partly owned	8,034	33.1	(32.3, 33.9)	165,735	42.1	(41.9, 42.4)	**0.79**	**(0.77, 0.80)**	-9.0
Held in a family trust	1,233	4.8	(4.5, 5.1)	37,389	8.2	(8.1, 8.3)	**0.58**	**(0.55, 0.61)**	-3.5
Not owned; not held in a family trust	13,941	62.1	(61.1, 63.2)	129,246	49.6	(49.3, 49.9)	**1.25**	**(1.24, 1.27)**	12.5

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 125 - Housing tenure, 20 years and over, South Canterbury DHB, 2018

Housing tenure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Owned or partly owned	924	38.3	(35.7, 41.0)	21,600	46.5	(45.7, 47.3)	**0.82**	**(0.78, 0.87)**	-8.2
Held in a family trust	126	4.9	(3.9, 5.8)	4,290	6.9	(6.6, 7.2)	**0.71**	**(0.60, 0.84)**	-2.0
Not owned; not held in a family trust	1,116	56.8	(53.3, 60.3)	12,099	46.6	(45.6, 47.6)	**1.22**	**(1.17, 1.27)**	10.3

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 126 - Housing tenure, 20 years and over, Southern DHB, 2018

Housing tenure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Owned or partly owned	6,279	38.7	(37.7, 39.7)	95,802	41.4	(41.0, 41.7)	**0.94**	**(0.92, 0.95)**	-2.6
Held in a family trust	1,044	5.9	(5.5, 6.2)	28,200	9.6	(9.5, 9.7)	**0.61**	**(0.57, 0.65)**	-3.7
Not owned; not held in a family trust	8,058	55.4	(54.2, 56.6)	73,023	49.0	(48.7, 49.4)	**1.13**	**(1.11, 1.15)**	6.4

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Living in an overcrowded home was 1.4 times more common for Māori than non-Māori in Te Tauraki in 2018 (Table 127). In the 2018 Census, 10.9% of Māori (8,745 people) in Te Tauraki lived in overcrowded homes compared to 8.0% of non-Māori.

Similar patterns are seen across the four DHBs. Living in an overcrowded home was 1.2 times more common for Māori than non-Māori in West Coast DHB in 2018 (Table 128). In the 2018 Census, 8% of Māori (258 people) in West Coast DHB lived in overcrowded homes compared to 6.8% of non-Māori. Living in an overcrowded home was 1.5 times more common for Māori than non-Māori in Canterbury DHB in 2018 (Table 129). In the 2018 Census, 9.2% of Māori (2,649 people) in Southern DHB lived in overcrowded homes compared to 7.2% of non-Māori (Table 131).

Table 127 - People living in crowded households (requiring at least one more bedroom), Te Tauraki IMPB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	8,745	10.9	(10.7, 11.2)	48,111	8.0	(7.9, 8.0)	**1.38**	**(1.35, 1.41)**	2.9

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 128 - People living in crowded households (requiring at least one more bedroom), West Coast DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	258	8.0	(6.9, 9.1)	1,017	6.8	(6.3, 7.3)	**1.18**	**(1.03, 1.34)**	1.2

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 129 - People living in crowded households (requiring at least one more bedroom), Canterbury DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	5,442	12.5	(12.2, 12.8)	30,636	8.6	(8.5, 8.7)	**1.45**	**(1.41, 1.49)**	3.9

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 130 - People living in crowded households (requiring at least one more bedroom), South Canterbury DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	396	8.9	(8.0, 9.8)	2,046	6.0	(5.7, 6.3)	**1.47**	**(1.33, 1.63)**	2.9

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 131 - People living in crowded households (requiring at least one more bedroom), Southern DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	2,649	9.2	(8.8, 9.6)	14,412	7.2	(7.1, 7.3)	**1.28**	**(1.23, 1.33)**	2.0

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

In 2018, 31.1% of Māori in Te Tauraki (22,638 people) lived in a home that was sometimes or always damp, and 21.8% of Māori (16,122 people) lived in a house with mould (Table 132). Māori in Te Tauraki were 1.5 times more likely than non-Māori to live in a damp home and 1.6 times more likely to live in a mouldy home.

Similar patterns are seen across the four DHBs.

Table 132 - People experiencing housing quality issues sometimes or always, Te Tauraki IMPB, 2018

Housing quality issues	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Dampness	22,638	31.1	(30.7, 31.5)	133,740	20.8	(20.7, 20.9)	**1.50**	**(1.48, 1.51)**	10.3
Mould	16,122	21.8	(21.5, 22.1)	90,951	14.1	(14.0, 14.2)	**1.55**	**(1.53, 1.57)**	7.7

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori. Dampness indicator shows % people who stated their house experienced dampness sometimes or always. Mould indicator shows % people who stated their house experienced mould (of approximately A4-size or larger) sometimes or always.

Table 133 - People experiencing housing quality issues sometimes or always, West Coast DHB, 2018

Housing quality issues	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Dampness	981	35.6	(33.3, 38.0)	5,466	27.3	(26.4, 28.2)	**1.30**	**(1.23, 1.38)**	8.3
Mould	681	24.9	(22.9, 26.9)	3,690	18.7	(18.0, 19.5)	**1.33**	**(1.24, 1.43)**	6.2

Source: 2018 Census, Statistics New Zealand.

Notes: Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori. Dampness indicator shows % people who stated their house experienced dampness sometimes or always. Mould indicator shows % people who stated their house experienced mould (of approximately A4-size or larger) sometimes or always.

Table 134 - People experiencing housing quality issues sometimes or always, Canterbury DHB, 2018

Housing quality issues	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Dampness	12,024	30.5	(29.9, 31.0)	71,025	19.1	(19.0, 19.3)	**1.59**	**(1.57, 1.62)**	11.3
Mould	8,493	21.0	(20.5, 21.5)	47,931	12.8	(12.7, 12.9)	**1.64**	**(1.61, 1.67)**	8.2

Source: 2018 Census, Statistics New Zealand.

Notes: Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori. Dampness indicator shows % people who stated their house experienced dampness sometimes or always. Mould indicator shows % people who stated their house experienced mould (of approximately A4-size or larger) sometimes or always.

Table 135 - People experiencing housing quality issues sometimes or always, South Canterbury DHB, 2018

Housing quality issues	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Dampness	1,257	32.1	(30.2, 33.9)	8,901	23.6	(23.0, 24.1)	**1.36**	**(1.30, 1.43)**	8.5
Mould	894	22.2	(20.7, 23.7)	5,844	15.3	(14.9, 15.8)	**1.45**	**(1.36, 1.54)**	6.9

Source: 2018 Census, Statistics New Zealand.

Notes: Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori. Dampness indicator shows % people who stated their house experienced dampness sometimes or always. Mould indicator shows % people who stated their house experienced mould (of approximately A4-size or larger) sometimes or always.

Table 136 - People experiencing housing quality issues sometimes or always, Southern DHB, 2018

Housing quality issues	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Dampness	8,376	31.5	(30.8, 32.2)	48,348	22.6	(22.3, 22.8)	**1.39**	**(1.37, 1.42)**	8.9
Mould	6,054	22.6	(22.0, 23.2)	33,486	15.6	(15.4, 15.8)	**1.45**	**(1.41, 1.48)**	7.0

Source: 2018 Census, Statistics New Zealand.

Notes: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori. Dampness indicator shows % people who stated their house experienced dampness sometimes or always. Mould indicator shows % people who stated their house experienced mould (of approximately A4-size or larger) sometimes or always.

Māori in Te Tauraki were 1.1 times as likely as non-Māori to live in homes without any source of heating in 2018 (Table 137). This equates to 0.7% of Māori (564 people) in Te Tauraki who were without heating compared to 0.6% of non-Māori in 2018.

Similar patterns are seen in Canterbury DHB (Table 138) and Southern DHB (Table 139). There are insufficient data for reliable estimates for West Coast DHB and South Canterbury DHB.

Table 137 - People living in households where there is no source of heating, Te Tauraki IMPB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
No source of heating	564	0.7	(0.6, 0.7)	4,029	0.6	(0.6, 0.6)	**1.14**	**(1.04, 1.24)**	0.1

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 138 - People living in households where there is no source of heating, Canterbury DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
No source of heating	327	0.7	(0.7, 0.8)	2,364	0.6	(0.6, 0.6)	**1.26**	**(1.12, 1.41)**	0.2

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 139 - People living in households where there is no source of heating, Southern DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
No source of heating	207	0.7	(0.6, 0.8)	1,368	0.6	(0.5, 0.6)	**1.18**	**(1.02, 1.37)**	0.1

Source: 2018 Census, Statistics New Zealand.

Note: Percentages are age-standardised to the 2001 Māori population. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

5.5. Primary Care Enrolment

In October 2023, 14.8% of Māori in Te Tauraki were not enrolled with primary health care, compared to 1.4% for non-Māori (Table 140). These figures for the proportion of Māori not enrolled in primary health care range from West Coast DHB (8.8%) (Table 141), to Canterbury DHB (12.9%) (Table 142), followed by South Canterbury (17.8%) (Table 143) and Southern (17.8%) (Table 144).

Nationally, 16.2% of Māori were not enrolled with primary health care, compared to 1.3% of non-Māori in October 2023. One partial explanation for the lower enrolment for Māori may be related to poor ethnicity data quality – this primary care enrolment data uses the ethnicity recorded in a person's National Health Index (NHI) record, and previous research has found that compared to the ethnicity that people report in the Census, the NHI undercounts Māori by 15.7%, with higher undercounts for Māori men (Harris, Paine et al. 2022).

The poor ethnicity data quality makes it difficult to assess how many Māori in Te Tauraki are actually missing out on being enrolled with primary health care, and how many are actually enrolled but misclassified with a non-Māori ethnicity. It is likely that both of these factors make a contribution to the inequity in primary care enrolment data.

Table 140 - People enrolled with primary care, Te Tauraki IMPB, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	96,692	85.2	(84.7, 85.7)	918,205	98.6	(98.4, 98.8)	**0.86**	**(0.86, 0.87)**	-13.4

Source: Te Whatu Ora Primary Care Enrolment data; denominator is 2023 ERP from Te Whatu Ora Population Web Tool
Notes: *Percentages are crude (not age-standardised)*. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 141 - People enrolled with primary care, West Coast DHB, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	3,829	91.2	(88.3, 94.1)	28,517	99.7	(98.6, 100.9)	**0.91**	**(0.91, 0.92)**	-8.5

Source: Te Whatu Ora Primary Care Enrolment data; denominator is 2023 ERP from Te Whatu Ora Population Web Tool
Notes: *Percentages are crude (not age-standardised)*. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 142 – People enrolled with primary care, Canterbury DHB, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	53,992	87.1	(86.3, 87.8)	530,368	99.3	(99.0, 99.5)	**0.88**	**(0.87, 0.88)**	-12.2

Source: Te Whatu Ora Primary Care Enrolment data; denominator is 2023 ERP from Te Whatu Ora Population Web Tool
Notes: *Percentages are crude (not age-standardised)*. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 143 - People enrolled with primary care, South Canterbury DHB, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	5,094	82.2	(79.9, 84.4)	55,976	99.4	(98.6, 100.2)	**0.83**	**(0.82, 0.84)**	-17.3

Source: Te Whatu Ora Primary Care Enrolment data; denominator is 2023 ERP from Te Whatu Ora Population Web Tool
Notes: *Percentages are crude (not age-standardised)*. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Table 144 - People enrolled with primary care, Southern DHB, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	33,777	82.2	(81.3, 83.1)	303,344	97.3	(96.9, 97.6)	**0.85**	**(0.84, 0.85)**	-15.1

Source: Te Whatu Ora Primary Care Enrolment data; denominator is 2023 ERP from Te Whatu Ora Population Web Tool
Notes: *Percentages are crude (not age-standardised)*. Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

Ngā āpitihanga
Appendices

Appendix 1: IMPB Māori population projections

Table 145 - Māori population projections, single year, Te Tauraki (mapped to DHB geographic boundaries), by 5-year age band, 2018 to 2043

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2018			2019			2020			2021		
00-04	5,030	5,390	10,430	5,030	5,410	10,430	5,150	5,510	10,680	5,250	5,580	10,830
05-09	5,280	5,450	10,720	5,330	5,460	10,770	5,300	5,440	10,730	5,290	5,520	10,810
10-14	4,800	5,370	10,180	4,990	5,560	10,550	5,220	5,830	11,050	5,440	5,920	11,360
15-19	4,720	5,000	9,720	4,800	5,120	9,910	4,880	5,190	10,070	4,990	5,460	10,440
20-24	4,430	4,840	9,250	4,480	4,920	9,390	4,670	5,050	9,720	4,760	5,070	9,830
25-29	3,920	4,280	8,190	4,050	4,380	8,440	4,100	4,460	8,570	4,190	4,590	8,800
30-34	3,110	3,300	6,400	3,380	3,580	6,950	3,630	3,830	7,460	3,870	4,110	7,980
35-39	2,830	2,840	5,670	2,860	2,900	5,760	2,870	3,010	5,870	2,970	3,080	6,050
40-44	2,690	2,670	5,370	2,660	2,680	5,340	2,780	2,790	5,550	2,890	2,860	5,750
45-49	2,890	2,850	5,730	2,870	2,800	5,670	2,830	2,760	5,600	2,790	2,740	5,530
50-54	2,560	2,490	5,060	2,610	2,630	5,230	2,740	2,720	5,460	2,840	2,830	5,650
55-59	2,220	2,200	4,440	2,370	2,210	4,570	2,410	2,260	4,690	2,450	2,390	4,840
60-64	1,480	1,600	3,080	1,580	1,760	3,350	1,740	1,890	3,640	1,900	1,930	3,810
65-69	1,070	1,140	2,210	1,120	1,220	2,340	1,200	1,270	2,470	1,280	1,350	2,620
70-74	690	740	1,430	750	810	1,560	840	870	1,710	900	960	1,860
75-79	440	480	900	470	500	970	480	530	1,010	510	540	1,060
80-84	210	220	440	230	230	470	290	290	560	320	330	650
85+	170	140	320	190	150	350	200	160	360	240	160	400
All Ages	**48,510**	**51,070**	**99,580**	**49,810**	**52,270**	**101,980**	**51,340**	**53,900**	**105,130**	**52,860**	**55,430**	**108,390**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2022			2023			2024			2025		
00-04	5,330	5,670	10,990	5,390	5,700	11,090	5,490	5,790	11,290	5,560	5,890	11,450
05-09	5,260	5,570	10,830	5,300	5,690	10,980	5,300	5,720	11,020	5,410	5,790	11,190
10-14	5,550	5,890	11,430	5,620	5,830	11,450	5,700	5,840	11,540	5,630	5,800	11,440
15-19	5,190	5,720	10,920	5,410	5,980	11,410	5,610	6,190	11,810	5,830	6,460	12,280
20-24	4,760	5,110	9,870	4,840	5,160	9,990	4,890	5,260	10,160	4,930	5,280	10,220
25-29	4,350	4,670	9,000	4,360	4,710	9,060	4,400	4,780	9,190	4,560	4,880	9,450
30-34	4,020	4,330	8,350	4,180	4,480	8,660	4,300	4,580	8,880	4,300	4,640	8,930
35-39	3,130	3,220	6,340	3,330	3,470	6,790	3,600	3,760	7,340	3,840	3,990	7,820
40-44	2,900	2,930	5,840	2,960	2,960	5,930	3,000	3,020	6,030	3,000	3,110	6,110
45-49	2,760	2,730	5,490	2,740	2,730	5,470	2,710	2,740	5,440	2,820	2,840	5,640
50-54	2,910	2,830	5,740	2,880	2,860	5,740	2,880	2,810	5,700	2,820	2,760	5,580
55-59	2,480	2,410	4,900	2,530	2,470	5,010	2,600	2,600	5,190	2,700	2,680	5,390
60-64	2,040	2,050	4,110	2,210	2,170	4,380	2,360	2,170	4,530	2,400	2,220	4,620
65-69	1,330	1,450	2,770	1,450	1,550	2,990	1,560	1,710	3,260	1,710	1,820	3,530
70-74	980	1,020	1,990	1,020	1,070	2,080	1,080	1,140	2,210	1,130	1,180	2,310
75-79	580	590	1,170	640	660	1,300	690	710	1,390	770	770	1,540
80-84	330	370	710	380	370	760	420	400	810	420	420	840
85+	270	180	450	270	220	520	300	250	550	350	280	620
All Ages	**54,160**	**56,730**	**110,990**	**55,470**	**58,040**	**113,500**	**56,880**	**59,460**	**116,350**	**58,200**	**60,770**	**118,970**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2026			2027			2028			2029		
00-04	5,620	5,970	11,610	5,720	6,040	11,760	5,790	6,130	11,940	5,870	6,200	12,070
05-09	5,470	5,830	11,310	5,550	5,930	11,480	5,630	5,950	11,580	5,720	6,060	11,780
10-14	5,600	5,860	11,460	5,580	5,900	11,490	5,610	6,020	11,620	5,620	6,040	11,660
15-19	6,030	6,530	12,550	6,140	6,490	12,620	6,210	6,430	12,640	6,270	6,430	12,710
20-24	5,000	5,520	10,510	5,200	5,770	10,960	5,410	6,040	11,460	5,600	6,230	11,850
25-29	4,620	4,860	9,490	4,620	4,890	9,510	4,670	4,920	9,570	4,710	5,000	9,720
30-34	4,370	4,720	9,090	4,510	4,780	9,280	4,520	4,820	9,330	4,560	4,890	9,450
35-39	4,060	4,250	8,300	4,190	4,450	8,650	4,330	4,590	8,940	4,460	4,690	9,150
40-44	3,070	3,180	6,240	3,220	3,300	6,520	3,430	3,560	6,980	3,680	3,850	7,530
45-49	2,910	2,890	5,800	2,930	2,950	5,870	2,970	2,990	5,960	3,010	3,050	6,060
50-54	2,780	2,720	5,500	2,740	2,700	5,440	2,720	2,720	5,440	2,670	2,720	5,400
55-59	2,810	2,770	5,560	2,870	2,780	5,650	2,850	2,790	5,660	2,840	2,760	5,600
60-64	2,430	2,330	4,750	2,450	2,360	4,810	2,510	2,420	4,920	2,580	2,520	5,110
65-69	1,860	1,850	3,690	2,000	1,970	3,970	2,160	2,070	4,240	2,300	2,080	4,380
70-74	1,200	1,260	2,460	1,260	1,350	2,600	1,370	1,440	2,810	1,480	1,580	3,070
75-79	810	850	1,670	890	890	1,790	930	930	1,870	980	1,000	1,990
80-84	450	420	880	510	460	980	570	520	1,090	610	560	1,160
85+	400	320	700	420	370	780	450	390	840	490	420	910
All Ages	**59,520**	**62,090**	**121,510**	**60,830**	**63,410**	**124,230**	**62,050**	**64,720**	**126,870**	**63,460**	**66,040**	**129,600**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2030			2031			2032			2033		
00-04	5,920	6,270	12,190	5,990	6,310	12,310	6,030	6,390	12,430	6,100	6,470	12,550
05-09	5,800	6,160	11,950	5,880	6,230	12,110	5,960	6,320	12,300	6,040	6,410	12,460
10-14	5,730	6,120	11,830	5,800	6,180	11,960	5,870	6,270	12,140	5,950	6,300	12,250
15-19	6,220	6,380	12,600	6,190	6,440	12,630	6,170	6,490	12,670	6,190	6,600	12,800
20-24	5,820	6,500	12,320	6,040	6,580	12,610	6,150	6,550	12,700	6,220	6,490	12,710
25-29	4,760	5,030	9,790	4,840	5,250	10,090	5,040	5,520	10,550	5,260	5,790	11,050
30-34	4,720	5,000	9,720	4,780	4,990	9,770	4,780	5,010	9,790	4,840	5,030	9,880
35-39	4,470	4,730	9,200	4,530	4,820	9,360	4,670	4,900	9,570	4,680	4,940	9,620
40-44	3,940	4,070	8,010	4,170	4,330	8,500	4,290	4,560	8,870	4,450	4,700	9,140
45-49	3,000	3,120	6,120	3,100	3,170	6,270	3,250	3,320	6,560	3,450	3,580	7,030
50-54	2,800	2,810	5,610	2,880	2,870	5,750	2,900	2,930	5,840	2,950	2,960	5,910
55-59	2,790	2,710	5,500	2,750	2,670	5,420	2,710	2,660	5,360	2,690	2,670	5,360
60-64	2,690	2,620	5,300	2,770	2,700	5,470	2,850	2,730	5,570	2,840	2,730	5,570
65-69	2,340	2,130	4,480	2,360	2,250	4,600	2,400	2,270	4,670	2,460	2,320	4,790
70-74	1,600	1,700	3,300	1,750	1,710	3,460	1,890	1,830	3,720	2,050	1,940	3,990
75-79	1,050	1,040	2,090	1,110	1,120	2,230	1,160	1,200	2,350	1,260	1,270	2,540
80-84	670	600	1,280	700	690	1,390	780	720	1,490	800	760	1,560
85+	520	450	960	580	460	1,030	630	520	1,150	700	550	1,270
All Ages	**64,780**	**67,460**	**132,240**	**66,210**	**68,780**	**134,980**	**67,520**	**70,100**	**137,720**	**68,940**	**71,530**	**140,570**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2034			2035			2036			2037		
00-04	6,160	6,540	12,690	6,240	6,610	12,830	6,300	6,670	13,000	6,370	6,760	13,140
05-09	6,120	6,480	12,600	6,180	6,550	12,730	6,250	6,620	12,870	6,310	6,680	12,980
10-14	6,040	6,410	12,450	6,130	6,500	12,630	6,220	6,600	12,810	6,310	6,690	12,990
15-19	6,200	6,630	12,840	6,310	6,700	13,030	6,390	6,760	13,150	6,480	6,870	13,330
20-24	6,290	6,490	12,770	6,230	6,440	12,660	6,190	6,510	12,710	6,190	6,540	12,730
25-29	5,450	6,000	11,460	5,680	6,280	11,950	5,890	6,350	12,240	6,010	6,330	12,330
30-34	4,890	5,110	10,000	4,940	5,140	10,070	5,000	5,360	10,360	5,230	5,620	10,840
35-39	4,730	5,020	9,750	4,900	5,130	10,030	4,970	5,120	10,070	4,970	5,140	10,110
40-44	4,570	4,790	9,360	4,580	4,830	9,410	4,650	4,910	9,570	4,790	5,000	9,790
45-49	3,720	3,870	7,590	3,970	4,110	8,090	4,200	4,380	8,580	4,340	4,610	8,950
50-54	3,000	3,020	6,010	2,980	3,100	6,090	3,070	3,160	6,230	3,240	3,300	6,540
55-59	2,650	2,670	5,330	2,770	2,760	5,530	2,870	2,830	5,700	2,880	2,890	5,770
60-64	2,820	2,700	5,530	2,780	2,650	5,430	2,740	2,620	5,350	2,700	2,610	5,320
65-69	2,520	2,430	4,950	2,630	2,540	5,150	2,720	2,600	5,320	2,800	2,630	5,420
70-74	2,180	1,950	4,140	2,230	2,000	4,240	2,250	2,100	4,360	2,300	2,130	4,420
75-79	1,360	1,410	2,750	1,460	1,510	2,970	1,590	1,500	3,100	1,720	1,620	3,350
80-84	870	820	1,670	930	850	1,780	970	920	1,900	1,010	970	2,000
85+	750	600	1,340	790	650	1,440	870	710	1,560	970	760	1,720
All Ages	**70,270**	**72,850**	**143,310**	**71,780**	**74,370**	**146,060**	**73,210**	**75,800**	**148,810**	**74,530**	**77,130**	**151,760**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2038			2039			2040			2041		
00-04	6,470	6,830	13,310	6,540	6,930	13,480	6,640	7,040	13,660	6,720	7,120	13,840
05-09	6,360	6,740	13,110	6,440	6,830	13,270	6,510	6,900	13,410	6,590	6,980	13,570
10-14	6,390	6,770	13,170	6,460	6,860	13,320	6,540	6,930	13,460	6,610	6,990	13,590
15-19	6,540	6,910	13,440	6,650	7,000	13,650	6,730	7,100	13,840	6,820	7,200	14,020
20-24	6,220	6,660	12,870	6,210	6,690	12,910	6,320	6,770	13,090	6,390	6,820	13,220
25-29	6,070	6,270	12,340	6,150	6,260	12,410	6,090	6,230	12,310	6,070	6,280	12,330
30-34	5,440	5,910	11,360	5,640	6,140	11,770	5,860	6,410	12,270	6,080	6,500	12,570
35-39	5,020	5,160	10,190	5,070	5,250	10,320	5,120	5,280	10,390	5,200	5,500	10,700
40-44	4,800	5,050	9,850	4,860	5,140	9,990	5,030	5,250	10,270	5,090	5,250	10,320
45-49	4,480	4,740	9,230	4,600	4,810	9,430	4,620	4,870	9,490	4,680	4,960	9,650
50-54	3,430	3,560	7,010	3,710	3,870	7,570	3,960	4,110	8,070	4,190	4,370	8,570
55-59	2,930	2,930	5,860	2,970	2,970	5,940	2,960	3,060	6,030	3,050	3,120	6,160
60-64	2,690	2,630	5,310	2,640	2,640	5,280	2,760	2,710	5,480	2,860	2,770	5,640
65-69	2,770	2,650	5,420	2,770	2,620	5,400	2,740	2,570	5,300	2,690	2,540	5,230
70-74	2,350	2,180	4,540	2,400	2,300	4,690	2,510	2,380	4,890	2,600	2,470	5,070
75-79	1,880	1,730	3,600	2,020	1,740	3,760	2,060	1,780	3,850	2,090	1,890	3,980
80-84	1,090	1,040	2,140	1,160	1,160	2,330	1,260	1,240	2,510	1,390	1,240	2,630
85+	1,030	830	1,840	1,080	880	1,970	1,170	930	2,100	1,240	1,000	2,240
All Ages	**75,960**	**78,560**	**154,520**	**77,380**	**80,090**	**157,480**	**78,910**	**81,520**	**160,430**	**80,340**	**82,960**	**163,290**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	6,830	7,230	14,020	6,920	7,310	14,260
05-09	6,670	7,060	13,730	6,750	7,150	13,900
10-14	6,660	7,060	13,720	6,740	7,140	13,870
15-19	6,910	7,290	14,200	7,010	7,390	14,390
20-24	6,480	6,920	13,400	6,550	6,960	13,530
25-29	6,050	6,330	12,370	6,060	6,440	12,500
30-34	6,190	6,460	12,670	6,270	6,420	12,690
35-39	5,400	5,770	11,180	5,630	6,050	11,690
40-44	5,090	5,250	10,350	5,160	5,290	10,450
45-49	4,830	5,040	9,870	4,860	5,080	9,930
50-54	4,330	4,600	8,920	4,490	4,740	9,210
55-59	3,220	3,250	6,460	3,400	3,520	6,940
60-64	2,870	2,850	5,730	2,920	2,870	5,790
65-69	2,660	2,530	5,190	2,650	2,550	5,200
70-74	2,680	2,490	5,170	2,670	2,500	5,160
75-79	2,110	1,920	4,030	2,170	1,970	4,150
80-84	1,510	1,340	2,850	1,630	1,430	3,070
85+	1,330	1,080	2,420	1,420	1,170	2,600
All Ages	**81,770**	**84,480**	**166,260**	**83,300**	**85,920**	**169,320**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Table 146 - Māori population projections, single year, West Coast DHB, by 5-year age band, 2018 to 2043

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2018			2019			2020			2021		
00-04	180	220	400	180	210	390	180	210	400	190	210	400
05-09	210	200	410	210	210	420	210	220	420	200	220	420
10-14	160	220	380	160	220	380	170	210	380	170	200	370
15-19	170	190	360	170	190	360	170	190	360	160	210	370
20-24	110	120	230	100	120	220	100	120	220	110	120	230
25-29	150	140	290	160	140	300	160	140	300	150	140	300
30-34	100	100	200	120	110	230	130	120	250	150	130	270
35-39	110	90	200	100	100	200	90	100	190	100	100	200
40-44	100	100	200	100	90	190	100	100	190	100	100	200
45-49	130	100	230	120	100	220	120	90	210	110	90	200
50-54	130	110	240	140	110	250	140	110	250	130	100	230
55-59	150	140	300	150	150	300	140	140	290	150	150	300
60-64	80	90	170	80	90	180	100	110	210	110	110	220
65-69	70	50	120	70	60	130	80	60	140	80	60	140
70-74	40	30	70	40	40	80	50	40	80	50	50	100
75-79	30	30	50	30	20	50	30	30	60	30	30	60
80-84	10	10	20	10	10	20	20	10	30	20	10	30
85+	0	10	10	10	10	20	10	10	20	10	10	20
All Ages	**1,920**	**1,950**	**3,870**	**1,950**	**1,980**	**3,930**	**1,990**	**2,020**	**4,000**	**2,020**	**2,060**	**4,080**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2022			2023			2024			2025		
00-04	190	200	390	190	200	390	200	200	400	200	210	410
05-09	190	230	420	180	230	410	180	220	400	190	220	400
10-14	180	210	390	200	200	400	210	210	420	200	210	420
15-19	150	200	350	150	210	370	150	210	370	160	210	370
20-24	120	140	260	130	150	270	130	150	280	130	150	280
25-29	140	130	270	130	130	250	110	130	240	110	130	240
30-34	160	150	310	170	150	320	180	150	330	180	160	330
35-39	100	100	190	110	110	220	130	120	250	140	130	270
40-44	110	100	210	110	90	210	110	100	210	100	110	210
45-49	100	100	200	100	100	200	100	90	190	100	100	200
50-54	140	100	240	130	100	220	120	100	220	120	90	210
55-59	130	130	270	120	110	230	130	110	240	130	110	240
60-64	130	120	260	150	140	290	150	140	290	140	140	280
65-69	80	70	150	70	90	160	80	90	170	100	100	200
70-74	50	50	100	60	50	110	70	60	130	70	60	130
75-79	40	30	70	40	30	70	40	30	70	40	30	80
80-84	20	10	40	30	20	40	30	20	40	30	20	50
85+	10	10	20	10	10	30	10	20	30	20	20	30
All Ages	**2,050**	**2,090**	**4,140**	**2,090**	**2,120**	**4,200**	**2,120**	**2,160**	**4,280**	**2,160**	**2,190**	**4,350**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2026			2027			2028			2029		
00-04	200	210	410	200	210	420	200	210	430	210	220	430
05-09	190	220	410	190	210	400	200	210	410	200	220	420
10-14	190	220	410	190	230	420	180	230	400	180	220	400
15-19	170	200	360	180	200	380	200	200	400	200	210	410
20-24	120	170	290	110	160	270	110	170	290	110	170	290
25-29	120	140	260	140	150	290	140	160	300	150	160	310
30-34	170	160	330	160	150	300	140	140	290	130	140	270
35-39	160	140	290	170	150	320	180	160	340	190	160	350
40-44	110	110	220	110	100	210	120	120	230	140	130	260
45-49	110	100	200	110	100	220	110	100	210	110	110	220
50-54	110	90	200	100	90	190	100	100	200	90	90	190
55-59	130	100	220	130	100	230	120	90	220	110	100	210
60-64	150	140	290	130	130	260	120	110	230	130	100	240
65-69	110	110	210	130	120	250	150	130	280	150	130	280
70-74	70	60	130	70	70	140	70	80	150	80	80	160
75-79	40	50	90	50	40	90	60	40	100	60	50	120
80-84	30	20	50	40	20	60	40	20	60	40	20	60
85+	30	20	40	30	20	40	30	30	50	30	30	60
All Ages	**2,200**	**2,230**	**4,430**	**2,240**	**2,270**	**4,500**	**2,280**	**2,300**	**4,580**	**2,310**	**2,340**	**4,650**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2030			2031			2032			2033		
00-04	210	220	430	210	220	440	210	220	440	210	230	440
05-09	210	220	420	210	220	430	210	220	440	210	230	440
10-14	180	220	400	190	220	410	190	210	400	200	210	410
15-19	200	210	410	190	220	410	190	230	420	170	220	400
20-24	120	170	290	130	160	280	140	160	310	160	160	320
25-29	150	160	310	140	180	320	130	170	300	130	190	320
30-34	130	150	270	140	150	290	160	170	320	160	170	330
35-39	190	160	350	180	160	350	170	150	320	150	150	310
40-44	150	130	280	160	140	300	170	160	340	190	170	350
45-49	100	110	210	110	110	220	110	110	220	120	120	240
50-54	100	100	200	100	100	200	110	100	210	110	100	210
55-59	110	90	200	110	90	200	100	90	190	90	100	190
60-64	130	110	240	120	90	220	130	100	230	120	90	210
65-69	140	130	270	140	140	280	130	120	250	120	100	230
70-74	90	90	180	100	100	200	120	110	230	140	120	260
75-79	70	50	120	70	50	120	70	60	130	70	70	140
80-84	40	20	60	40	40	70	40	30	70	50	30	80
85+	40	30	70	40	30	60	40	30	70	50	30	80
All Ages	**2,350**	**2,380**	**4,720**	**2,390**	**2,410**	**4,800**	**2,420**	**2,450**	**4,870**	**2,460**	**2,490**	**4,950**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2034			2035			2036			2037		
00-04	210	230	440	210	230	440	210	230	450	210	230	450
05-09	220	230	440	220	230	450	220	230	450	220	230	450
10-14	200	220	420	200	220	420	210	220	430	210	230	430
15-19	170	220	390	180	220	400	180	220	400	190	210	400
20-24	170	170	330	160	170	330	150	180	330	150	190	340
25-29	130	190	320	140	180	320	140	170	310	160	180	330
30-34	170	170	340	170	180	340	160	190	350	150	190	330
35-39	140	150	290	140	150	290	150	160	310	170	170	340
40-44	190	170	360	200	170	370	190	170	360	180	160	340
45-49	140	130	270	150	140	290	160	150	310	180	170	340
50-54	110	110	210	100	110	210	110	110	220	110	110	220
55-59	90	90	180	90	100	190	100	100	200	110	100	210
60-64	110	100	210	120	80	200	110	90	190	100	90	190
65-69	130	100	230	130	110	230	120	90	210	130	100	220
70-74	140	130	270	130	130	260	140	130	270	130	120	240
75-79	70	70	140	80	80	160	90	80	170	110	90	200
80-84	60	40	100	70	40	110	70	40	110	70	40	110
85+	50	30	80	40	30	70	50	40	80	60	30	90
All Ages	**2,500**	**2,520**	**5,020**	**2,530**	**2,560**	**5,090**	**2,570**	**2,600**	**5,170**	**2,600**	**2,640**	**5,240**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2038			2039			2040			2041		
00-04	220	240	450	220	240	460	230	240	460	230	240	460
05-09	220	230	450	220	240	460	220	240	460	230	240	460
10-14	210	230	440	210	230	440	220	230	450	220	230	450
15-19	190	210	400	200	220	410	200	220	420	200	220	420
20-24	140	180	320	140	180	320	140	180	320	150	180	320
25-29	170	170	350	180	180	360	180	190	360	170	190	360
30-34	150	200	350	150	200	350	150	200	350	160	190	350
35-39	170	180	350	180	180	360	180	190	360	170	200	370
40-44	160	160	320	150	160	310	150	160	310	160	170	320
45-49	190	170	360	200	170	370	200	180	380	190	180	370
50-54	120	120	240	140	130	270	150	140	290	160	150	310
55-59	110	100	210	100	110	210	100	110	210	110	110	220
60-64	100	100	190	90	90	180	90	90	190	100	90	190
65-69	120	90	210	110	90	210	120	80	200	110	80	190
70-74	120	100	210	130	100	220	120	100	220	120	90	210
75-79	130	110	230	130	110	240	120	110	240	130	120	250
80-84	60	50	110	60	50	110	70	60	130	80	60	140
85+	60	40	110	70	40	120	80	40	130	80	50	130
All Ages	**2,640**	**2,670**	**5,310**	**2,670**	**2,710**	**5,390**	**2,710**	**2,750**	**5,460**	**2,750**	**2,790**	**5,530**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	230	240	460	230	240	480
05-09	230	240	470	230	240	470
10-14	220	230	450	220	240	450
15-19	210	220	430	210	230	430
20-24	150	170	320	150	170	330
25-29	170	200	370	150	200	350
30-34	170	190	370	190	190	380
35-39	160	200	350	160	210	370
40-44	170	180	360	180	190	370
45-49	180	170	350	170	160	330
50-54	170	170	340	190	170	360
55-59	110	100	210	110	120	230
60-64	110	100	210	110	90	200
65-69	100	90	190	100	90	190
70-74	120	90	220	120	90	200
75-79	120	110	220	110	90	200
80-84	100	70	170	110	90	200
85+	80	50	130	80	60	140
All Ages	**2,780**	**2,820**	**5,610**	**2,820**	**2,860**	**5,680**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Table 147 - Māori population projections, single year, Canterbury DHB, by 5-year age band, 2018 to 2043

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2018			2019			2020			2021		
00-04	2,780	3,040	5,820	2,800	3,050	5,850	2,890	3,090	5,980	2,950	3,110	6,060
05-09	2,890	2,930	5,820	2,930	2,970	5,890	2,900	3,000	5,900	2,890	3,070	5,960
10-14	2,600	2,860	5,460	2,700	2,940	5,640	2,860	3,120	5,980	3,000	3,200	6,200
15-19	2,460	2,610	5,070	2,510	2,660	5,170	2,550	2,660	5,210	2,620	2,790	5,410
20-24	2,440	2,720	5,150	2,410	2,760	5,160	2,470	2,820	5,290	2,460	2,800	5,260
25-29	2,260	2,460	4,710	2,350	2,510	4,860	2,360	2,540	4,900	2,420	2,620	5,040
30-34	1,730	1,850	3,580	1,880	2,000	3,880	2,070	2,170	4,230	2,210	2,330	4,540
35-39	1,510	1,590	3,100	1,560	1,630	3,190	1,550	1,680	3,230	1,620	1,700	3,320
40-44	1,510	1,500	3,010	1,470	1,510	2,980	1,530	1,560	3,090	1,580	1,600	3,180
45-49	1,600	1,630	3,230	1,580	1,590	3,170	1,550	1,560	3,120	1,540	1,550	3,090
50-54	1,350	1,420	2,770	1,380	1,520	2,890	1,470	1,590	3,060	1,550	1,660	3,200
55-59	1,110	1,200	2,310	1,200	1,160	2,360	1,230	1,210	2,440	1,250	1,270	2,520
60-64	780	860	1,640	830	970	1,800	920	1,010	1,940	980	1,060	2,030
65-69	530	620	1,150	560	660	1,220	580	690	1,270	640	730	1,360
70-74	350	380	730	380	420	800	430	450	890	450	500	950
75-79	210	230	440	220	250	470	230	270	500	250	290	540
80-84	100	90	190	110	90	200	130	110	240	160	130	290
85+	90	60	160	100	70	170	100	80	180	110	80	190
All Ages	**26,300**	**28,100**	**54,400**	**27,000**	**28,700**	**55,700**	**27,800**	**29,600**	**57,400**	**28,700**	**30,500**	**59,200**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2022			2023			2024			2025		
00-04	2,980	3,170	6,150	3,030	3,200	6,230	3,080	3,250	6,330	3,110	3,290	6,400
05-09	2,880	3,110	5,990	2,930	3,180	6,110	2,960	3,200	6,160	3,030	3,230	6,260
10-14	3,090	3,180	6,270	3,100	3,150	6,250	3,150	3,190	6,340	3,110	3,210	6,320
15-19	2,740	2,960	5,700	2,870	3,130	6,010	2,980	3,220	6,210	3,130	3,400	6,530
20-24	2,440	2,760	5,200	2,500	2,720	5,220	2,540	2,770	5,310	2,560	2,740	5,300
25-29	2,490	2,630	5,110	2,420	2,650	5,070	2,380	2,690	5,070	2,420	2,730	5,160
30-34	2,280	2,510	4,790	2,400	2,580	4,980	2,490	2,630	5,120	2,470	2,640	5,110
35-39	1,730	1,770	3,500	1,850	1,940	3,790	2,000	2,100	4,090	2,180	2,250	4,430
40-44	1,580	1,640	3,220	1,580	1,650	3,230	1,630	1,690	3,320	1,610	1,730	3,340
45-49	1,530	1,520	3,050	1,530	1,520	3,050	1,490	1,530	3,020	1,540	1,580	3,120
50-54	1,590	1,660	3,250	1,590	1,630	3,230	1,580	1,590	3,180	1,540	1,560	3,100
55-59	1,280	1,310	2,590	1,330	1,400	2,740	1,370	1,500	2,860	1,450	1,560	3,020
60-64	1,040	1,120	2,170	1,100	1,170	2,270	1,190	1,130	2,320	1,220	1,170	2,390
65-69	670	780	1,450	760	820	1,580	810	930	1,740	900	970	1,870
70-74	490	530	1,020	500	570	1,070	530	610	1,140	540	640	1,180
75-79	280	310	590	310	340	650	350	370	710	390	400	790
80-84	160	170	330	180	180	360	190	200	390	190	220	420
85+	130	80	210	130	90	230	150	90	240	170	110	270
All Ages	**29,400**	**31,200**	**60,600**	**30,100**	**31,900**	**62,000**	**30,900**	**32,700**	**63,600**	**31,600**	**33,400**	**65,000**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2026			2027			2028			2029		
00-04	3,150	3,330	6,490	3,190	3,370	6,560	3,230	3,410	6,640	3,260	3,440	6,700
05-09	3,080	3,230	6,310	3,110	3,300	6,410	3,160	3,330	6,490	3,210	3,380	6,590
10-14	3,090	3,260	6,350	3,080	3,310	6,390	3,120	3,380	6,500	3,150	3,400	6,550
15-19	3,260	3,470	6,730	3,360	3,450	6,800	3,370	3,420	6,780	3,410	3,450	6,870
20-24	2,610	2,850	5,460	2,730	3,010	5,740	2,860	3,190	6,050	2,970	3,270	6,240
25-29	2,400	2,680	5,080	2,370	2,640	5,010	2,420	2,590	5,000	2,450	2,620	5,080
30-34	2,520	2,700	5,210	2,580	2,690	5,270	2,510	2,720	5,220	2,470	2,750	5,220
35-39	2,310	2,410	4,720	2,380	2,580	4,960	2,490	2,640	5,140	2,580	2,690	5,270
40-44	1,660	1,740	3,400	1,770	1,810	3,580	1,900	1,980	3,880	2,040	2,130	4,180
45-49	1,580	1,600	3,190	1,590	1,640	3,220	1,580	1,650	3,230	1,630	1,690	3,320
50-54	1,530	1,530	3,060	1,510	1,510	3,020	1,510	1,510	3,020	1,470	1,520	2,990
55-59	1,530	1,620	3,150	1,570	1,620	3,200	1,580	1,590	3,170	1,560	1,560	3,120
60-64	1,230	1,230	2,460	1,260	1,270	2,530	1,320	1,360	2,670	1,350	1,450	2,800
65-69	950	1,010	1,950	1,010	1,070	2,080	1,070	1,110	2,180	1,150	1,080	2,230
70-74	590	670	1,260	630	720	1,340	710	760	1,470	760	860	1,620
75-79	400	440	840	440	470	910	450	500	950	480	540	1,010
80-84	210	230	450	240	250	490	270	270	540	300	290	590
85+	190	130	310	190	160	360	210	170	390	230	190	410
All Ages	**32,300**	**34,100**	**66,400**	**33,000**	**34,900**	**67,900**	**33,700**	**35,600**	**69,300**	**34,500**	**36,300**	**70,800**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2030			2031			2032			2033		
00-04	3,280	3,470	6,750	3,310	3,490	6,800	3,330	3,520	6,850	3,360	3,550	6,910
05-09	3,250	3,430	6,680	3,290	3,470	6,760	3,330	3,510	6,850	3,370	3,550	6,920
10-14	3,230	3,430	6,650	3,280	3,440	6,710	3,310	3,500	6,810	3,360	3,540	6,900
15-19	3,380	3,470	6,850	3,360	3,520	6,880	3,350	3,570	6,920	3,390	3,640	7,030
20-24	3,120	3,450	6,570	3,250	3,530	6,780	3,350	3,510	6,860	3,360	3,480	6,840
25-29	2,470	2,600	5,070	2,530	2,700	5,230	2,650	2,870	5,520	2,780	3,050	5,830
30-34	2,510	2,800	5,310	2,490	2,760	5,250	2,460	2,710	5,180	2,510	2,660	5,180
35-39	2,570	2,700	5,260	2,610	2,760	5,370	2,680	2,760	5,440	2,610	2,790	5,390
40-44	2,230	2,290	4,520	2,370	2,450	4,820	2,430	2,630	5,070	2,550	2,690	5,240
45-49	1,610	1,720	3,330	1,670	1,730	3,400	1,780	1,810	3,580	1,900	1,980	3,890
50-54	1,530	1,560	3,090	1,570	1,590	3,160	1,570	1,620	3,200	1,570	1,630	3,200
55-59	1,530	1,520	3,050	1,510	1,500	3,010	1,490	1,480	2,970	1,500	1,480	2,980
60-64	1,440	1,520	2,950	1,510	1,570	3,080	1,550	1,580	3,130	1,560	1,550	3,110
65-69	1,180	1,120	2,300	1,190	1,170	2,370	1,230	1,210	2,440	1,280	1,300	2,580
70-74	840	900	1,740	890	930	1,820	950	990	1,940	1,010	1,030	2,040
75-79	490	560	1,050	540	590	1,130	570	630	1,200	640	670	1,320
80-84	340	320	660	340	360	700	380	380	760	380	410	790
85+	230	210	440	270	230	490	290	260	550	330	270	600
All Ages	**35,200**	**37,100**	**72,300**	**36,000**	**37,800**	**73,800**	**36,700**	**38,500**	**75,300**	**37,500**	**39,300**	**76,800**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2034			2035			2036			2037		
00-04	3,400	3,590	6,970	3,430	3,620	7,050	3,460	3,660	7,120	3,500	3,700	7,200
05-09	3,400	3,580	6,990	3,430	3,610	7,040	3,460	3,640	7,100	3,480	3,670	7,150
10-14	3,410	3,590	7,000	3,460	3,640	7,100	3,500	3,690	7,190	3,550	3,730	7,280
15-19	3,420	3,660	7,080	3,490	3,690	7,190	3,550	3,700	7,250	3,580	3,770	7,350
20-24	3,410	3,510	6,920	3,370	3,520	6,900	3,350	3,580	6,940	3,350	3,620	6,970
25-29	2,890	3,140	6,040	3,050	3,330	6,370	3,180	3,400	6,580	3,280	3,380	6,660
30-34	2,550	2,690	5,240	2,570	2,660	5,230	2,620	2,770	5,390	2,750	2,930	5,680
35-39	2,570	2,830	5,400	2,620	2,880	5,500	2,600	2,840	5,430	2,570	2,800	5,370
40-44	2,640	2,730	5,370	2,620	2,740	5,360	2,670	2,800	5,480	2,740	2,810	5,550
45-49	2,050	2,140	4,190	2,240	2,300	4,540	2,380	2,460	4,840	2,450	2,640	5,090
50-54	1,620	1,670	3,290	1,600	1,710	3,310	1,650	1,720	3,370	1,770	1,790	3,560
55-59	1,460	1,490	2,950	1,520	1,530	3,050	1,560	1,570	3,120	1,560	1,600	3,160
60-64	1,550	1,510	3,060	1,510	1,480	2,990	1,500	1,460	2,960	1,480	1,440	2,930
65-69	1,310	1,390	2,700	1,400	1,460	2,850	1,470	1,510	2,980	1,520	1,520	3,030
70-74	1,090	1,000	2,090	1,120	1,040	2,160	1,130	1,090	2,220	1,160	1,130	2,290
75-79	690	770	1,450	760	800	1,560	800	820	1,630	860	880	1,740
80-84	410	440	850	420	460	880	460	490	950	480	520	1,010
85+	350	300	650	390	330	710	410	360	770	460	390	850
All Ages	**38,200**	**40,000**	**78,300**	**39,000**	**40,800**	**79,800**	**39,800**	**41,600**	**81,300**	**40,500**	**42,300**	**82,900**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2038			2039			2040			2041		
00-04	3,550	3,740	7,300	3,590	3,790	7,390	3,640	3,850	7,500	3,700	3,910	7,610
05-09	3,510	3,700	7,210	3,550	3,740	7,280	3,580	3,780	7,360	3,620	3,820	7,440
10-14	3,580	3,770	7,360	3,620	3,810	7,430	3,650	3,840	7,490	3,680	3,870	7,540
15-19	3,630	3,810	7,440	3,690	3,860	7,550	3,730	3,910	7,650	3,780	3,960	7,740
20-24	3,390	3,700	7,090	3,410	3,720	7,140	3,490	3,750	7,240	3,540	3,760	7,310
25-29	3,290	3,350	6,640	3,340	3,390	6,730	3,310	3,400	6,710	3,290	3,460	6,740
30-34	2,880	3,120	6,000	2,990	3,220	6,210	3,150	3,400	6,550	3,280	3,480	6,760
35-39	2,620	2,740	5,360	2,650	2,770	5,430	2,670	2,740	5,410	2,730	2,850	5,580
40-44	2,670	2,840	5,510	2,640	2,890	5,520	2,680	2,940	5,620	2,660	2,900	5,560
45-49	2,560	2,700	5,260	2,650	2,740	5,390	2,640	2,750	5,390	2,690	2,810	5,500
50-54	1,890	1,970	3,870	2,040	2,130	4,170	2,230	2,290	4,520	2,370	2,450	4,820
55-59	1,560	1,600	3,170	1,610	1,640	3,250	1,590	1,680	3,270	1,640	1,690	3,330
60-64	1,490	1,450	2,940	1,450	1,460	2,910	1,510	1,500	3,010	1,550	1,530	3,080
65-69	1,520	1,490	3,010	1,510	1,460	2,970	1,480	1,430	2,900	1,460	1,410	2,870
70-74	1,210	1,210	2,430	1,240	1,300	2,540	1,330	1,370	2,690	1,400	1,420	2,820
75-79	910	920	1,840	1,000	890	1,890	1,030	920	1,950	1,040	970	2,010
80-84	550	550	1,110	590	640	1,230	660	660	1,320	700	680	1,380
85+	480	420	900	510	460	970	540	490	1,020	580	520	1,100
All Ages	**41,300**	**43,100**	**84,400**	**42,100**	**43,900**	**86,000**	**42,900**	**44,700**	**87,600**	**43,700**	**45,500**	**89,200**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	3,760	3,970	7,720	3,810	4,030	7,850
05-09	3,660	3,860	7,520	3,710	3,910	7,610
10-14	3,700	3,900	7,600	3,740	3,930	7,670
15-19	3,820	4,010	7,830	3,870	4,050	7,920
20-24	3,580	3,830	7,410	3,630	3,870	7,510
25-29	3,280	3,500	6,780	3,320	3,570	6,890
30-34	3,380	3,460	6,850	3,400	3,440	6,840
35-39	2,850	3,010	5,870	2,990	3,200	6,190
40-44	2,640	2,850	5,490	2,690	2,800	5,490
45-49	2,750	2,820	5,580	2,690	2,850	5,540
50-54	2,440	2,630	5,070	2,560	2,690	5,250
55-59	1,760	1,770	3,520	1,880	1,940	3,830
60-64	1,550	1,560	3,120	1,550	1,570	3,120
65-69	1,450	1,390	2,840	1,460	1,400	2,860
70-74	1,450	1,430	2,870	1,450	1,400	2,850
75-79	1,060	1,010	2,070	1,110	1,090	2,210
80-84	750	730	1,480	790	760	1,560
85+	630	570	1,200	690	610	1,300
All Ages	**44,500**	**46,300**	**90,800**	**45,300**	**47,100**	**92,500**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Table 148 - Māori population projections, single year, South Canterbury DHB, by 5-year age band, 2018 to 2043

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2018			2019			2020			2021		
00-04	300	310	610	300	320	610	300	330	630	300	320	630
05-09	320	310	620	310	310	620	300	310	610	310	320	630
10-14	300	300	600	320	320	630	330	330	660	330	320	650
15-19	270	290	560	300	290	580	300	290	590	310	310	620
20-24	170	220	380	160	230	390	190	250	440	220	270	490
25-29	190	210	400	190	220	420	190	200	390	180	200	380
30-34	150	170	320	170	170	340	180	190	370	190	200	400
35-39	160	130	290	150	130	280	140	150	280	140	160	300
40-44	140	140	280	140	140	280	160	140	300	160	140	300
45-49	160	160	320	170	170	330	170	170	340	160	160	320
50-54	140	130	270	140	130	270	140	130	270	150	150	290
55-59	130	110	240	130	120	240	130	120	260	150	130	280
60-64	100	80	180	100	90	190	110	90	200	110	100	200
65-69	70	70	140	80	80	160	90	80	170	100	70	170
70-74	40	40	80	50	40	90	50	50	100	50	60	110
75-79	30	30	50	30	30	60	30	30	60	30	30	60
80-84	20	10	30	20	10	30	20	20	30	20	20	40
85+	20	10	30	20	10	30	20	10	30	20	10	30
All Ages	**2,690**	**2,720**	**5,410**	**2,760**	**2,790**	**5,550**	**2,850**	**2,880**	**5,730**	**2,940**	**2,970**	**5,910**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2022			2023			2024			2025		
00-04	300	320	620	300	310	610	300	320	630	310	330	640
05-09	320	320	640	320	340	660	310	350	660	320	350	670
10-14	330	330	660	340	330	670	340	330	670	320	340	660
15-19	310	320	640	320	320	640	340	340	670	360	350	700
20-24	240	270	510	270	290	560	290	280	580	290	280	580
25-29	180	200	370	160	200	360	150	210	370	180	230	410
30-34	200	210	410	210	220	430	210	230	440	200	210	410
35-39	150	170	330	170	180	350	190	190	370	200	210	400
40-44	160	130	300	170	140	310	160	140	300	150	150	300
45-49	150	160	320	140	150	290	140	150	290	170	150	310
50-54	160	140	300	160	160	320	170	170	340	170	170	340
55-59	140	140	280	140	140	280	150	130	280	140	130	270
60-64	120	100	220	130	110	240	130	120	250	130	130	260
65-69	90	70	160	100	80	180	110	90	190	110	90	200
70-74	60	70	120	70	70	130	80	80	150	90	70	160
75-79	40	40	80	40	40	80	40	40	80	50	50	90
80-84	20	20	40	20	20	50	30	20	50	30	20	50
85+	30	10	40	30	10	50	20	20	50	20	20	50
All Ages	3,010	3,040	6,050	3,080	3,120	6,200	3,160	3,200	6,370	3,240	3,280	6,520

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2026			2027			2028			2029		
00-04	310	340	650	330	340	660	330	350	680	340	350	690
05-09	320	350	670	320	350	670	320	340	660	330	350	680
10-14	330	350	680	340	340	690	340	360	710	340	370	710
15-19	350	340	690	350	350	700	360	350	710	360	350	710
20-24	310	310	610	310	320	620	320	310	630	330	330	660
25-29	210	250	460	230	250	480	260	270	520	280	260	540
30-34	190	200	400	190	200	390	170	210	370	160	220	380
35-39	210	210	420	210	220	440	220	230	450	220	250	470
40-44	150	170	320	160	180	340	180	190	370	190	200	390
45-49	160	150	310	170	140	300	170	150	320	160	150	310
50-54	170	160	330	160	160	320	150	150	300	140	150	290
55-59	150	150	290	160	150	300	160	160	330	170	170	340
60-64	150	130	280	140	140	280	140	140	280	150	130	280
65-69	110	90	200	120	100	220	130	110	240	130	110	240
70-74	100	70	170	90	70	160	90	80	170	100	80	190
75-79	50	50	110	50	60	110	60	60	130	70	70	150
80-84	30	20	50	40	30	70	40	30	70	40	30	70
85+	30	20	50	30	20	50	30	30	60	30	30	60
All Ages	**3,320**	**3,360**	**6,680**	**3,390**	**3,440**	**6,830**	**3,470**	**3,520**	**6,990**	**3,550**	**3,600**	**7,150**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2030			2031			2032			2033		
00-04	340	360	700	350	360	710	350	370	730	360	380	740
05-09	330	360	690	340	360	700	340	370	710	350	380	730
10-14	350	380	720	350	380	720	340	380	720	340	370	710
15-19	340	350	690	350	360	710	360	360	720	360	380	740
20-24	350	340	690	350	330	680	350	350	690	360	340	700
25-29	280	260	550	300	280	580	300	300	590	310	290	600
30-34	190	240	430	210	260	470	240	250	490	270	270	540
35-39	220	220	440	210	210	420	200	220	420	180	220	400
40-44	200	210	420	220	220	440	220	230	450	230	240	470
45-49	150	160	310	160	170	330	170	190	350	180	200	380
50-54	170	150	320	160	150	310	170	140	310	170	150	320
55-59	170	180	350	170	160	330	160	170	320	150	150	300
60-64	140	130	270	150	150	290	160	150	300	170	160	330
65-69	130	120	260	150	130	270	140	140	280	140	130	270
70-74	100	90	190	100	90	190	120	90	210	120	110	230
75-79	90	70	160	90	70	160	80	70	150	90	70	160
80-84	40	30	80	40	40	90	50	50	90	60	50	110
85+	40	30	60	40	30	70	50	30	90	50	30	90
All Ages	**3,630**	**3,680**	**7,320**	**3,720**	**3,770**	**7,480**	**3,800**	**3,850**	**7,650**	**3,880**	**3,940**	**7,820**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2034			2035			2036			2037		
00-04	360	390	750	380	400	760	380	400	790	390	410	800
05-09	360	380	740	360	390	750	370	400	770	380	400	780
10-14	350	380	730	360	380	740	360	390	750	370	400	760
15-19	360	390	750	370	390	760	370	390	760	370	400	760
20-24	350	340	700	340	350	680	340	360	700	360	350	710
25-29	320	310	630	340	320	660	340	310	650	340	330	670
30-34	290	270	560	290	270	560	300	290	590	310	300	610
35-39	170	230	400	200	250	450	230	270	490	250	260	510
40-44	230	260	490	230	230	460	220	220	440	210	230	440
45-49	200	200	400	210	220	430	220	230	450	220	240	470
50-54	170	150	320	150	160	320	160	180	340	170	190	360
55-59	140	150	300	170	150	320	160	150	320	170	140	310
60-64	170	170	350	170	180	350	170	160	330	160	170	330
65-69	150	120	270	140	130	270	150	140	290	160	140	300
70-74	120	110	240	130	120	250	140	120	270	140	130	270
75-79	100	80	170	100	80	180	100	80	180	110	90	200
80-84	70	60	120	80	60	140	80	50	140	70	50	130
85+	50	30	80	50	40	100	60	50	110	70	60	120
All Ages	**3,970**	**4,030**	**7,990**	**4,050**	**4,110**	**8,170**	**4,140**	**4,200**	**8,340**	**4,230**	**4,290**	**8,520**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2038			2039			2040			2041		
00-04	390	410	810	400	430	830	410	440	840	410	440	850
05-09	380	410	790	390	420	810	400	420	820	400	430	840
10-14	380	400	780	380	410	790	390	420	800	400	420	820
15-19	370	390	750	370	390	770	380	400	780	380	410	790
20-24	360	380	730	350	380	740	360	390	750	360	390	750
25-29	350	330	670	350	320	670	330	330	660	340	340	670
30-34	320	300	620	330	320	650	350	330	680	350	320	670
35-39	280	280	560	300	280	580	310	280	590	320	300	620
40-44	190	230	420	180	240	420	210	260	470	240	280	510
45-49	230	250	490	230	260	500	230	240	470	220	230	460
50-54	180	200	380	200	210	410	210	230	440	220	230	460
55-59	170	160	330	170	150	320	150	170	320	160	180	340
60-64	150	150	300	140	160	300	170	150	320	160	150	320
65-69	160	160	320	170	170	340	170	170	350	170	160	330
70-74	140	130	270	140	120	260	130	120	260	140	140	280
75-79	120	100	210	120	100	220	120	110	230	140	110	250
80-84	80	60	140	80	60	150	80	60	150	80	70	150
85+	80	60	130	80	60	140	100	70	160	100	60	160
All Ages	**4,320**	**4,390**	**8,710**	**4,410**	**4,480**	**8,890**	**4,500**	**4,570**	**9,070**	**4,590**	**4,670**	**9,260**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	420	450	860	430	450	890
05-09	410	440	850	420	450	870
10-14	400	430	830	410	440	850
15-19	390	410	800	400	420	820
20-24	360	390	750	360	380	740
25-29	350	340	690	350	360	710
30-34	350	330	680	360	330	690
35-39	320	320	640	330	310	640
40-44	260	270	530	290	290	580
45-49	220	230	450	200	240	430
50-54	230	250	470	240	260	490
55-59	170	190	360	180	200	390
60-64	170	150	320	170	160	330
65-69	160	160	320	150	150	300
70-74	150	140	290	160	150	310
75-79	130	120	260	130	120	250
80-84	100	70	170	100	80	180
85+	100	70	170	100	70	180
All Ages	**4,690**	**4,760**	**9,450**	**4,780**	**4,860**	**9,640**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Table 149 - Māori population projections, single year, Southern DHB, by 5-year age band, 2018 to 2043

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2018			2019			2020			2021		
00-04	1,770	1,820	3,600	1,750	1,830	3,580	1,780	1,880	3,670	1,810	1,940	3,740
05-09	1,860	2,010	3,870	1,880	1,970	3,840	1,890	1,910	3,800	1,890	1,910	3,800
10-14	1,740	1,990	3,740	1,810	2,080	3,900	1,860	2,170	4,030	1,940	2,200	4,140
15-19	1,820	1,910	3,730	1,820	1,980	3,800	1,860	2,050	3,910	1,900	2,150	4,040
20-24	1,710	1,780	3,490	1,810	1,810	3,620	1,910	1,860	3,770	1,970	1,880	3,850
25-29	1,320	1,470	2,790	1,350	1,510	2,860	1,390	1,580	2,980	1,440	1,630	3,080
30-34	1,130	1,180	2,300	1,210	1,300	2,500	1,250	1,350	2,610	1,320	1,450	2,770
35-39	1,050	1,030	2,080	1,050	1,040	2,090	1,090	1,080	2,170	1,110	1,120	2,230
40-44	940	930	1,880	950	940	1,890	990	990	1,970	1,050	1,020	2,070
45-49	1,000	960	1,950	1,000	940	1,950	990	940	1,930	980	940	1,920
50-54	940	830	1,780	950	870	1,820	990	890	1,880	1,010	920	1,930
55-59	830	750	1,590	890	780	1,670	910	790	1,700	900	840	1,740
60-64	520	570	1,090	570	610	1,180	610	680	1,290	700	660	1,360
65-69	400	400	800	410	420	830	450	440	890	460	490	950
70-74	260	290	550	280	310	590	310	330	640	350	350	700
75-79	170	190	360	190	200	390	190	200	390	200	190	400
80-84	80	110	200	90	120	220	120	150	260	120	170	290
85+	60	60	120	60	60	130	70	60	130	100	60	160
All Ages	**17,600**	**18,300**	**35,900**	**18,100**	**18,800**	**36,800**	**18,700**	**19,400**	**38,000**	**19,200**	**19,900**	**39,200**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2022			2023			2024			2025		
00-04	1,860	1,980	3,830	1,870	1,990	3,860	1,910	2,020	3,930	1,940	2,060	4,000
05-09	1,870	1,910	3,780	1,870	1,940	3,800	1,850	1,950	3,800	1,870	1,990	3,860
10-14	1,950	2,170	4,110	1,980	2,150	4,130	2,000	2,110	4,110	2,000	2,040	4,040
15-19	1,990	2,240	4,230	2,070	2,320	4,390	2,140	2,420	4,560	2,180	2,500	4,680
20-24	1,960	1,940	3,900	1,940	2,000	3,940	1,930	2,060	3,990	1,950	2,110	4,060
25-29	1,540	1,710	3,250	1,650	1,730	3,380	1,760	1,750	3,510	1,850	1,790	3,640
30-34	1,380	1,460	2,840	1,400	1,530	2,930	1,420	1,570	2,990	1,450	1,630	3,080
35-39	1,150	1,180	2,320	1,200	1,240	2,430	1,280	1,350	2,630	1,320	1,400	2,720
40-44	1,050	1,060	2,110	1,100	1,080	2,180	1,100	1,090	2,200	1,140	1,120	2,260
45-49	980	950	1,920	970	960	1,930	980	970	1,940	1,010	1,010	2,010
50-54	1,020	930	1,950	1,000	970	1,970	1,010	950	1,960	990	940	1,930
55-59	930	830	1,760	940	820	1,760	950	860	1,810	980	880	1,860
60-64	750	710	1,460	830	750	1,580	890	780	1,670	910	780	1,690
65-69	490	530	1,010	520	560	1,070	560	600	1,160	600	660	1,260
70-74	380	370	750	390	380	770	400	390	790	430	410	840
75-79	220	210	430	250	250	500	260	270	530	290	290	580
80-84	130	170	300	150	150	310	170	160	330	170	160	320
85+	100	80	180	100	110	210	120	120	230	140	130	270
All Ages	**19,700**	**20,400**	**40,200**	**20,200**	**20,900**	**41,100**	**20,700**	**21,400**	**42,100**	**21,200**	**21,900**	**43,100**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2026			2027			2028			2029		
00-04	1,960	2,090	4,060	2,000	2,120	4,120	2,030	2,160	4,190	2,060	2,190	4,250
05-09	1,880	2,030	3,920	1,930	2,070	4,000	1,950	2,070	4,020	1,980	2,110	4,090
10-14	1,990	2,030	4,020	1,970	2,020	3,990	1,970	2,050	4,010	1,950	2,050	4,000
15-19	2,250	2,520	4,770	2,250	2,490	4,740	2,280	2,460	4,750	2,300	2,420	4,720
20-24	1,960	2,190	4,150	2,050	2,280	4,330	2,120	2,370	4,490	2,190	2,460	4,660
25-29	1,890	1,790	3,690	1,880	1,850	3,730	1,850	1,900	3,750	1,830	1,960	3,790
30-34	1,490	1,660	3,150	1,580	1,740	3,320	1,700	1,750	3,450	1,800	1,780	3,580
35-39	1,380	1,490	2,870	1,430	1,500	2,930	1,440	1,560	3,010	1,470	1,590	3,060
40-44	1,150	1,160	2,300	1,180	1,210	2,390	1,230	1,270	2,500	1,310	1,390	2,700
45-49	1,060	1,040	2,100	1,060	1,070	2,130	1,110	1,090	2,200	1,110	1,100	2,210
50-54	970	940	1,910	970	940	1,910	960	960	1,920	970	960	1,930
55-59	1,000	900	1,900	1,010	910	1,920	990	950	1,940	1,000	930	1,930
60-64	900	830	1,720	920	820	1,740	930	810	1,740	950	840	1,790
65-69	690	640	1,330	740	680	1,420	810	720	1,540	870	760	1,630
70-74	440	460	900	470	490	960	500	520	1,020	540	560	1,100
75-79	320	310	630	350	320	680	360	330	690	370	340	710
80-84	180	150	330	190	160	360	220	200	420	230	220	440
85+	150	150	300	170	170	330	180	160	340	200	170	380
All Ages	**21,700**	**22,400**	**44,000**	**22,200**	**22,800**	**45,000**	**22,600**	**23,300**	**46,000**	**23,100**	**23,800**	**47,000**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2030			2031			2032			2033		
00-04	2,090	2,220	4,310	2,120	2,240	4,360	2,140	2,280	4,410	2,170	2,310	4,460
05-09	2,010	2,150	4,160	2,040	2,180	4,220	2,080	2,220	4,300	2,110	2,250	4,370
10-14	1,970	2,090	4,060	1,980	2,140	4,120	2,030	2,180	4,210	2,050	2,180	4,230
15-19	2,300	2,350	4,650	2,290	2,340	4,630	2,270	2,330	4,610	2,270	2,360	4,630
20-24	2,230	2,540	4,770	2,310	2,560	4,870	2,310	2,530	4,840	2,340	2,510	4,850
25-29	1,860	2,010	3,860	1,870	2,090	3,960	1,960	2,180	4,140	2,040	2,260	4,300
30-34	1,890	1,810	3,710	1,940	1,820	3,760	1,920	1,880	3,800	1,900	1,930	3,830
35-39	1,490	1,650	3,150	1,530	1,690	3,220	1,620	1,770	3,390	1,740	1,780	3,520
40-44	1,360	1,440	2,790	1,420	1,520	2,940	1,470	1,540	3,010	1,480	1,600	3,080
45-49	1,140	1,130	2,270	1,160	1,160	2,320	1,190	1,210	2,410	1,250	1,280	2,520
50-54	1,000	1,000	2,000	1,050	1,030	2,080	1,050	1,070	2,120	1,100	1,080	2,180
55-59	980	920	1,900	960	920	1,880	960	920	1,880	950	940	1,890
60-64	980	860	1,840	990	890	1,880	1,010	900	1,910	990	930	1,920
65-69	890	760	1,650	880	810	1,680	900	800	1,700	920	790	1,710
70-74	570	620	1,190	660	590	1,250	700	640	1,340	780	680	1,460
75-79	400	360	760	410	410	820	440	440	870	460	460	920
80-84	250	230	480	280	250	530	310	260	570	310	270	580
85+	210	180	390	230	170	410	250	200	440	270	220	500
All Ages	**23,600**	**24,300**	**47,900**	**24,100**	**24,800**	**48,900**	**24,600**	**25,300**	**49,900**	**25,100**	**25,800**	**51,000**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2034			2035			2036			2037		
00-04	2,190	2,330	4,530	2,220	2,360	4,580	2,250	2,380	4,640	2,270	2,420	4,690
05-09	2,140	2,290	4,430	2,170	2,320	4,490	2,200	2,350	4,550	2,230	2,380	4,600
10-14	2,080	2,220	4,300	2,110	2,260	4,370	2,150	2,300	4,440	2,180	2,330	4,520
15-19	2,250	2,360	4,620	2,270	2,400	4,680	2,290	2,450	4,740	2,340	2,490	4,820
20-24	2,360	2,470	4,820	2,360	2,400	4,750	2,350	2,390	4,740	2,330	2,380	4,710
25-29	2,110	2,360	4,470	2,150	2,450	4,600	2,230	2,470	4,700	2,230	2,440	4,670
30-34	1,880	1,980	3,860	1,910	2,030	3,940	1,920	2,110	4,030	2,020	2,200	4,220
35-39	1,850	1,810	3,660	1,940	1,850	3,790	1,990	1,850	3,840	1,980	1,910	3,890
40-44	1,510	1,630	3,140	1,530	1,690	3,220	1,570	1,720	3,290	1,660	1,800	3,460
45-49	1,330	1,400	2,730	1,370	1,450	2,830	1,440	1,540	2,980	1,490	1,560	3,050
50-54	1,100	1,090	2,190	1,130	1,120	2,250	1,150	1,150	2,300	1,190	1,210	2,400
55-59	960	940	1,900	990	980	1,970	1,050	1,010	2,060	1,040	1,050	2,090
60-64	990	920	1,910	980	910	1,890	960	910	1,870	960	910	1,870
65-69	930	820	1,750	960	840	1,800	980	860	1,840	990	870	1,870
70-74	830	710	1,540	850	710	1,570	840	760	1,600	870	750	1,620
75-79	500	490	990	520	550	1,070	600	520	1,120	640	560	1,210
80-84	330	280	600	360	290	650	360	340	700	390	360	750
85+	300	240	530	310	250	560	350	260	600	380	280	660
All Ages	**25,600**	**26,300**	**52,000**	**26,200**	**26,900**	**53,000**	**26,700**	**27,400**	**54,000**	**27,200**	**27,900**	**55,100**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
	2038			2039			2040			2041		
00-04	2,310	2,440	4,750	2,330	2,470	4,800	2,360	2,510	4,860	2,380	2,530	4,920
05-09	2,250	2,400	4,660	2,280	2,430	4,720	2,310	2,460	4,770	2,340	2,490	4,830
10-14	2,220	2,370	4,590	2,250	2,410	4,660	2,280	2,440	4,720	2,310	2,470	4,780
15-19	2,350	2,500	4,850	2,390	2,530	4,920	2,420	2,570	4,990	2,460	2,610	5,070
20-24	2,330	2,400	4,730	2,310	2,410	4,710	2,330	2,450	4,780	2,340	2,490	4,840
25-29	2,260	2,420	4,680	2,280	2,370	4,650	2,270	2,310	4,580	2,270	2,290	4,560
30-34	2,090	2,290	4,390	2,170	2,400	4,560	2,210	2,480	4,690	2,290	2,510	4,790
35-39	1,950	1,960	3,920	1,940	2,020	3,950	1,960	2,070	4,030	1,980	2,150	4,130
40-44	1,780	1,820	3,600	1,890	1,850	3,740	1,990	1,890	3,870	2,030	1,900	3,930
45-49	1,500	1,620	3,120	1,520	1,640	3,170	1,550	1,700	3,250	1,580	1,740	3,320
50-54	1,240	1,270	2,520	1,330	1,400	2,720	1,370	1,450	2,820	1,440	1,540	2,980
55-59	1,090	1,070	2,150	1,090	1,070	2,160	1,120	1,100	2,230	1,140	1,140	2,270
60-64	950	930	1,880	960	930	1,890	990	970	1,960	1,050	1,000	2,050
65-69	970	910	1,880	980	900	1,880	970	890	1,850	950	890	1,840
70-74	880	740	1,630	890	780	1,670	930	790	1,720	940	820	1,760
75-79	720	600	1,320	770	640	1,410	790	640	1,430	780	690	1,470
80-84	400	380	780	430	410	840	450	460	910	530	430	960
85+	410	310	700	420	320	740	450	330	790	480	370	850
All Ages	**27,700**	**28,400**	**56,100**	**28,200**	**29,000**	**57,200**	**28,800**	**29,500**	**58,300**	**29,300**	**30,000**	**59,300**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	2,420	2,570	4,980	2,450	2,590	5,040
05-09	2,370	2,520	4,890	2,390	2,550	4,950
10-14	2,340	2,500	4,840	2,370	2,530	4,900
15-19	2,490	2,650	5,140	2,530	2,690	5,220
20-24	2,390	2,530	4,920	2,410	2,540	4,950
25-29	2,250	2,290	4,530	2,240	2,310	4,550
30-34	2,290	2,480	4,770	2,320	2,460	4,780
35-39	2,070	2,240	4,320	2,150	2,330	4,490
40-44	2,020	1,950	3,970	2,000	2,010	4,010
45-49	1,680	1,820	3,490	1,800	1,830	3,630
50-54	1,490	1,550	3,040	1,500	1,620	3,110
55-59	1,180	1,190	2,370	1,230	1,260	2,490
60-64	1,040	1,040	2,080	1,090	1,050	2,140
65-69	950	890	1,840	940	910	1,850
70-74	960	830	1,790	940	860	1,800
75-79	800	680	1,480	820	670	1,490
80-84	560	470	1,030	630	500	1,130
85+	520	390	920	550	430	980
All Ages	**29,800**	**30,600**	**60,400**	**30,400**	**31,100**	**61,500**

Source: Te Whatu Ora Population Webtool (Best Available Populations).

Appendix 2: Technical notes

1. Explanation of statistical terms used in this report

95% confidence interval

Technical definition

A 95% confidence interval represents a range from a lower to an upper value that is likely to include the true average figure for the entire population. It suggests that if a similar sample of the total population was taken 100 times, the true value would be found within this range 95 times. This confidence interval can vary in size: a larger number of survey responses or participants, typically results in a narrower range, indicating more precise estimates, while a smaller number of responses may result in a broader range, indicating less certainty about the exact figure.

Plain English definition

When a health study gives a number, like how many people feel healthy, it's often not just one number but a range. This range is what's called a 95% confidence interval. It's like a safety net that says, 'We think the real number is in here.' And if we did the study over and over, 95 times out of 100, we'd get a number in this range. The more people we include in our sample, the smaller and more accurate this net becomes. So, if we ask only a few people, the net is wide, and we're less sure. If we ask a lot of people, the net gets tighter, and we're more sure we've got the right number.

Example from the report

In a survey assessing health status among residents of Te Moana a Toi[8] (see table below), 13.0% of the sampled Māori population considered their health to be 'Excellent'. However, this percentage is an estimate from a sample of people in Te Moana a Toi, not the entire population. The 95% confidence interval, shown in brackets as “(9.8, 16.2)”, indicates that there is a 95% probability that the actual percentage of all Māori residents who would rate their health as 'Excellent' falls within this range. If this survey were to be conducted 100 times with different sample groups, it is expected that 95 of those surveys would yield a true percentage that falls between 9.8% and 16.2%.

Table 6 - Health status reported by Māori aged 15 years and over, Te Moana a Toi, 2018

Health Status	Te Moana a Toi			Aotearoa		
	%	(95% CI)		%	(95% CI)	
Excellent	13.0	(9.8,	16.2)	15.1	(14.0,	16.2)
Very Good	40.2	(35.6,	44.9)	36.9	(35.4,	38.3)
Good	30.1	(25.3,	35.0)	30.3	(29.0,	31.7)
Fair/poor	16.6	(12.9,	20.3)	17.7	(16.6,	18.8)

Source: Te Kupenga 2018, Statistics New Zealand customised report.

[8] The example tables in this technical appendix are all taken from the Te Moana a Toi IMPB profile, and are presented purely as an example to facilitate understanding across all IMPB data profiles.

Age standardisation

Technical definition

Age-standardisation is a statistical method used to compare rates of events across different populations by adjusting for age differences in the two groups. This method is particularly useful when comparing health outcomes between groups like Māori and non-Māori, where there are significant differences in age distribution; for example only 8% of Māori are aged 65 and over in Te Moana a Toi compared with 26% of non-Māori (see the table below).

Because of these age differences, comparing crude rates (actual observed rates) can be misleading. By applying the age-specific rates from the populations being compared to a standard population, age-standardised rates provide a clearer comparison as if the populations had the same age distribution. Almost all data in this report has been age-standardised to the 2001 Māori population. Where crude rates are presented instead, this is noted beneath the table.

Table 2 – Population estimate by age group, Te Moana a Toi, 2023

Age group (years)	Māori			non-Māori		Total IMPB number
	Number	Age distribution	% of IMPB	Number	Age distribution	
0–14	20,255	30%		30,670	15%	50,925
15–24	12,285	18%		16,810	8%	29,095
25–44	16,465	24%		50,870	25%	67,335
45–64	13,030	19%		52,935	26%	65,965
65+	5,575	8%		51,760	26%	57,335
Total	**68,000**	**100%**	**25%**	**202,740**	**100%**	**270,740**

Plain English definition

Age-standardisation is a method used to compare health between two groups fairly. It adjusts the numbers to consider how young or old the people in each group are. This way, when looking at health data, it is more likely that any differences between the groups are not just because one has more young people or more old people. It helps give a more accurate picture of health when comparing two groups with a different spread of ages.

Example from the report

The table below shows an age-standardised rate of 28.4 per 100,000 per year ischaemic heart disease events among Bay of Plenty DHB Māori women between 2014 and 2018. Without age standardisation calculations, crude rates would be lower than 28.4 among Māori women. The lower rate would be simply because a larger proportion of the Māori population is younger and ischaemic heart disease is more frequent in older people.

Table 6 - Leading causes of death for Māori, all ages, Bay of Plenty DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Ischaemic heart disease	19	28.4	(16.2, 45.5)	98	8.3	(6.2, 10.9)	**3.40**	**(1.95, 5.93)**	20.1

Rate ratios

Technical definition

Rate ratios, often referred to as relative risks, are a measure of the relationship between the occurrence of a certain event in two different groups, typically standardised for age (see section on age standardisation above) to allow fair comparison. It is the result of the rate of the event in the first group (for example, Māori) divided by the rate in the second group (non-Māori), which serves as the reference group. A rate ratio of 1 indicates parity between groups, above 1 indicates a higher rate in the first group, and below 1 indicates a lower rate. In general, the data presented in this report uses Māori as the first group and compares it with non-Māori as the second group.

Plain English definition

A rate ratio compares how common something, like a disease, is between two different groups of people, like Māori and non-Māori. If the ratio is exactly 1, both groups are equally affected. If it's higher than 1, it means that the first group, in this case Māori, has the event happen more often. If it's lower, Māori have it happen less often. It tells us the relative disparity between two groups.

Example from the report

In the table below, the rate ratio for ischaemic heart disease is 3.40. This tells us that Māori females are more than three times as likely to suffer from this condition compared to non-Māori females after considering the age distribution in each group.

The 95% confidence interval (see section on confidence intervals above) of 1.95 to 5.93 for this rate ratio indicates that we are very sure that the true rate ratio is significantly different from 1, indicating a genuine disparity in risk between the two populations. In this report, a statistically significant difference between groups is evident when the confidence interval for the rate ratio does not cross 1. These results are shown in **bold** type.

Table 6 - Leading causes of death for Māori, all ages, Bay of Plenty DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Ischaemic heart disease	19	28.4	(16.2, 45.5)	98	8.3	(6.2, 10.9)	**3.40**	**(1.95, 5.93)**	20.1

Rate difference

Technical definition

Rate differences, also known as absolute differences, quantify the disparity between two groups by showing the additional number of events occurring in one group compared to another, per population unit (like per 100,000 people). This is calculated by subtracting the event rate of the reference group from that of the comparison group.

Plain English definition

Rate difference tells us how much more often something happens in one group compared to another. If you take the number of times an event happens per 100,000 people in one group and subtract the same from another group, you get the rate difference. This number shows if one group is experiencing more of a certain event, like a disease or death, and by how much. It's a simple way to see the actual impact of a problem on one group over another.

Example from the report

The table below show that Māori females in Bay of Plenty DHB have an age-standardised rate of ischaemic heart disease at 28.4 events per 100,000 per year, while the rate for non-Māori females is 8.3. This gives a rate difference of 20.1 events per 100,000 per year, which tells us that in a population of 100,000 Māori women and 100,000 non-Māori women there are 20.1 more cases of ischaemic heart disease among Māori females than non-Māori females each year. This figure is crucial because it doesn't just show the relative disparity (like a rate ratio does), but it tells us how many additional events are affecting Māori females, highlighting the actual impact of the disease on the population and where health resources might be most needed to address the disparity.

Table 6 - Leading causes of death for Māori, all ages, Bay of Plenty DHB, 2014 to 2018

Cause	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Rate difference
	Av. no. per year	Age-standardised rate per 100,000 (95% CI)		Av. no. per year	Age-standardised rate per 100,000 (95% CI)				
Female									
Ischaemic heart disease	19	28.4	(16.2, 45.5)	98	8.3	(6.2, 10.9)	**3.40**	**(1.95, 5.93)**	20.1

2. Key methods and quality limitations of key data sources

This section describes in more detail the specific methods, and key limitations, used for each of the main data sources used in this report.

Numerators

Data in this first volume of IMPB profiles are sourced from Te Whatu Ora, Manatū Hauora (the Ministry of Health), and Statistics New Zealand (StatsNZ). Where administrative data (e.g. national mortality data) are used, the most recent five years of non-provisional data were aggregated to provide more stable rate estimates for smaller areas. Census data were taken from the 2018 Census, and data from the Te Kupenga survey were from the 2018 Te Kupenga survey, undertaken after the 2018 Census.

Denominators

StatsNZ mid-year (at 30 June) estimated resident population was used as denominator data in the calculation of population rates for deaths and Primary Healthcare Organisation (PHO) enrolment. For census variables, the denominator is the people for whom there is a response / relevant information from the census dataset for the question asked ('people stated'). This differs for each question, and is a subset of the total usually resident population identified by the census for the relevant rohe (region). For Te Kupenga survey data, the denominator is the total stated population, this means that people who refuse to answer/ don't know their answer/ answer with an invalid answer are excluded.

Ethnicity data

Ethnicity data quality

Although high quality ethnicity data are critical for Māori health improvement, ethnicity data quality in the health sector remains poor (Harris, Paine et al. 2022). It is the responsibility of the entire health system to collect, record and report ethnicity data in the ways set out in the HISO 10001:2017 Ethnicity Data Protocols (Ministry of Health. 2017). Despite the protocols being in existence for nearly 20 years, there is evidence that they are not being adhered to and Māori have continued to be systematically undercounted (Cormack D and McLeod M 2010, Harris, Paine et al. 2022). Self-identified ethnicity recorded on the Census is considered to be the "gold-standard" for ethnicity data, so this is used as the denominator for most variables in this report.

To understand what impact the ethnicity data quality is likely to have, on the accuracy of the results presented in this report, we need to consider the ethnicity data quality in both the numerator and the denominator. For some measures, it may underestimate the true number of, or rate of, a particular outcome for Māori. The potential impact of ethnicity data weaknesses is discussed for each data source later in this Appendix.

Ethnicity classification

When analysing data, there are different ways to classify people who report multiple ethnicities. The two main ways are *total response (overlapping) output* and *prioritised output.* In total response output, each respondent is counted in each of the ethnic groups they reported. So, individuals who indicate more than one ethnic group are counted more than once, and the sum of the ethnic group populations will exceed the total population of NZ. For example, using total response classification, a death from lung cancer in an individual who identifies as Māori and New Zealand European, will be reported as a lung cancer death for both ethnicities.

In prioritised output, each respondent is allocated to a single ethnic group using a prioritisation order, with Māori first, to ensure that ethnic groups of policy importance or of small size, are not swamped by the New Zealand European ethnic group. Under this method, a person is classified as Māori if any one of their recorded ethnicities are Māori. For example, using prioritised classification, a death from lung cancer

in a person recorded as both Māori and New Zealand European, would be counted as a lung cancer death for Māori, and not in non-Māori.

In this report, the method of ethnicity classification is noted under each table or figure. Wherever possible, prioritised ethnicity classification was used when people identified with more than one ethnic group.

Comparison group

Most indicators compare Māori with non-Māori. Non-Māori includes all people who do not identify as Māori and represent a comparative or reference group. Some indicators in this report (e.g. life expectancy) use non-Māori non-Pacific (all people who do not identify as either Māori or Pacific or both) as the comparison group. This is done because in areas where there are large Pacific populations, grouping the Pacific population with the non-Māori group skews the result for the comparison group toward the Māori population. This is particularly necessary in regions where there is a high Pacific population such as South Auckland.

Age-standardised and crude rates

This report uses direct age-standardisation; most rates (unless noted otherwise) are standardised to the 2001 Census Māori population. Where data were not available with sufficient age group breakdown to allow age standardisation, or data for a specific age were presented, crude rates were calculated. In this case, caution should be taken when comparing Māori with non-Māori results. Crude rates accurately portray a situation in each population, but make comparisons difficult, because they do not consider the different age distributions in each of the populations (e.g., the Māori population is much younger than the non-Māori population). Rates were not calculated for counts fewer than five in data from national collections. For Te Kupenga data, if the weighted count (estimate) was less than 1000 then the data was supressed.

Confidence intervals

This report has endeavoured where possible to provide local data specific to IMPBs and their relevant DHB areas. Some of these areas have small populations. As the size of the group becomes smaller, the confidence interval (CI) becomes wider, and there is less certainty about the rate. This means the degree of confidence and certainty about the numbers diminishes for rohe (regions) with smaller populations. Thinking of the data as ‘indicative’ rather than precise is important in these rohe, as well as considering Māori-specific regional and national data, which will have greater certainty around rates, because of the larger sample size.

When the CIs of two groups do not overlap, the difference in rates between the groups is considered statistically significant. Sometimes, even when there are overlapping CIs, the difference between the groups may be statistically significant. Determining that would require further statistical testing which has not been undertaken for this report.

Rate ratios

Age-standardised rate ratios are used in this report to compare age-standardised rates between Māori and non-Māori. The rate ratio (RR) is equal to the age-standardised Māori rate divided by the age-standardised non-Māori rate. The non-Māori population is used as the reference population. For example, an age-standardised RR of 1.5 means that the rate is 50 percent higher (or 1.5 times as high) in Māori than in non-Māori, after taking into account the different age structures of these two populations. This report gives rate ratios and their 95 percent CIs. In this profile, if the CI of the rate ratio does not include the number 1, the ratio is said to be statistically significant. Differences presented in this profile in **bold** are statistically significant.

Demography data

Indicators on population demography and projections use the estimated resident population (ERP) and projections provided by StatsNZ for the health sector, from a 2018 base. The ERP is an estimate designed to adjust for the undercount for various groups in the census response rate, people temporarily overseas or elsewhere in NZ from their usual residence on census night, and key population changes (births, deaths, mobility) since the 2018 census.

In the estimates and projections prioritised ethnicity was used to identify Māori individuals (any person who identified Māori as any of their ethnic groups in the base census data on which the estimates and projections are built) and non-Māori included people who had at least one valid ethnic response, none of which was/were Māori.

The Census of Population and Dwellings

Indicators using data from the 2018 Census of Population and Dwellings are derived from the census usually resident (UR) population (residents of an area living in the area on census night and people living elsewhere in Aotearoa from their usual residence on census night). Data used in this report were sourced from the publicly available UR data provided on the StatsNZ website, and for some indicators, from a custom data extract produced by StatsNZ for the previous Northern Region DHBs (which included data for the whole of Aotearoa).

StatsNZ apply confidentiality rules to census data to protect the confidentiality of individuals, families, households, dwellings, and undertakings in 2018 Census data. Counts are calculated using a method called fixed random rounding to base 3, and suppression of 'sensitive' counts less than six, where tables report multiple geographic variables and/or small populations. This means individual figures may not always sum to stated totals[9].

Due to changes in the 2018 Census methodology and lower than anticipated response rates, as described further below, time series data for census variables should be interpreted with care.

Most census variables in the Wai Ora chapter have been age-standardised to the 2001 Māori population. The unpaid work variables were not able to be age-standardised for this report, and crude rates are presented. In this case, caution should be taken when comparing Māori with non-Māori results.

The 2018 Census was the first 'digital-first' census undertaken in Aotearoa, as a part of modernising and streamlining the census process. Unfortunately, the 2018 Census had a very low response rate overall, and especially for Māori and Pacific peoples - approximately 68% for Māori and 65% for Pacific peoples. Adjustments were made to improve the quality of the data (for example, using data from previous censuses and other administrative datasets), and the overall quality of the 2018 Census data is now considered moderate/good. However, the adjustments do not affect the Māori and non-Māori population in the same way. For example, in the 2018 Census, 29% or more of the ethnicity data for Māori came from other sources. This means that the ethnicity data in the 2018 census for Māori is not of the same quality as the data for the NZ European ethnic population, for example, which had only 11.5% of their responses from these other sources.

Further details on the adjustment methods used in the 2018 Census can be found online via Stats NZ[10]. In summary, the core self-response data from the 2013 Census was combined with administrative data (e.g. from the education or health system), and in some situations data derived by statistical models to predict what the missing data would have been (called imputation). In addition to different levels of self-response, people identified as living in NZ at the time of the census have different levels of information from other sources available to StatsNZ to draw on.

---

[9] More info on Census confidentiality rules: Applying confidentiality rules to 2018 Census data and summary of changes since 2013 | Stats NZ

[10] https://www.stats.govt.nz/assets/Uploads/Reports/Final-report-of-the-2018-Census-External-Data-Quality-Panel/Downloads/Final-report-of-the-2018-Census-External-Data-Quality-Panel-corrected.pdf

However, on the other hand, the census is a key source for population level data about factors that are important for health, such as income, employment, and housing. StatsNZ has provided quality ratings for the 2018 Census data to help users determine how to interpret the data. Along with StatsNZ's own quality ratings, they also engaged an External Data Quality Panel which included Māori population experts, who provided their assessment of the census data quality. The table below shows the ratings of both for the data variables used in this report. The overall message from these ratings is that the data can provide insights into the situation for Māori whānau, but it should be seen as indicative, rather than precise.

Table 150 - Quality ratings 2018 Census variables included in this report

Variable name	StatsNZ quality rating	External Data Quality Panel quality rating	Notes
Census usually resident population count	Very high	Very high	
Ethnicity	High	Moderate	
Number of bedrooms	High	High	Number of bedrooms is used to help derive estimates of household crowding. There were over 300,000 people who could not be placed into households in the 2018 data. This means the number of people who lived in a crowded house may be undercounted.
Number of rooms	Moderate	Poor	
Housing quality: dwelling dampness and mould indicators	Moderate	Moderate	This is a self-evaluated assessment of whether the home has mould that is larger than an A4 sheet of paper (in total).
Main types of heating and fuel types used to heat dwellings	Moderate	Moderate	This question was first introduced in the 2018 Census. Each type of heating reported was recorded once only.
Tenure of household	Moderate	Moderate	
Access to telecommunication systems	Moderate	Moderate	The online data collection methodology of the 2018 Census may have affected this variable. The proportion of households with no access to telecommunications was lower than expected. The proportion of households with access to a telephone was higher than expected. This data provides information on access to telecommunication systems at the household level. It does not show whether a particular household member has access to those amenities. In some cases, not every member of a household has equal access to particular telecommunication systems.
Number of motor vehicles	Moderate	Moderate	
Industry	High	High	Industry is the type of activity undertaken by the organisation or business where people work.
Occupation	Moderate	Poor	An occupation is a set of jobs that require the performance of similar or identical sets of tasks. Occupations are organised based on skills, using the ANZSCO classification. The significant use of imputation may have inflated the total number of respondents in all categories.

Variable name	StatsNZ quality rating	External Data Quality Panel quality rating	Notes
Qualifications: highest qualification	Moderate	Moderate/poor	
Total personal income	High	High	Total personal income received is the total before-tax income of a person in the 12 months ended 31 March 2018. The information is collected as income bands rather than in actual dollars. This includes all possible sources of income.
Status in employment	High	Moderate	Employment is described as full-time (30 hours or more / week) or part-time (< 30 hours per week). A person not employed is described as either 'unemployed' or 'not in the labour force'. Not in the labour force means not employed and not actively seeking work or not available for work
Unpaid activities	Poor	Not applicable	Because of the low quality ratings, Stats NZ recommend very careful use of this data particularly for Māori and Pacific peoples and at small geographies. No alternative data source or imputation was available to replace missing responses.

Geographical alignment between IMPB and DHB areas

This report has endeavored to report data specific to each IMPB health planning area and has used several slightly different methods to do this in different chapters of the report.

For population estimates, and Te Kupenga survey data, the population for an IMPB has been calculated using geographies (SA2 areas or Territorial Authority/Local Boards) that are smaller than the previous DHB districts, to be able to better align with the IMPB health planning areas. This means the Te Taura Ora o Waiariki and Tūwharetoa IMPBs have been able to be split out separately, and Ōtāhuhu has been included as part of Ngaa Pou Hauora oo Taamaki Makaurau, rather than Te Taumata Hauora o Te Kahu o Taonui (historically Ōtāhuhu was part of Auckland DHB rather than Counties Manukau DHB, so the Auckland Council Local Board Māngere-Ōtāhuhu spanned the boundary between the DHBs)[11]. In some cases, for example at the Nelson-Marlborough/Te Tauraki border, the IMPB health planning area did not align completely with SA2 areas.

There may be some variation between the IMPB population estimates presented here compared to estimation using data from the previous DHB. This is due to there being a higher level of uncertainty around the SA2 population estimates and they will not always sum to exactly the same population by age, sex and ethnicity as the district population estimates.

For other measures, including mortality data, NZDep2018 and PHO enrolment, the IMPB population has been calculated using the sum of the main DHBs it contains. So, for example IMPB mortality data for Te Taumata Hauora o Te Kahu o Taonui will include all of Northland, Auckland and Waitematā DHBs, even though that includes communities such as Ōtāhuhu which are not part of the IMPB.

Life expectancy

There are two parts to the life expectancy data provided in this report. There is a ‘standard’ calculation of life expectancy at birth for each IMPB, using mortality data from Manatū Hauora and population data from

[11] Ōtāhuhu has a population of approximately 16,000 people, the majority of whom identify as Pacific and Asian (Indian). The area is classified as NZDep2018 deciles 9 and 10 – the most socioeconomically challenged areas.

StatsNZ and presented as the gap between Māori and non-Māori. It uses five years of data to be able to provide ethnicity and male/female information.

There is also information on what conditions contribute to those life expectancy gaps, from an analysis completed by the Service Innovation and Improvement Directorate, Te Whatu Ora in May 2023 titled "The Contribution of Avoidable Mortality to the Life Expectancy Gap among the Māori and Pacific population. Regional Summary." This analysis compared Māori with the non-Māori, non-Pacific population, so that is why this comparator group is used for this section in this IMPB report.

The Arriaga method—a life table decomposition technique accounting for both age and cause of death—was used. The analyses and calculations are based on official death data from the Te Whatu Ora mortality collection, while population data are derived from official StatsNZ population estimates.

The analysis hinges on the principal underlying cause of death classification, which simplifies the reality that multiple factors can contribute to a single death. This may result in an underestimation of the effects of prevalent conditions contributing to, but not the final causes of death. As it requires cause of death information, these are often two years delayed to allow coronial processes to be completed. As such, the life expectancy figures here may not be the most recent available, but are the most recent that allows this type of gap analysis.

Causes of death are divided into 50 potentially avoidable conditions. Avoidable deaths encompass those deemed amenable to high-quality healthcare, preventable through public health interventions, or both. A comprehensive list of the conditions used in this analysis, along with their corresponding ICD codes, can be found in the Te Whatu Ora report. Most are limited to those under 75 years, except leukemia which is only considered avoidable under the age of 45 years and external injuries which includes all ages.

Mortality data

Indicators on cause of death and mortality come from the national Mortality Collection. This classifies the underlying cause of death for all deaths registered in Aotearoa and all registered fetal deaths (stillbirths). Aotearoa is currently using the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) classification and the World Health Organization (WHO) ICD Rules and Guidelines for Mortality Coding. Mortality data 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. The year range of 2014 to 2018 was used as complete mortality data records were not available for 2019 and 2020 at the time of writing. The DHB of residence was determined from the domicile code attached to the death registration (so even if a person passed away at a tertiary hospital outside their home region, their death would be recorded as one in their home DHB). In tables presenting data on causes of death, data is not presented where there were fewer than five Māori events during the period represented by the data. There are several different methods of classifying causes of death as "potentially avoidable", "preventable" or "amenable". The ICD-10-AM codes used for potentially avoidable death tables in this report are listed in the next Appendix.

Te Kupenga Survey

Te Kupenga 2018 is StatsNZ's survey of Māori wellbeing. A survey of almost 8,500 adults (aged 15 years and over) of Māori ethnicity and/or descent, Te Kupenga gives an overall picture of the social, cultural, and economic wellbeing of Māori people in Aotearoa.

Te Kupenga is a post-census survey. This means the survey sample was selected from people who identified as having Māori ethnicity and/or descent on their 2018 census form, so only those who completed the census were able to be selected. Given that a lower proportion of Māori people completed the 2018 Census than planned or anticipated, StatsNZ investigated the potential impact this may have had on the Te Kupenga sample. They found some bias in the sample frame (the group of people who could have been selected to participate) compared with the total Māori population. However, this bias was small, and they were able to remove most of the effect of the bias through the statistical weighting process. See StatsNZ website for more information on this[12].

In this IMPB profile, all estimates of numbers, percentages, and confidence intervals for data presented from Te Kupenga were calculated by StatsNZ and provided in a customised extract. Estimates of counts were rounded to the nearest thousand. Estimates of proportions were rounded to 1 decimal point. All percentages were calculated from unrounded data. If the weighted count (estimate) was less than 1000 then the data was supressed. Further details on the survey measures are available in the Te Kupenga 2018 report and can be found at the StatsNZ website[13].

Primary care enrolment

Primary care enrolment data is based on the National Enrolment System using the National Health Index (NHI). Ethnicity data in the NHI is known to undercount Māori by 15.7% compared to the ethnicity people report in the census, with higher undercounts for Māori men (Harris, Paine et al. 2022). The denominator for calculating the percentage of people enrolled in a PHO is the estimated resident population, which uses ethnicity based on the 2018 Census. The poor ethnicity data quality in the NHI makes it difficult to assess how many Māori are actually missing out on being enrolled with primary health care, and how many are actually enrolled but misclassified with a non-Māori ethnicity. It is likely that both of these factors make a contribution to the inequity in primary care enrolment data. Primary care enrolment data presented in this report are not age-standardised. In this case, caution should be taken when comparing Māori with non-Māori results. Crude rates make comparisons difficult, because they do not take into account different age distributions in each of the populations.

NZ Index of Deprivation 2018

NZDep2018 is an area-based measure of relative socioeconomic deprivation. It is based on nine variables from the 2018 Census which cover eight different dimensions of socioeconomic hardship. These variables relate to home internet access, receipt of welfare benefits, household income, employment, qualifications, home ownership, family structure, household crowding and housing quality. NZDep2018 gives a deprivation score for small area geographies (i.e. meshblocks, and SA1s) (Atkinson, Salmond et al. 2019). These scores are aggregated into deciles (1-10, 1 being areas with the least socioeconomic challenge and 10 being those the most disadvantage). This report uses NZDep2018 information supplied by StatsNZ for the health sector, applying the scores to estimated resident populations to estimate the number of people living in each decile.

[12] https://www.stats.govt.nz/methods/assessment-of-potential-bias-in-the-te-kupenga-sample-frame-2018

[13] https://www.stats.govt.nz/information-releases/te-kupenga-2018-final-english/

Geographic Classification of Health

The Geographic Classification for Health (GCH) is a rural-urban geographic classification designed to allow Aotearoa's health researchers and policy makers to accurately monitor rural-urban variations in health outcomes. The GCH classifies all areas of Aotearoa as rural or urban according to their proximity to larger urban areas with respect to health (Whitehead, Davie et al. 2021).

The GCH is comprised of five categories, two urban and three rural, that reflect degrees of reducing urban influence and increasing rurality. 'Urban 1' to 'Urban 2' are based on population size, and 'Rural 1' to 'Rural 3' based on drive time to their closest major, large, medium, and small urban areas. The population and drive time thresholds used in the GCH were developed from a health perspective and tested in partnership with a wide range of rural health stakeholders.

Appendix 3: ICD-10-AM Codes

The International Classification of Diseases (ICD-10-AM) codes used for the calculation of potentially avoidable mortality are presented below.

Table 151 - Potentially avoidable mortality ICD-10-AM codes

Condition	ICD-10-AM Code
Tuberculosis	A15-A19, B90
Selected invasive bacterial and protozoal infection	A38-A41, A46, A481, B50-B54, G00, G03, J020, J13-J15, J18, L03
Hepatitis	B15-B19
HIV/AIDS	B20-B24
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
Melanoma of skin	C43
Non-melanotic skin cancer	C44
Breast cancer (female only)	C50
Cervical cancer	C53
Uterine cancer	C54-C55
Bladder cancer	C67
Thyroid cancer	C73
Hodgkin's disease	C81
Leukaemia	C910-C911
Benign tumours	D10-D36
Thyroid disorders	E00-E07
Diabetes	E10-E14
Alcohol-related diseases	F10, I426, K292, K70
Illicit drug use disorders	F11-F16, F18-F19
Epilepsy	G40-G41
Birth defects	H311, P00, P04, Q00-Q99
Rheumatic and other valvular heart disease	I01-I09
Hypertensive heart disease	I10-I15
Nephritis and nephrosis	I12-I13, N00-N09, N17-N19

Condition	ICD-10-AM Code
Ischaemic heart disease	I20-I25
Deep vein thrombosis with pulmonary embolism	I26, I802
Cerebrovascular diseases	I60-I69
Aortic aneurysm	I71
Viral pneumonia and influenza	J10, J12, J171, J21
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, K915
Chronic liver disease (excluding alcohol-related disease)	K73-K74
Obstructive uropathy and prostatic hyperplasia	N13, N20-N21, N35, N40, N991
Complications of perinatal period	P03, P05-P95
Motor vehicle accidents	V01-V04, V06, V09-V80, V87, V89, V99
Falls	W00-W19
Drownings	W65-W74
Fires, burns	X00-X09
Accidental poisonings	X40-X49
Suicide and self-inflicted injuries	X60-X84, Y870
Violence	X85-Y09, Y871

Appendix 4: Māori 2001 Population

The table below shows the 2001 Māori population standard used for age-standardisation in this report, including the weightings applied to each age-group.

Table 152 - 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	8043	1.53
70–74	5046	0.96
75–79	2736	0.52
80–84	1251	0.24
85+	699	0.13

Te rārangi tohutoro
References

Te rārangi tohutoro - References

Atkinson, J., C. Salmond and P. Crampton (2019). "NZDep2018 Index of Deprivation, interim research report." University of Otago: Wellington, New Zealand **5541**: 1-65.

Cormack D and McLeod M (2010). Improving and maintaining quality in ethnicity data collections in the health and disability sector. Wellington, Te Rōpū Rangahau Hauora a Eru Pōmare.

Curtis, E. (2016). "Indigenous positioning in health research: the importance of Kaupapa Māori theory-informed practice." AlterNative: An International Journal of Indigenous Peoples **12**(4): 396-410.

Curtis E, Loring B, Harris R, McLeod M, Mills C, Scott N and Reid P (2022). Māori Health Priorities. A report commissioned by the interim Māori Health Authority (iMHA) to inform development of the interim New Zealand Health Plan (iNZHP). Auckland, Te Aka Whai Ora.

Curtis, E., R. Jones, E. Willing, A. Anderson, S.-J. Paine, S. Herbert, B. Loring, G. Dalgic and P. Reid (2023). "Indigenous adaptation of a model for understanding the determinants of ethnic health inequities." Discover Social Science and Health **3**(1): 10.

Harris, R., S. J. Paine, J. Atkinson, B. Robson, P. T. King, J. Randle, A. Mizdrak and M. McLeod (2022). "We still don't count: the under-counting and under-representation of Māori in health and disability sector data." N Z Med J **135**(1567): 54-78.

Ministry of Health. (2017). HISO 10001:2017 Ethnicity Data Protocols. Wellington, Ministry of Health.

Simmonds, S., B. Robson, F. Cram and G. Purdie (2008). "Kaupapa Māori Epidemiology." Australasian Epidemiologist., **15**(1): 2-6.

Walsh, M. (2023). The Contribution of Avoidable Mortality to the Life Expectancy Gap among the Māori and Pacific population. Regional Summary, Equity team, Service Innovation and Improvement, Te Whatu Ora.

Whitehead, J., G. Davie, B. de Graaf, S. Crengle, M. Smith, R. Lawrenson, D. Fearnley, N. Farrell and G. Nixon (2021). "The Geographic Classification for Health." Methodology and classification report.

www.teakawhaiora.nz