Te Aka Whai Ora
Māori Health Authority

Iwi-Māori Partnership Board Health Profile:

Te Taumata Hauora o Te Kahu o Taonui

Volume One

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Toitū te mauri ora

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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)

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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
NZ	Aotearoa/New Zealand
NZDep2018	New Zealand Index of Deprivation 2018
NZHS	New Zealand Health Survey
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;

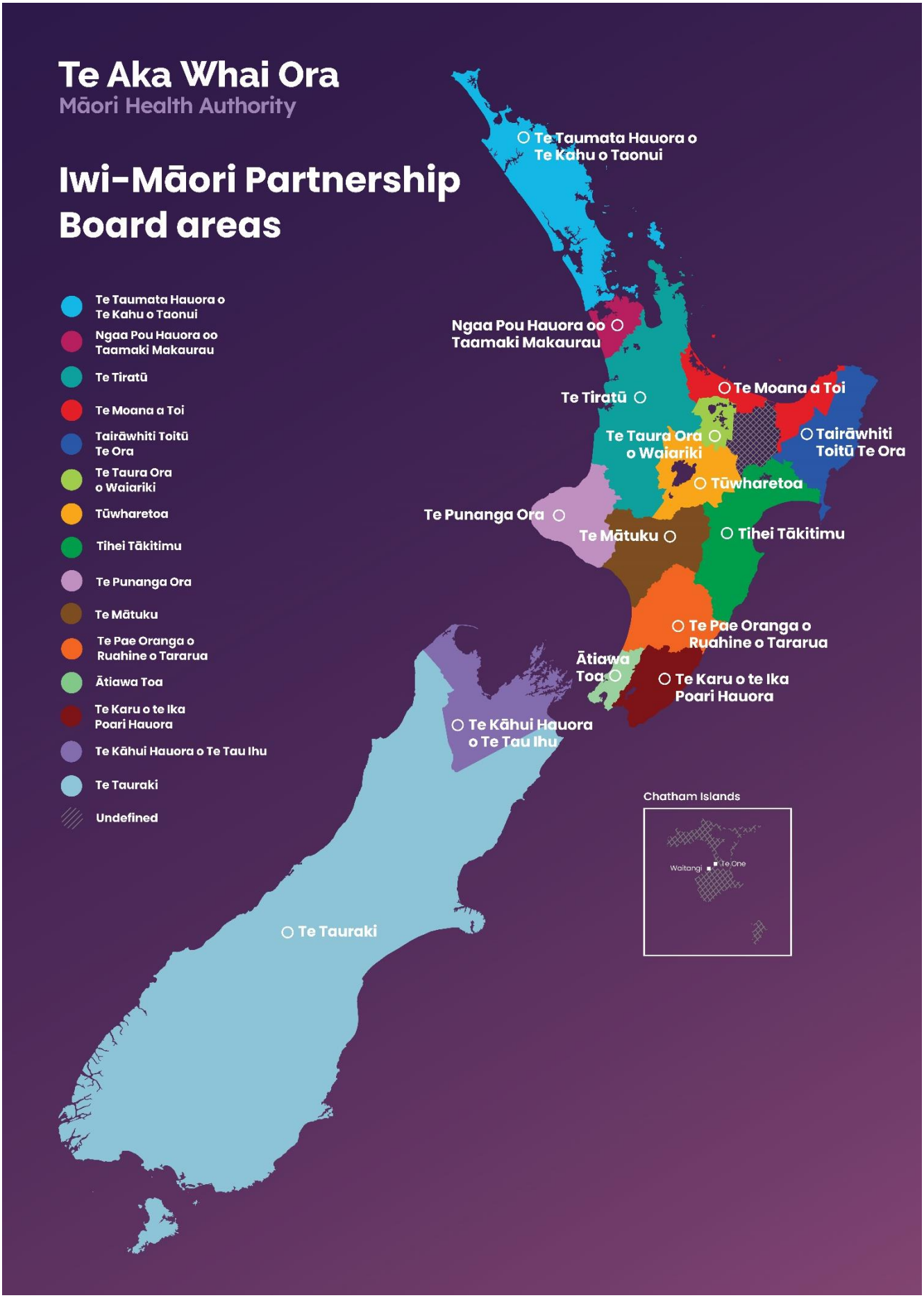
b) that the organisation has taken reasonable steps to engage with relevant Māori communities and groups; and

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 - 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.

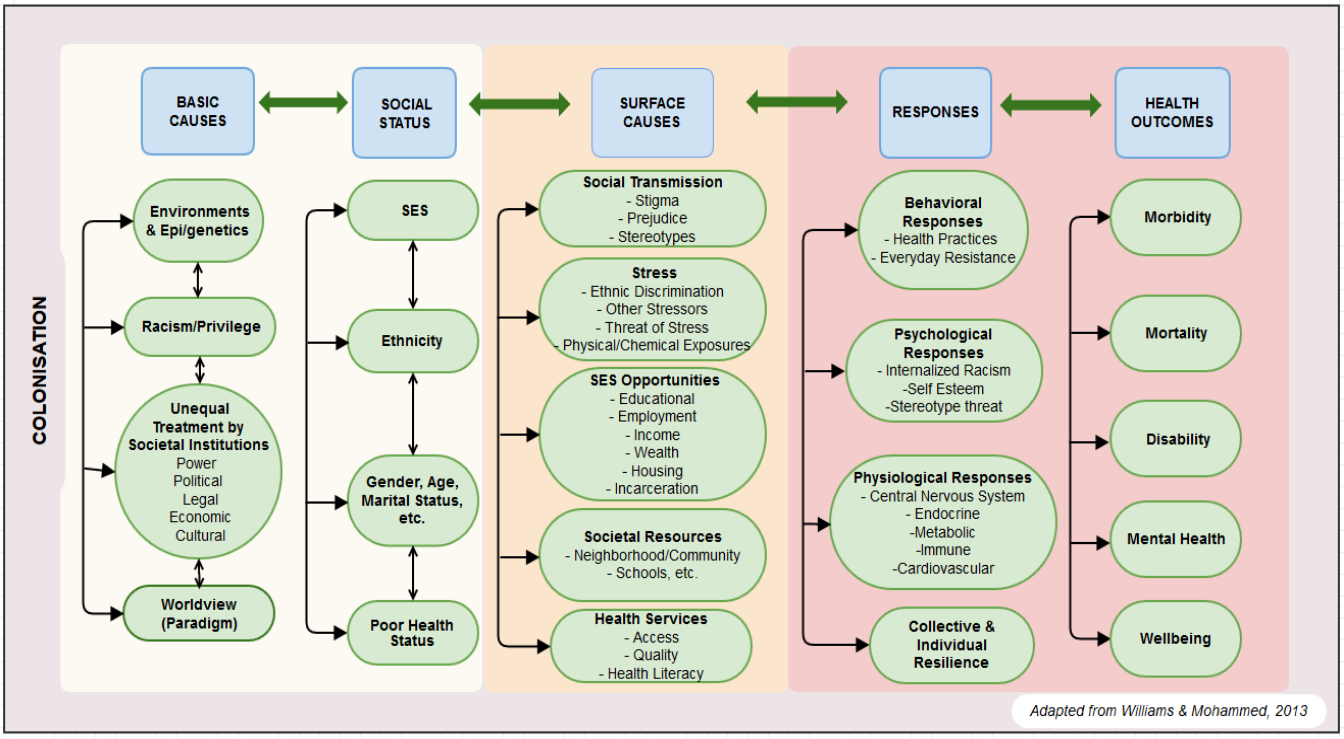
The framework emphasises the importance of distinguishing *basic* causes from *surface* (or intervening causes). Overall, changes in *basic* causes create important changes in health *outcomes*. *Social status* categories are created, and reinforced, by *basic* causes. *Social status* categories considered 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 Taumata Hauora o Te Kahu o Taonui

Te Taumata Hauora o Te Kahu o Taonui is home to an estimated 182,510 Māori in 2023 and includes most of the geographic areas of the former Northland, Waitematā and Auckland DHBs (Figure 3). This report includes data which is specific to the IMPB health planning area where possible, as well as presenting data for the three DHBs separately, to highlight any key differences for Māori within the IMPB. 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 Taumata Hauora o Te Kahu o Taonui IMPB with DHB boundaries, 2023

Table 1 shows the age breakdown of the population of Te Taumata Hauora o Te Kahu o Taonui. The Māori population of Te Taumata Hauora o Te Kahu o Taonui is very young, with 46% 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 14% of the IMPB population, but this varies significantly by DHB. Māori make up 37% of the Northland DHB population (Table 2), 8% of the Auckland DHB population (Table 3), and 11% of the Waitematā DHB population (Table 4).

Table 1 - Population estimates by age group, Te Taumata Hauora o Te Kahu o Taonui, 2023

Age group (years)	Māori			non-Māori		Total IMPB number
	Number	Age distribution	% of IMPB	Number	Age distribution	
0-14	50,390	28%		180,365	16%	230,755
15-24	32,595	18%		121,365	11%	153,960
25-44	48,650	27%		330,580	30%	379,230
45-64	35,875	20%		286,770	26%	322,645
65+	12,980	7%		194,695	17%	207,675
Total	**182,510**	**100%**	**14%**	**1,113,060**	**100%**	**1,295,570**

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

Table 2 - Population estimates by age group, Northland DHB, 2023

Age group (years)	Māori			non-Māori		Total DHB number
	Number	Age distribution	% of DHB	Number	Age distribution	
0-14	21,750	29%		18,200	14%	39,950
15-24	11,840	16%		9,450	7%	21,290
25-44	18,060	24%		27,300	21%	45,360
45-64	15,780	21%		37,980	29%	53,760
65+	7,210	10%		36,580	28%	43,790
Total	**74,600**	**100%**	**37%**	**129,500**	**100%**	**204,100**

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

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

Age group (years)	Māori			non-Māori		Total DHB number
	Number	Age distribution	% of DHB	Number	Age distribution	
0-14	8,540	21%		66,170	15%	74,710
15-24	7,860	20%		51,380	12%	59,240
25-44	12,440	31%		146,230	34%	158,670
45-64	8,050	20%		106,140	25%	114,190
65+	3,170	8%		62,640	14%	65,810
Total	**40,000**	**100%**	**8%**	**432,600**	**100%**	**472,600**

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

Table 4 - Population estimates by age group, Waitematā DHB, 2023

Age group (years)	Māori			non-Māori		Total DHB number
	Number	Age distribution	% of DHB	Number	Age distribution	
0-14	20,720	30%		100,590	18%	121,310
15-24	12,910	19%		61,810	11%	74,720
25-44	18,340	27%		162,470	29%	180,810
45-64	12,710	18%		146,770	26%	159,480
65+	4,090	6%		92,880	16%	96,970
Total	**68,800**	**100%**	**11%**	**564,500**	**100%**	**633,300**

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

Over the next two decades, the Māori population of Te Taumata Hauora o Te Kahu o Taonui is projected to grow to an estimate of 243,210 (Table 5) and to be older. By 2043, 12% of the Māori population will be over 65 years old, compared to 7% in 2023. The Māori population is projected to make up an increasing share of the IMPB population - from 14% in 2023 to 16% in 2043, although this masks significant differences between DHBs. In Northland DHB, Māori make up 37% of the population, and this is projected to increase to 42% in 2043 (Table 6). In Auckland DHB, Māori will make up a relatively stable share of the population - 8% in 2023, rising to 9% in 2043 (Table 7). In Waitematā DHB, Māori make up 11% of the population in 2023, and this is projected to rise to 13% by 2043 (Table 8).

Table 5 - Population projections, Te Taumata Hauora o Te Kahu o Taonui, 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	182,510	14%	28%	64%	7%	1,113,060	86%	16%	66%	17%
2028	196,930	15%	26%	64%	9%	1,158,170	85%	15%	66%	20%
2033	213,090	15%	25%	64%	11%	1,213,670	85%	14%	65%	22%
2038	229,720	15%	25%	63%	12%	1,265,070	85%	13%	64%	23%
2043	243,210	16%	24%	63%	12%	1,303,940	84%	13%	64%	23%

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

Table 6 - Population projections, Northland DHB, 2023 to 2043

Year	Māori					non-Māori				
	Residents	% of DHB	% 0-14 years	% 15-64 years	% 65+ years	Residents	% of DHB	% 0-14 years	% 15-64 years	% 65+ years
2023	74,600	37%	29%	61%	10%	129,500	63%	14%	58%	28%
2028	80,300	38%	27%	62%	12%	133,700	62%	13%	55%	32%
2033	86,000	39%	25%	62%	13%	136,400	61%	12%	53%	35%
2038	91,900	40%	25%	61%	14%	137,600	60%	11%	51%	38%
2043	97,800	42%	24%	61%	15%	137,800	58%	11%	50%	39%

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

Table 7 - Population projections, Auckland DHB, 2023 to 2043

Year	Māori					non-Māori				
	Residents	% of DHB	% 0-14 years	% 15-64 years	% 65+ years	Residents	% of DHB	% 0-14 years	% 15-64 years	% 65+ years
2023	40,000	8%	21%	71%	8%	432,600	92%	15%	70%	14%
2028	42,000	9%	19%	70%	10%	441,500	91%	13%	70%	17%
2033	45,500	9%	20%	69%	12%	463,500	91%	12%	70%	18%
2038	48,900	9%	20%	67%	13%	484,800	91%	11%	69%	19%
2043	52,200	9%	19%	68%	13%	505,700	91%	11%	69%	19%

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

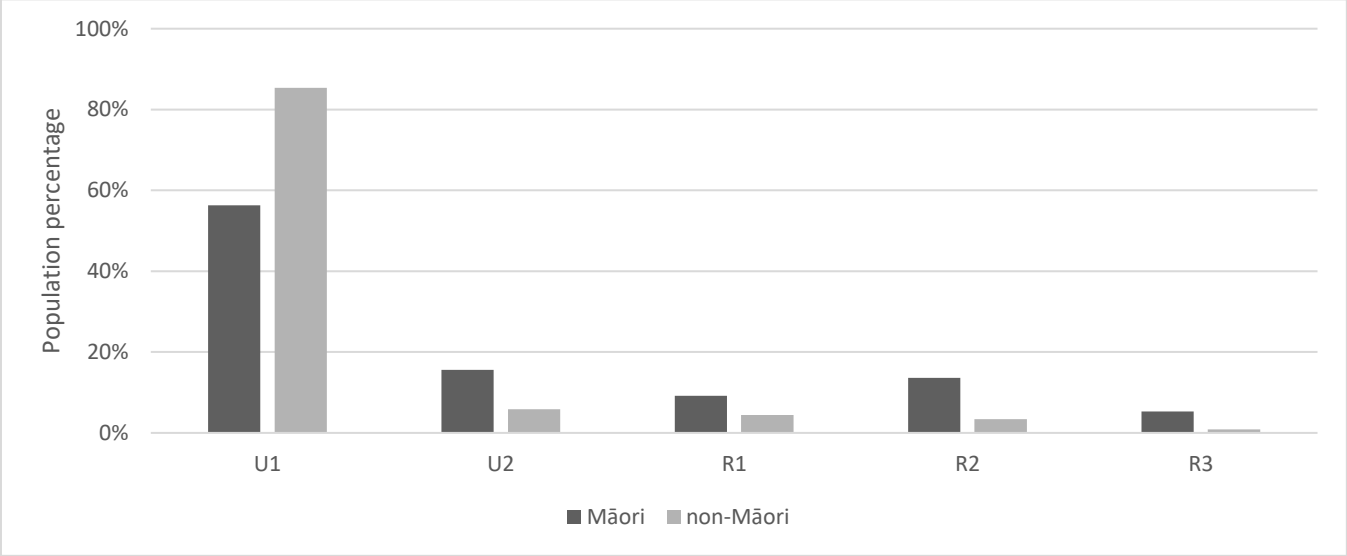
Table 8 - Population projections, Waitematā DHB, 2023 to 2043

Year	Māori					non-Māori				
	Residents	% of DHB	% 0-14 years	% 15-64 years	% 65+ years	Residents	% of DHB	% 0-14 years	% 15-64 years	% 65+ years
2023	68,800	11%	30%	64%	6%	564,500	89%	18%	66%	16%
2028	75,400	11%	28%	64%	8%	590,500	89%	16%	65%	19%
2033	82,200	12%	27%	63%	9%	622,300	88%	15%	64%	20%
2038	89,400	12%	27%	63%	10%	652,000	88%	15%	63%	22%
2043	97,100	13%	26%	63%	11%	679,500	87%	15%	63%	22%

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

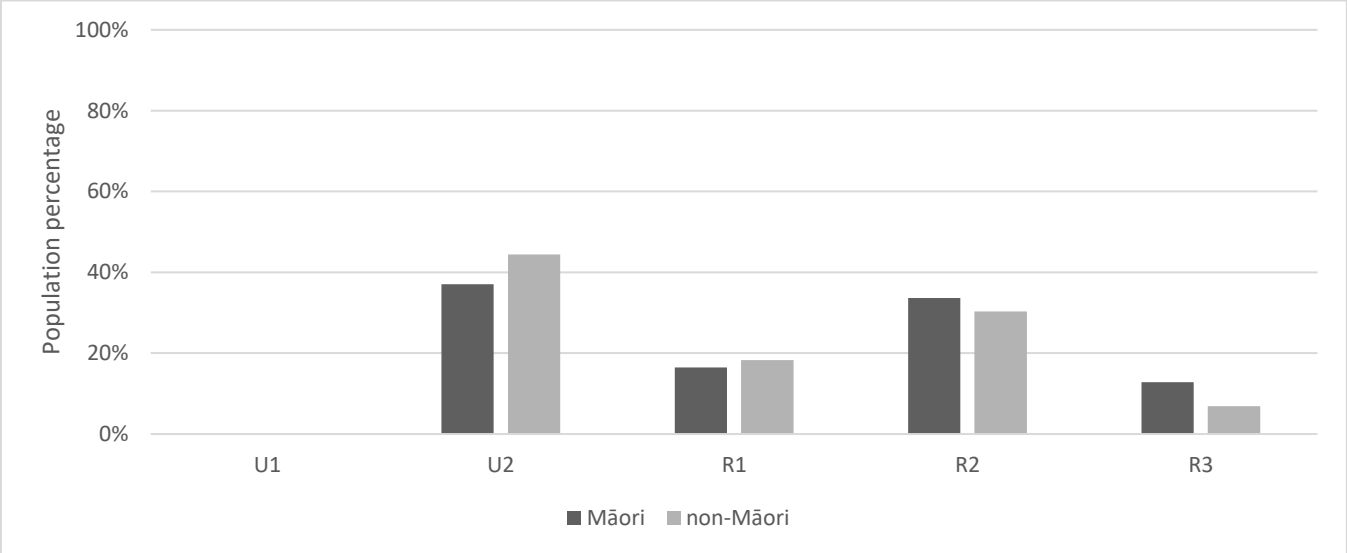
The Geographic Classification for Health (GCH) is a rural-urban geographic classification composed of five categories, two urban and three rural, that reflect degrees of reducing urban influence and increasing rurality. It is applied to all of New Zealand's Statistical Areas on a scale from 'Urban 1' 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 Taumata Hauora o Te Kahu o Taonui (72%) live in urban areas, compared to 91% for non-Māori (Figure 4). In Northland DHB, only 37% of Māori live in urban areas, compared to 44% of non-Māori (Table 6). In Auckland and Waitematā DHBs, almost all of the population live in urban areas: 97% of Māori and 98% of non-Māori in Auckland DHB (Figure 6), and 94% of Māori and 97% of non-Māori in Waitematā DHB (Figure 7) live in urban areas.

Figure 4 - Population distribution by urban and rural classification, Te Taumata Hauora o Te Kahu o Taonui, 2023



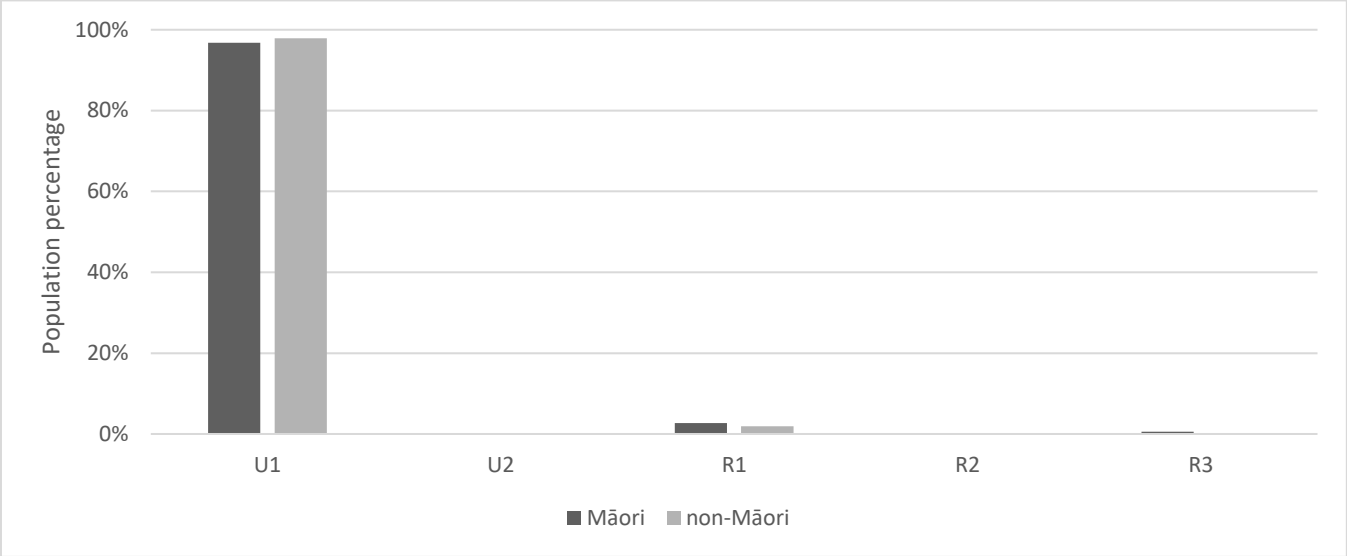
Source: Population count (Population Webtool SA2 2023); GCH (SA2 University of Otago). IMPB area has been mapped to DHB boundaries, not SA2 geographic areas. Note that total values may add up to more than 100% due to rounding.

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



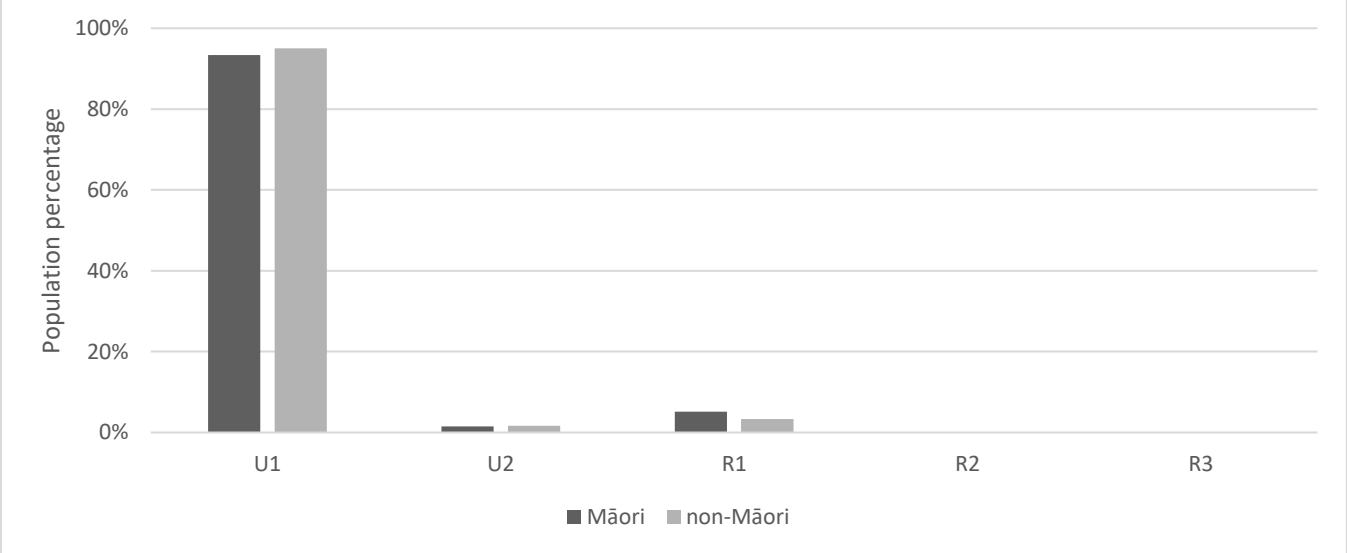
Source: Population count (Population Webtool SA2 2023); GCH (SA2 University of Otago). Note that total values may add up to more than 100% due to rounding.

Figure 6 - Population distribution by urban and rural classification, Auckland 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, Waitematā 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 Taumata Hauora o Te Kahu o Taonui (mapped to SA2 geographic areas) between 2018-2022 is 78.9 years for females and 75.1 years for males (Table 9). Māori life expectancy in Te Taumata Hauora o Te Kahu o Taonui is 6.9 years shorter for Māori females and 7.4 years shorter for Māori males, compared to non-Māori in Te Taumata Hauora o Te Kahu o Taonui.

Table 9 - Life expectancy at birth, Te Taumata Hauora o Te Kahu o Taonui, Māori and non-Māori, 2018 to 2022

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	78.9	(78.3, 79.5)	85.8	(85.7, 86.0)	-6.9
Male	75.1	(74.5, 75.6)	82.5	(82.4, 82.7)	-7.4

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 IMPB, life-expectancy for Māori is shortest (and the gap with non-Māori is the widest) in Northland DHB, and highest in Waitematā DHB (with the narrowest equity gap). Between 2018-2022, life expectancy for Māori in Northland DHB was 76.7 years for females (7.4 years shorter than non-Māori females) and 72.2 years for males (8.2 years shorter than non-Māori males) (Table 10). In Auckland DHB (Table 11), life expectancy for Māori was 79.9 years for females (5.6 years shorter than non-Māori females) and 76.6 years for males (5.7 years shorter than non-Māori males). In Waitematā DHB (Table 12), life expectancy for Māori was 81.1 years for females (5.1 years shorter than non-Māori females) and 79.0 years for males (3.9 years shorter than non-Māori males).

Table 10 - Life expectancy at birth, Northland DHB, Māori and non-Māori, 2018 to 2022

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	76.7	(75.9, 77.4)	84.1	(83.6, 84.6)	-7.4
Male	72.2	(71.5, 73.0)	80.4	(79.9, 80.9)	-8.2

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 11 - Life expectancy at birth, Auckland DHB, Māori and non-Māori, 2018 to 2022

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	79.9	(78.6, 81.2)	85.5	(85.3, 85.8)	-5.6
Male	76.6	(75.4, 77.8)	82.3	(82.1, 82.6)	-5.7

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.

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

Sex	Māori		non-Māori		Difference in years
	Years (95% credible interval)		Years (95% credible interval)		
Female	81.1	(79.8, 82.4)	86.2	(86.0, 86.5)	-5.1
Male	79.0	(76.8, 81.1)	82.9	(82.7, 83.1)	-3.9

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.

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. Te Taumata Hauora o Te Kahu o Taonui is situated in the Northern Region, although this region also includes Counties Manukau DHB. In the Northern Region for 2018-2020, life expectancy for Māori was 76.2 years, 8.3 years lower than the non-Māori/non-Pacific population (84.5 years).

Avoidable deaths include those considered *amenable* to high-quality healthcare, *preventable* through public health interventions, or both. Among Māori in the Northern Region, 2.8 years of the 8.3 year gap can be attributed to conditions that are considered both amenable and preventable followed by 1.4 years from conditions considered preventable only and 0.9 years from conditions considered amenable only. An additional 3.1 years can be attributed to conditions that are considered non avoidable[7].

The leading avoidable causes of death contributing to the life expectancy gap among Māori in the Northern Region are coronary disease (0.9 years), lung cancer (0.9 years) and diabetes (0.4 years). A list of the top 10 conditions and their contribution to the gap are presented in Table 13. In total, these conditions contribute 3.8 years of the 8.3 year gap. These data are not able to be disaggregated by sex at a regional level because the numbers are too small.

[7] By 'non-avoidable', the metric is referring to the direct causal pathway. Broader determinants of health such as income, education, housing, colonisation and institutional racism are not covered. Longer term all the 'gap' is avoidable through government, policy and intersectoral actions.

Table 13 - Decomposition of the ethnic gap in life expectancy by avoidable category - Māori compared with non-Māori/non-Pacific, 2018 to 2020, Northern Region

Avoidable cause	Contribution (years)
Coronary disease	0.9
Lung cancer	0.9
Diabetes	0.4
Chronic obstructive pulmonary disease (COPD)	0.4
Land transport injuries	0.3
Suicide	0.3
Other accidental injuries	0.2
Stroke	0.2
Valvular heart disease	0.1
Stomach cancer	0.1
Total contribution from top 10 avoidable conditions	**3.8 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, 83.3% of Māori aged 15 years and over in Te Taumata Hauora o Te Kahu o Taonui (mapped to SA2 geographic areas) reported their own health status as good, very good or excellent (Table 14), a similar percentage to Māori nationally (82.3%). A total of 16.7% of Māori in Te Taumata Hauora o Te Kahu o Taonui reported their health status as fair or poor. A higher percentage of Māori in Northland DHB reported their health status as fair or poor (18.7%) (Table 15), than in Auckland (16.8%) (Table 16) or Waitematā (15.4%) (Table 17) DHBs, 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.

Table 14 - Health status reported by Māori aged 15 years and over, Te Taumata Hauora o Te Kahu o Taonui, 2018

Health Status	Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	17.4	(14.6, 20.3)	15.1	(14.0, 16.2)
Very Good	37.6	(34.2, 41.0)	36.9	(35.4, 38.3)
Good	28.3	(25.4, 31.2)	30.3	(29.0, 31.7)
Fair/poor	16.7	(14.3, 19.0)	17.7	(16.6, 18.8)

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

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

Health Status	Northland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	17.2	(12.4, 21.9)	15.1	(14.0, 16.2)
Very Good	34.8	(30.1, 39.4)	36.9	(35.4, 38.3)
Good	29.3	(25.5, 33.2)	30.3	(29.0, 31.7)
Fair/poor	18.7	(14.6, 22.9)	17.7	(16.6, 18.8)

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

Table 16 - Health status reported by Māori aged 15 years and over, Auckland DHB, 2018

Health Status	Auckland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	20.4	(15.5, 25.4)	15.1	(14.0, 16.2)
Very Good	38.2	(33.0, 43.3)	36.9	(35.4, 38.3)
Good	24.6	(19.7, 29.6)	30.3	(29.0, 31.7)
Fair/poor	16.8	(12.6, 21.0)	17.7	(16.6, 18.8)

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

Table 17 - Health status reported by Māori aged 15 years and over, Waitematā DHB, 2018

Health Status	Waitematā		Aotearoa	
	%	(95% CI)	%	(95% CI)
Excellent	15.1	(10.9, 19.4)	15.1	(14.0, 16.2)
Very Good	39.2	(33.1, 45.3)	36.9	(35.4, 38.3)
Good	30.3	(25.4, 35.2)	30.3	(29.0, 31.7)
Fair/poor	15.4	(11.2, 19.5)	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 Taumata Hauora o Te Kahu o Taonui in 2014-2018 were ischaemic heart disease, lung cancer, diabetes, chronic obstructive pulmonary disease (COPD), and cerebrovascular disease (Table 18), and these align with the leading causes of death for Māori nationally (Table 22). These same five conditions made up the top five causes of death for Māori in Northland DHB (Table 19), Auckland DHB (Table 20), and Waitematā DHB (Table 21). These leading causes of death for Māori differ to the leading causes of death for non-Māori in Te Taumata Hauora o Te Kahu o Taonui in 2014-2018, which were ischaemic heart disease, dementia, cerebrovascular disease lung cancer and COPD.

The leading causes of death for Māori females in Te Taumata Hauora o Te Kahu o Taonui in 2014-2018 were lung cancer, ischaemic heart disease, COPD, diabetes, and cerebrovascular disease (Table 18). This was the same for Māori females in Northland DHB (Table 19), and similar in the other two DHBs, with breast cancer being among the leading causes of death in Auckland DHB (Table 20) and Waitematā DHB (Table 21).

For Māori males, the leading causes of death in Te Taumata Hauora o Te Kahu o Taonui 2014-2018 were ischaemic heart disease, lung cancer, diabetes, traffic accidents and COPD. This was the same for Māori males in Northland DHB (Table 19), and similar in the other two DHBs, with suicide being among the leading causes of death in Auckland DHB (Table 20) and Waitematā DHB (Table 21).

Because the population size of a single DHB is small, a handful of deaths from a particular cause can have an impact on the ranking of leading causes. For this reason, local causes of death for Māori men and women should be interpreted together with the leading causes of death for Māori nationally (Table 22).

Table 18 - Leading causes of death for Māori, all ages, Te Taumata Hauora o Te Kahu o Taonui, 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	41	27.1	(19.2, 36.9)	149	7.0	(5.7, 8.4)	**3.86**	**(2.68, 5.57)**	20.1
Ischaemic heart disease	38	22.5	(15.7, 31.2)	385	8.5	(7.4, 9.7)	**2.66**	**(1.86, 3.79)**	14.0
COPD	25	15.1	(9.7, 22.4)	129	3.8	(3.0, 4.6)	**3.99**	**(2.54, 6.27)**	11.3
Diabetes mellitus	21	13.3	(8.0, 20.6)	68	2.4	(1.8, 3.3)	**5.43**	**(3.17, 9.31)**	10.9
Cerebrovascular disease	21	12.9	(7.7, 20.1)	314	7.2	(6.2, 8.4)	**1.78**	**(1.10, 2.87)**	5.7
Male									
Ischaemic heart disease	67	55.2	(42.5, 70.4)	510	21.9	(19.7, 24.4)	**2.52**	**(1.93, 3.29)**	33.3
Lung cancer	34	28.0	(19.3, 39.1)	168	8.3	(6.9, 9.8)	**3.37**	**(2.31, 4.92)**	19.7
Diabetes mellitus	24	19.9	(12.6, 29.9)	74	3.5	(2.6, 4.5)	**5.77**	**(3.53, 9.42)**	16.4
Transport accidents	17	20.6	(11.7, 33.4)	41	5.8	(3.9, 8.2)	**3.54**	**(1.92, 6.52)**	14.8
COPD	17	13.3	(7.6, 21.5)	152	5.6	(4.6, 6.7)	**2.37**	**(1.42, 3.98)**	7.7
Total									
Ischaemic heart disease	105	37.5	(30.5, 45.6)	895	14.9	(13.6, 16.2)	**2.52**	**(2.04, 3.13)**	22.6
Lung cancer	75	27.6	(21.6, 34.7)	318	7.6	(6.6, 8.6)	**3.64**	**(2.80, 4.73)**	20.0
Diabetes mellitus	45	16.4	(11.8, 22.1)	142	2.9	(2.4, 3.6)	**5.62**	**(3.91, 8.08)**	13.5
COPD	42	14.2	(10.2, 19.3)	281	4.6	(4.0, 5.3)	**3.09**	**(2.21, 4.33)**	9.6
Cerebrovascular disease	36	12.7	(8.8, 17.9)	519	7.4	(6.6, 8.3)	**1.73**	**(1.20, 2.47)**	5.3

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.

Table 19 - Leading causes of death for Māori, all ages, Northland 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	23	32.8	(20.4, 49.8)	30	9.1	(5.4, 14.0)	**3.59**	**(1.95, 6.63)**	23.7
Ischaemic heart disease	22	26.1	(15.6, 40.4)	58	9.2	(5.4, 13.8)	**2.83**	**(1.51, 5.29)**	16.9
COPD	17	21.1	(11.8, 34.5)	28	6.0	(3.6, 9.3)	**3.50**	**(1.78, 6.86)**	15.1
Diabetes mellitus	12	15.8	(7.5, 28.6)	10	1.6	(0.5, 3.5)	**9.76**	**(3.46, 27.51)**	14.2
Cerebrovascular disease	11	14.0	(6.2, 26.4)	47	6.6	(4.0, 9.9)	2.12	(0.96, 4.66)	7.4
Male									
Ischaemic heart disease	37	65.5	(45.2, 91.4)	97	25.4	(18.1, 33.8)	**2.58**	**(1.64, 4.06)**	40.1
Lung cancer	19	33.4	(19.8, 52.6)	35	10.3	(6.5, 15.3)	**3.24**	**(1.75, 5.98)**	23.1
Diabetes mellitus	14	26.3	(13.4, 45.5)	10	2.6	(0.9, 5.3)	**10.03**	**(3.87, 25.99)**	23.7
Transport accidents	11	38.5	(18.7, 69.4)	10	14.2	(4.4, 29.9)	2.70	(0.98, 7.48)	24.3
COPD	10	17.2	(8.1, 31.8)	31	6.4	(4.1, 9.4)	**2.70**	**(1.28, 5.70)**	10.8
Total									
Ischaemic heart disease	59	44.2	(33.0, 57.8)	155	17.1	(13.0, 21.7)	**2.58**	**(1.79, 3.74)**	27.1
Lung cancer	42	33.2	(23.7, 45.2)	65	9.7	(7.0, 13.0)	**3.42**	**(2.22, 5.26)**	23.5
COPD	27	19.2	(12.4, 28.3)	60	6.2	(4.4, 8.3)	**3.12**	**(1.90, 5.12)**	13.0
Diabetes mellitus	26	20.7	(12.9, 31.2)	20	2.1	(1.1, 3.6)	**9.77**	**(4.83, 19.76)**	18.6
Cerebrovascular disease	17	13.5	(7.3, 22.2)	88	8.2	(5.4, 11.5)	1.64	(0.87, 3.07)	5.3

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 20 - Leading causes of death for Māori, all ages, Auckland 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	9	25.6	(11.4, 49.1)	45	6.1	(4.2, 8.5)	**4.19**	**(1.99, 8.82)**	19.5
Ischaemic heart disease	9	22.8	(10.2, 43.7)	148	9.3	(7.4, 11.4)	**2.47**	**(1.23, 4.97)**	13.5
Cerebrovascular disease	6	15.4	(5.0, 35.1)	129	8.6	(6.7, 10.8)	1.79	(0.73, 4.38)	6.8
Breast cancer	4	13.4	(2.9, 36.2)	46	8.3	(5.7, 11.5)	1.62	(0.54, 4.93)	5.1
Diabetes mellitus	4	13.3	(3.6, 33.1)	28	3.1	(1.8, 4.8)	**4.32**	**(1.49, 12.51)**	10.2
Male									
Ischaemic heart disease	15	54.8	(29.5, 92.1)	185	23.9	(20.0, 28.3)	**2.29**	**(1.31, 4.00)**	30.9
Lung cancer	8	27.9	(11.9, 55.2)	54	8.2	(5.9, 10.9)	**3.41**	**(1.60, 7.29)**	19.7
Cerebrovascular disease	5	19.8	(5.6, 47.7)	74	7.9	(5.9, 10.3)	2.49	(0.95, 6.56)	11.9
Diabetes mellitus	5	18.4	(6.2, 41.8)	33	4.7	(3.1, 6.9)	**3.91**	**(1.54, 9.93)**	13.7
Suicide	4	17.8	(4.3, 47.1)	28	8.9	(5.7, 13.1)	2.01	(0.67, 6.01)	8.9
Total									
Ischaemic heart disease	24	36.8	(23.4, 55.1)	333	16.2	(14.1, 18.5)	**2.27**	**(1.48, 3.49)**	20.6
Lung cancer	17	26.7	(15.4, 43.1)	99	7.1	(5.6, 8.8)	**3.79**	**(2.23, 6.45)**	19.6
Cerebrovascular disease	11	16.7	(8.1, 30.5)	203	8.3	(6.9, 9.9)	**2.00**	**(1.06, 3.79)**	8.4
Diabetes mellitus	10	15.7	(7.4, 29.3)	60	3.8	(2.8, 5.1)	**4.10**	**(2.04, 8.24)**	11.9
COPD	7	11.1	(4.5, 22.8)	90	4.4	(3.4, 5.6)	**2.53**	**(1.17, 5.50)**	6.7

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

Table 21 - Leading causes of death for Māori, all ages, Waitematā 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	9	19.1	(8.4, 37.0)	74	7.0	(5.2, 9.1)	**2.72**	**(1.31, 5.63)**	12.1
Ischaemic heart disease	7	16.2	(6.5, 33.2)	179	7.9	(6.4, 9.5)	2.06	(0.96, 4.43)	8.3
Breast cancer	5	12.1	(3.5, 29.3)	65	8.3	(6.0, 11.1)	1.46	(0.56, 3.85)	3.8
Cerebrovascular disease	5	9.7	(2.8, 23.6)	138	6.5	(5.1, 8.2)	1.48	(0.56, 3.86)	3.2
COPD	5	9.7	(2.8, 23.6)	62	3.5	(2.5, 4.7)	**2.80**	**(1.05, 7.45)**	6.2
Male									
Ischaemic heart disease	15	42.8	(23.7, 71.1)	228	19.6	(16.6, 22.9)	**2.18**	**(1.28, 3.74)**	23.2
Lung cancer	7	20.4	(8.4, 41.3)	79	7.7	(5.9, 9.9)	**2.64**	**(1.23, 5.69)**	12.7
Suicide	5	20.3	(6.7, 46.3)	34	9.9	(6.6, 14.3)	2.04	(0.80, 5.19)	10.4
Diabetes mellitus	5	12.6	(3.8, 30.6)	31	2.8	(1.7, 4.3)	**4.46**	**(1.62, 12.30)**	9.8
Transport accidents	4	13.7	(3.5, 35.4)	20	6.3	(3.5, 10.3)	2.16	(0.71, 6.61)	7.4
Total									
Ischaemic heart disease	22	28.0	(17.4, 42.5)	406	13.4	(11.7, 15.1)	**2.09**	**(1.35, 3.25)**	14.6
Lung cancer	16	19.8	(11.3, 32.2)	153	7.3	(6.0, 8.8)	**2.72**	**(1.60, 4.59)**	12.5
Diabetes mellitus	9	10.7	(4.8, 20.4)	61	2.5	(1.8, 3.4)	**4.29**	**(2.07, 8.87)**	8.2
Cerebrovascular disease	8	9.4	(3.9, 18.7)	227	6.6	(5.5, 7.8)	1.42	(0.68, 2.95)	2.8
COPD	8	9.1	(3.8, 18.2)	131	4.2	(3.4, 5.1)	**2.15**	**(1.02, 4.52)**	4.9

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

Table 22 - 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 (301 deaths each year per 100,000 people) was 2.1 times higher for Māori compared to non-Māori in Te Taumata Hauora o Te Kahu o Taonui in 2014-2018 (Table 23). This equates to an average of 363 Māori females and 386 Māori males dying each year in Te Taumata Hauora o Te Kahu o Taonui. More than half of all Māori deaths in the IMPB occur in Northland DHB. The age-standardised death rate was higher for Māori in Northland DHB (Table 24), than Māori in the other two DHBs (Table 25 and Table 26), and the gap between Māori and non-Māori was widest in Northland DHB.

Table 23 - All-cause deaths, all ages, Te Taumata Hauora o Te Kahu o Taonui, 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	363	256.2	(228.5, 286.2)	3,173	116.6	(109.8, 123.5)	**2.20**	**(1.94, 2.49)**	139.6
Male	386	351.6	(316.1, 389.9)	3,210	166.7	(158.6, 175.1)	**2.11**	**(1.88, 2.37)**	184.9
Total	750	301.1	(278.8, 324.8)	6,383	140.6	(135.3, 146.0)	**2.14**	**(1.97, 2.33)**	160.5

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

Table 24 - All-cause deaths, all ages, Northland 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	194	295.1	(249.3, 346.0)	526	138.8	(113.4, 165.9)	**2.13**	**(1.66, 2.72)**	156.3
Male	207	434.9	(372.2, 504.4)	610	201.4	(170.8, 233.8)	**2.16**	**(1.74, 2.68)**	233.5
Total	402	361.6	(322.9, 403.2)	1,136	169.8	(149.8, 190.7)	**2.13**	**(1.81, 2.50)**	191.8

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

Table 25 - All-cause deaths, all ages, Auckland 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	82	257.6	(201.2, 324.1)	1,197	120.4	(109.6, 131.6)	**2.14**	**(1.67, 2.74)**	137.2
Male	85	326.3	(257.7, 406.9)	1,137	171.0	(157.9, 184.7)	**1.91**	**(1.51, 2.41)**	155.3
Total	166	286.8	(243.1, 335.7)	2,334	144.6	(136.1, 153.3)	**1.98**	**(1.68, 2.35)**	142.2

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

Table 26 - All-cause deaths, all ages, Waitematā 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	87	203.6	(161.5, 253.0)	1,450	109.7	(100.4, 119.4)	**1.86**	**(1.47, 2.35)**	93.9
Male	94	279.6	(225.2, 343.0)	1,463	156.3	(145.0, 168.0)	**1.79**	**(1.44, 2.22)**	123.3
Total	182	238.4	(204.2, 276.6)	2,913	131.8	(124.5, 139.4)	**1.81**	**(1.54, 2.12)**	106.6

Source: Mortality dataset, Ministry of Health.
Note: Ratios in **bold** show that Māori rates were significantly different from non-Māori rates. 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 Taumata Hauora o Te Kahu o Taonui (Table 27). The age-standardised potentially avoidable death rate (177 deaths each year per 100,000 people) was 2.7 times higher for Māori compared to non-Māori in Te Taumata Hauora o Te Kahu o Taonui in 2014-2018.

This equates to an average of 386 avoidable Māori deaths each year in Te Taumata Hauora o Te Kahu o Taonui, 203 (52.6%) in Northland DHB (Table 28), 88 (22.8%) in Auckland DHB (Table 29), and 95 (24.6%) in Waitematā DHB (Table 30).

Table 27 - Potentially avoidable deaths, ages 0-74 years, Te Taumata Hauora o Te Kahu o Taonui, 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	169	144.0	(122.0, 168.6)	575	53.7	(48.2, 59.5)	**2.68**	**(2.22, 3.24)**	90.3
Male	217	212.4	(184.1, 243.8)	835	80.4	(73.8, 87.3)	**2.64**	**(2.25, 3.11)**	132.0
Total	386	176.9	(158.9, 196.3)	1,410	66.8	(62.5, 71.3)	**2.65**	**(2.34, 3.00)**	110.1

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

Table 28 - Potentially avoidable deaths, ages 0-74 years, Northland 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	87	168.8	(131.8, 212.1)	100	67.3	(47.4, 90.4)	**2.51**	**(1.70, 3.69)**	101.5
Male	116	277.8	(225.7, 337.7)	156	109.8	(83.0, 140.1)	**2.53**	**(1.83, 3.49)**	168.0
Total	203	220.8	(188.8, 256.3)	256	88.7	(71.7, 107.4)	**2.49**	**(1.94, 3.19)**	132.1

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

Table 29 - Potentially avoidable deaths, ages 0-74 years, Auckland 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	39	142.7	(99.4, 197.8)	208	53.5	(44.9, 63.1)	**2.67**	**(1.84, 3.86)**	89.2
Male	50	192.2	(140.9, 255.6)	319	82.9	(72.6, 94.2)	**2.32**	**(1.69, 3.17)**	109.3
Total	88	166.2	(132.1, 206.1)	527	67.9	(61.1, 75.1)	**2.45**	**(1.93, 3.11)**	98.3

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

Table 30 - Potentially avoidable deaths, ages 0-74 years, Waitematā 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	43	114.3	(81.9, 155.0)	267	51.2	(43.6, 59.5)	**2.23**	**(1.59, 3.14)**	63.1
Male	52	155.2	(115.0, 204.7)	360	73.3	(64.3, 83.1)	**2.12**	**(1.56, 2.87)**	81.9
Total	95	134.2	(108.0, 164.8)	627	62.1	(56.1, 68.4)	**2.16**	**(1.72, 2.72)**	72.1

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 Taumata Hauora o Te Kahu o Taonui were similar to the leading causes of death overall for Māori in the IMPB. In 2014-2018, the leading causes of potentially avoidable deaths for Māori aged 0-74 years in Te Taumata Hauora o Te Kahu o Taonui were ischaemic heart disease, lung cancer, diabetes, suicide and COPD (Table 31), the same as the leading potentially avoidable causes for Māori nationally (Table 35). There were minor variations between the DHBs, with motor vehicle accidents featuring in the top five avoidable causes for Māori in Northland DHB (Table 32) and Waitematā DHB (Table 34) and cerebrovascular disease featuring in the top five avoidable causes for Māori in Auckland DHB (Table 33).

The leading causes of potentially avoidable deaths for Māori females in Te Taumata Hauora o Te Kahu o Taonui in 2014-2018 were lung cancer, ischaemic heart disease, breast cancer, COPD and diabetes (Table 31). For Māori males, the leading causes of death in 2014-2018 were ischaemic heart disease, lung cancer, diabetes, suicide and motor vehicle accidents.

Māori aged 0-74 years in Te Taumata Hauora o Te Kahu o Taonui in 2014-2018 had over 6.4 times higher potentially avoidable mortality from diabetes compared to non-Māori, 4.2 times higher potentially avoidable mortality for lung cancer, 3.9 times higher potentially avoidable mortality for COPD and 3.2 times higher potentially avoidable mortality for ischaemic heart disease (Table 31). Between 2014-2018, around 1 in 6 preventable Māori deaths each year in Te Taumata Hauora o Te Kahu o Taonui was from ischaemic heart disease, and 1 in 6 was from lung cancer.

Because the population size of a single DHB is small, a handful of deaths from a particular cause can have an impact on the ranking of leading causes. For this reason, local causes of potentially avoidable death for Māori men and women should be interpreted together with the leading causes of potentially avoidable death for Māori nationally (Table 35).

Table 31 - Leading causes of potentially avoidable mortality, ages 0-74 years, Te Taumata Hauora o Te Kahu o Taonui, 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	31	22.7	(15.4, 32.2)	79	5.3	(4.2, 6.7)	**4.24**	**(2.78, 6.49)**	17.4
Ischaemic heart disease	17	12.9	(7.4, 20.6)	48	3.2	(2.3, 4.3)	**4.08**	**(2.32, 7.17)**	9.7
Breast cancer	13	11.7	(6.0, 20.1)	89	7.7	(6.0, 9.6)	1.52	(0.83, 2.77)	4.0
COPD	13	9.2	(4.9, 15.8)	33	2.0	(1.3, 2.8)	**4.70**	**(2.45, 9.01)**	7.2
Diabetes	12	9.1	(4.6, 16)	22	1.6	(0.9, 2.4)	**5.86**	**(2.83, 12.14)**	7.5
Male									
Ischaemic heart disease	47	40.9	(29.9, 54.7)	176	13.5	(11.4, 15.8)	**3.04**	**(2.18, 4.23)**	27.4
Lung cancer	29	24.3	(16.2, 35.0)	84	5.9	(4.6, 7.3)	**4.15**	**(2.70, 6.39)**	18.4
Diabetes	17	15.2	(8.8, 24.5)	30	2.2	(1.4, 3.2)	**6.88**	**(3.71, 12.76)**	13.0
Suicide and self-inflicted injuries	16	21.3	(12.0, 35.0)	70	10.0	(7.6, 12.8)	**2.14**	**(1.22, 3.75)**	11.3
Motor vehicle accidents	15	18.4	(10.0, 30.8)	29	4.7	(3.0, 7.0)	**3.92**	**(2.02, 7.61)**	13.7
Total									
Ischaemic heart disease	64	26.1	(20.0, 33.5)	224	8.2	(7.1, 9.4)	**3.20**	**(2.40, 4.26)**	17.9
Lung cancer	60	23.4	(17.9, 30.2)	163	5.6	(4.7, 6.6)	**4.20**	**(3.10, 5.68)**	17.8
Diabetes	29	12.0	(8.0, 17.3)	52	1.9	(1.4, 2.5)	**6.41**	**(4.00, 10.27)**	10.1
Suicide and self-inflicted injuries	24	15.5	(9.8, 23.2)	96	6.9	(5.5, 8.5)	**2.25**	**(1.42, 3.57)**	8.6
COPD	23	9.0	(5.7, 13.5)	77	2.3	(1.8, 2.9)	**3.87**	**(2.42, 6.17)**	6.7

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

Table 32 - Leading causes of potentially avoidable mortality, ages 0-74 years, Northland 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	18	28.0	(16.3, 44.8)	17	7.5	(4.0, 12.5)	**3.76**	**(1.84, 7.67)**	20.5
Ischaemic heart disease	9	14.2	(6.1, 27.7)	9	4.3	(1.1, 9.5)	**3.31**	**(1.08, 10.16)**	9.9
COPD	9	13.5	(5.9, 26.2)	10	3.7	(1.6, 7.1)	**3.65**	**(1.41, 9.49)**	9.8
Diabetes	7	11.0	(3.9, 23.7)	2	0.8	(0.0, 3.1)	**13.74**	**(2.50, 75.63)**	10.2
Breast cancer	6	11.2	(3.6, 25.3)	15	10.1	(4.4, 18.6)	1.11	(0.38, 3.24)	1.1
Male									
Ischaemic heart disease	25	49.8	(31.6, 74.4)	33	16.5	(9.8, 25.2)	**3.02**	**(1.65, 5.53)**	33.3
Lung cancer	16	29.5	(16.6, 48.4)	18	7.6	(4.1, 12.7)	**3.87**	**(1.87, 8.01)**	21.9
Motor vehicle accidents	10	35.7	(16.7, 65.9)	7	11.8	(3.0, 27.1)	3.03	(0.99, 9.21)	23.9
Diabetes	10	20.8	(9.1, 39.8)	4	1.7	(0.3, 4.7)	**12.35**	**(3.37, 45.23)**	19.1
Suicide and self-inflicted injuries	6	24.7	(9.0, 53.2)	12	18.2	(7.4, 34.9)	1.35	(0.47, 3.89)	6.5
Total									
Ischaemic heart disease	34	30.8	(20.9, 43.6)	42	10.3	(6.5, 15.0)	**2.99**	**(1.76, 5.07)**	20.5
Lung cancer	34	28.8	(19.7, 40.5)	36	7.6	(5.0, 10.9)	**3.81**	**(2.29, 6.33)**	21.2
Diabetes	17	15.7	(8.6, 25.9)	6	1.2	(0.4, 2.9)	**12.63**	**(4.51, 35.39)**	14.5
COPD	15	12.8	(7.1, 21.3)	19	3.4	(2.0, 5.5)	**3.75**	**(1.86, 7.59)**	9.4
Motor vehicle accidents	14	23.2	(12.3, 39.5)	11	8.3	(2.9, 17.0)	**2.78**	**(1.08, 7.14)**	14.9

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

Table 33 - Leading causes of potentially avoidable mortality, ages 0-74 years, Auckland 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	7	20.5	(7.9, 43.2)	24	4.6	(2.9, 7.0)	**4.43**	**(1.86, 10.58)**	15.9
Ischaemic heart disease	4	12.3	(3.3, 31.5)	17	3.3	(1.9, 5.3)	**3.77**	**(1.26, 11.28)**	9.0
Suicide and self-inflicted injuries	3	12.4	(1.9, 39.4)	12	3.9	(1.9, 7.0)	3.20	(0.81, 12.71)	8.5
Breast cancer	3	12.3	(2.3, 35.7)	31	7.5	(4.9, 10.7)	1.66	(0.50, 5.45)	4.8
Diabetes	3	10.2	(1.9, 30.1)	10	2.0	(0.9, 3.7)	**5.21**	**(1.39, 19.54)**	8.2
Male									
Ischaemic heart disease	11	39.5	(19.6, 70.7)	68	15.0	(11.5, 19.2)	**2.63**	**(1.39, 5.01)**	24.5
Lung cancer	6	22.4	(8.2, 48.5)	31	6.3	(4.2, 9.0)	**3.59**	**(1.50, 8.61)**	16.1
Suicide and self-inflicted injuries	4	18.9	(4.9, 49.0)	26	8.7	(5.6, 13.0)	2.17	(0.74, 6.35)	10.2
Diabetes	4	13.9	(3.7, 35.8)	16	3.3	(1.8, 5.4)	**4.28**	**(1.40, 13.03)**	10.6
Cerebrovascular disease	3	10.5	(1.9, 31.1)	17	3.6	(2.0, 5.8)	2.95	(0.84, 10.38)	6.9
Total									
Ischaemic heart disease	15	25.3	(14.1, 41.7)	86	9.0	(7.1, 11.2)	**2.82**	**(1.62, 4.91)**	16.3
Lung cancer	13	21.5	(11.3, 36.9)	55	5.4	(4.0, 7.1)	**3.97**	**(2.14, 7.34)**	16.1
Suicide and self-inflicted injuries	7	15.5	(5.8, 32.9)	38	6.3	(4.3, 8.8)	**2.47**	**(1.06, 5.76)**	9.2
Diabetes	7	11.9	(4.7, 24.7)	25	2.6	(1.6, 3.9)	**4.60**	**(1.96, 10.79)**	9.3
Cerebrovascular disease	6	10.1	(3.6, 22.3)	33	3.4	(2.3, 4.8)	**3.02**	**(1.24, 7.39)**	6.7

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

Table 34 - Leading causes of potentially avoidable mortality, ages 0-74 years, Waitematā 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	7	15.9	(6.2, 33.3)	37	5.2	(3.6, 7.3)	**3.04**	**(1.32, 6.99)**	10.7
Ischaemic heart disease	5	11.5	(3.4, 27.9)	22	2.9	(1.8, 4.5)	**3.97**	**(1.42, 11.09)**	8.6
Breast cancer	4	11.2	(3.0, 28.6)	42	7.4	(5.1, 10.2)	1.53	(0.54, 4.29)	3.8
Motor vehicle accidents	2	7.6	(0.9, 26.2)	6	2.2	(0.6, 5.2)	3.45	(0.68, 17.55)	5.4
Suicide and self-inflicted injuries	2	7.3	(0.8, 25.3)	11	3.4	(1.5, 6.4)	2.12	(0.47, 9.59)	3.9
Male									
Ischaemic heart disease	11	30.9	(15.1, 55.9)	75	11.7	(9.0, 14.8)	**2.65**	**(1.39, 5.08)**	19.2
Lung cancer	7	18.9	(7.4, 39.3)	35	5.0	(3.4, 7.1)	**3.76**	**(1.64, 8.63)**	13.9
Suicide and self-inflicted injuries	5	20.4	(6.8, 46.7)	32	9.9	(6.5, 14.3)	2.07	(0.81, 5.28)	10.5
Diabetes	4	9.8	(2.3, 26.4)	10	1.6	(0.7, 3.1)	**6.07**	**(1.76, 20.91)**	8.2
Motor vehicle accidents	3	11.7	(2.5, 32.6)	14	5.3	(2.7, 9.2)	2.20	(0.65, 7.47)	6.4
Total									
Ischaemic heart disease	15	20.7	(11.6, 34.1)	97	7.1	(5.7, 8.8)	**2.91**	**(1.68, 5.04)**	13.6
Lung cancer	14	17.3	(9.3, 29.3)	72	5.1	(4.0, 6.5)	**3.37**	**(1.87, 6.06)**	12.2
Suicide and self-inflicted injuries	8	13.7	(5.6, 27.7)	42	6.6	(4.6, 9.1)	2.07	(0.94, 4.58)	7.1
Motor vehicle accidents	6	9.6	(3.3, 21.7)	21	3.8	(2.1, 6.0)	2.57	(0.97, 6.77)	5.8
Diabetes	6	7.3	(2.6, 16.2)	21	1.5	(0.9, 2.4)	**4.79**	**(1.87, 12.26)**	5.8

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

Table 35 - 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[8]. 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 (Table 36), most Māori (72.3%) in Te Taumata Hauora o Te Kahu o Taonui reported their whānau was doing well (7/10 or greater). Over a quarter of Māori (27.6%) in Te Taumata Hauora o Te Kahu o Taonui reported that their whānau was not doing well (6/10 or less). These findings are similar to the results for Māori nationally.

Table 36 - Whānau well-being reported by Māori aged 15 years and over, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 2018

How the whānau is doing	Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	11.8	(10.2, 13.5)	12.9	(12.1, 13.7)
(9 out of 10)	12.7	(10.7, 14.7)	12.8	(11.9, 13.6)
(8 out of 10)	21.7	(19.3, 24.2)	24.4	(23.3, 25.6)
(7 out of 10)	26.1	(23.4, 28.9)	23.5	(22.5, 24.6)
(0-6 out of 10)	27.6	(25.1, 30.0)	26.4	(25.2, 27.6)

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

Reported whānau wellbeing varied slightly between the 3 DHBs making up Te Taumata Hauora o Te Kahu o Taonui. In Northland DHB, 70.1% of Māori (Table 37) reported their whānau was doing well (7/10 or greater), compared to 72.4% of Māori in Auckland DHB (Table 38) and 73.9% of Māori in Waitematā DHB (Table 39). 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.

Table 37 - Whānau well-being reported by Māori aged 15 years and over, Northland DHB and Aotearoa, 2018

How the whānau is doing	Northland		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	15.1	(11.9, 18.3)	12.9	(12.1, 13.7)
(9 out of 10)	11.2	(8.8, 13.6)	12.8	(11.9, 13.6)
(8 out of 10)	21.5	(17.5, 25.4)	24.4	(23.3, 25.6)
(7 out of 10)	22.3	(18.3, 26.4)	23.5	(22.5, 24.6)
(0-6 out of 10)	29.8	(25.4, 34.3)	26.4	(25.2, 27.6)

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

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

Table 38 - Whānau well-being reported by Māori aged 15 years and over, Auckland DHB and Aotearoa, 2018

How the whānau is doing	Auckland		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	10.7 *	(7.1, 14.4)	12.9	(12.1, 13.7)
(9 out of 10)	9.9 *	(6.3, 13.4)	12.8	(11.9, 13.6)
(8 out of 10)	23.8	(18.3, 29.3)	24.4	(23.3, 25.6)
(7 out of 10)	28.0	(22.0, 34.0)	23.5	(22.5, 24.6)
(0-6 out of 10)	27.6	(22.1, 33.1)	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 39 - Whānau well-being reported by Māori aged 15 years and over Waitematā DHB and Aotearoa, 2018

How the whānau is doing	Waitematā		Aotearoa	
	%	(95% CI)	%	(95% CI)
(10 out of 10)	9.4	(7.1, 11.8)	12.9	(12.1, 13.7)
(9 out of 10)	15.7	(11.8, 19.7)	12.8	(11.9, 13.6)
(8 out of 10)	20.9	(17.4, 24.3)	24.4	(23.3, 25.6)
(7 out of 10)	27.9	(23.2, 32.6)	23.5	(22.5, 24.6)
(0-6 out of 10)	26.0	(21.9, 30.1)	26.4	(25.2, 27.6)

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

When thinking about who made up the whānau, 19.7% of Māori aged 15 years and over in Te Taumata Hauora o Te Kahu o Taonui included “close friends or others” (Table 40). This figure was 20.8% for Māori in Northland DHB (Table 41), 17.7% for Māori in Auckland DHB (Table 42) and 20.4% for Māori in Waitematā DHB (Table 43).

Table 40 - Whānau composition reported by Māori aged 15 years and over, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 2018

Whānau description	Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	53.7	(50.5, 57.0)	52.1	(50.6, 53.6)
11 to 20	24.5	(21.9, 27.2)	24.2	(23.0, 25.4)
More than 20	21.7	(19.0, 24.5)	23.7	(22.3, 25.0)
Groups included in whānau				
Parents, partner, children, brothers and sisters	97.7	(96.9, 98.5)	97.4	(97.0, 97.8)
Grandparents, grandchildren	33.6	(30.3, 36.9)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	46.2	(42.6, 49.7)	48.6	(47.1, 50.2)
Close friends, others	19.7	(17.4, 21.9)	22.6	(21.3, 23.8)

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

Table 41 - Whānau composition reported by Māori aged 15 years and over, Northland DHB and Aotearoa, 2018

Whānau description	Northland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	52.7	(48.0, 57.3)	52.1	(50.6, 53.6)
11 to 20	22.2	(18.4, 26.0)	24.2	(23.0, 25.4)
More than 20	25.1	(21.0, 29.2)	23.7	(22.3, 25.0)
Groups included in whānau				
Parents, partner, children, brothers and sisters	97.5	(96.5, 98.6)	97.4	(97.0, 97.8)
Grandparents, grandchildren	34.0	(29.1, 39.0)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	44.1	(38.8, 49.4)	48.6	(47.1, 50.2)
Close friends, others	20.8	(16.5, 25.1)	22.6	(21.3, 23.8)

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

Table 42 - Whānau composition reported by Māori aged 15 years and over, Auckland DHB and Aotearoa, 2018

Whānau description	Auckland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	51.0	(42.7, 59.2)	52.1	(50.6, 53.6)
11 to 20	27.2	(21.1, 33.3)	24.2	(23.0, 25.4)
More than 20	21.9	(15.8, 27.9)	23.7	(22.3, 25.0)
Groups included in whānau				
Parents, partner, children, brothers and sisters	98.5	(97.5, 99.5)	97.4	(97.0, 97.8)
Grandparents, grandchildren	30.2	(24.3, 36.0)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	46.6	(38.4, 54.8)	48.6	(47.1, 50.2)
Close friends, others	17.7	(13.3, 22.1)	22.6	(21.3, 23.8)

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

Table 43 - Whānau composition reported by Māori aged 15 years and over, Waitematā DHB and Aotearoa, 2018

Whānau description	Waitematā		Aotearoa	
	%	(95% CI)	%	(95% CI)
Size of whānau				
10 or less	56.0	(50.2, 61.7)	52.1	(50.6, 53.6)
11 to 20	24.4	(19.7, 29.0)	24.2	(23.0, 25.4)
More than 20	19.7	(15.0, 24.3)	23.7	(22.3, 25.0)
Groups included in whānau				
Parents, partner, children, brothers and sisters	97.1	(95.5, 98.7)	97.4	(97.0, 97.8)
Grandparents, grandchildren	36.2	(30.3, 42.0)	39.0	(37.5, 40.5)
Aunts and uncles, cousins, nephews and nieces, other in-laws	48.0	(42.8, 53.1)	48.6	(47.1, 50.2)
Close friends, others	20.4	(16.8, 24.0)	22.6	(21.3, 23.8)

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

Most Māori (74.3%) in Te Taumata Hauora o Te Kahu o Taonui reported it was easy or very easy to get support in times of need (Table 44). This was similar across the three DHBs, with 74.6% of Māori in Northland DHB (Table 45), 72.6% in Auckland DHB () and 75% in Waitematā DHB (Table 47) reporting that it was easy or very easy to get support in times of need. Fewer Māori in Te Taumata Hauora o Te Kahu o Taonui (55.7%) 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. Looking at this by DHB, 62.7% of Māori in Northland DHB (Table 45), 52.4% in Auckland DHB (Table 46) and 52.8% in Waitematā DHB (Table 47) reported it was easy or very easy to get help with Māori cultural practices.

Table 44 - Access to whānau support, Māori aged 15 years and over, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 2018

How easy is it to get help	Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	74.3	(71.3, 77.3)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	19.2	(16.6, 21.8)	16.4	(15.5, 17.4)
Hard, very hard	6.5	(5.2, 7.7)	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	55.7	(52.3, 59.1)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	22.6	(20.0, 25.3)	18.9	(17.9, 19.9)
Hard, very hard	18.0	(15.5, 20.5)	18.1	(17.0, 19.2)

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

Table 45 - Access to whānau support, Māori aged 15 years and over, Northland DHB and Aotearoa, 2018

How easy is it to get help	Northland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	74.6	(71.0, 78.1)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	19.1	(16.0, 22.2)	16.4	(15.5, 17.4)
Hard, very hard	6.3 *	(4.4, 8.2)	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	62.7	(58.6, 66.8)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	20.6	(17.0, 24.1)	18.9	(17.9, 19.9)
Hard, very hard	11.5	(8.4, 14.6)	18.1	(17.0, 19.2)

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

Table 46 - Access to whānau support, Māori aged 15 years and over, Auckland DHB and Aotearoa, 2018

How easy is it to get help	Auckland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	72.6	(66.0, 79.1)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	20.8	(14.9, 26.7)	16.4	(15.5, 17.4)
Hard, very hard	6.6 *	(4.2, 9.1)	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	52.4	(45.7, 59.0)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	24.6	(18.5, 30.7)	18.9	(17.9, 19.9)
Hard, very hard	19.9	(14.7, 25.1)	18.1	(17.0, 19.2)

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

Table 47 - Access to whānau support, Māori aged 15 years and over, Waitematā DHB and Aotearoa, 2018

How easy is it to get help	Waitematā		Aotearoa	
	%	(95% CI)	%	(95% CI)
Support in times of need				
Easy, very easy	75.0	(69.7, 80.2)	76.1	(74.9, 77.3)
Sometimes easy, sometimes hard	18.3	(13.7, 22.9)	16.4	(15.5, 17.4)
Hard, very hard	6.7 *	(4.4, 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	52.8	(47.4, 58.2)	59.0	(57.7, 60.3)
Sometimes easy, sometimes hard	23.0	(19.5, 26.5)	18.9	(17.9, 19.9)
Hard, very hard	21.6	(17.1, 26.0)	18.1	(17.0, 19.2)

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

Being involved in Māori culture was very/quite important to 45.9% of Māori in Te Taumata Hauora o Te Kahu o Taonui, and spirituality was very/quite important to 51.2% of Māori in Te Taumata Hauora o Te Kahu o Taonui (Table 48). Only 9.4% of Māori respondents in Te Taumata Hauora o Te Kahu o Taonui reported that being involved in Māori culture was not at all important to them.

In Northland DHB, being involved in Māori culture was very/quite important to 56.4% of Māori and spirituality was very/quite important to 57.2% (Table 49). Māori in Northland DHB (37.6%) were significantly more likely than Māori nationally (30.7%) to report that spirituality was extremely important to them. For Auckland DHB (Table 50), being involved in Māori culture was very/quite important to 45.1% and spirituality was very/quite important to 47.8% of Māori. In Waitematā DHB, 38.4% of Māori said that being involved in Māori culture was very/quite important to them, and 49.2% said spirituality was very/quite important to them (Table 51).

Table 48 - Importance of Māori culture and spirituality, Māori aged 15 years and over, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 2018

	Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	21.1	(18.7, 23.5)	22.1	(21.1, 23.1)
Quite important	24.8	(22.7, 27.0)	23.2	(22.1, 24.3)
Somewhat	26.3	(23.8, 28.8)	25.8	(24.7, 26.9)
A little important	18.4	(15.8, 21)	18.3	(17.1, 19.5)
Not at all important	9.4	(7.7, 11.1)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	31.9	(28.8, 35)	30.7	(29.5, 31.9)
Quite important	19.3	(16.8, 21.8)	18.0	(16.9, 19.0)
Somewhat	14.8	(12.5, 17.2)	16.8	(15.9, 17.8)
A little important	15.4	(13.1, 17.6)	15.3	(14.3, 16.2)
Not at all important	18.6	(16.1, 21.1)	19.2	(18.1, 20.4)

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

Table 49 - Importance of Māori culture and spirituality, Māori aged 15 years and over, Northland DHB and Aotearoa, 2018

	Northland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	29.8	(25.5, 34.1)	22.1	(21.1, 23.1)
Quite important	26.6	(22.9, 30.2)	23.2	(22.1, 24.3)
Somewhat	23.6	(20.5, 26.7)	25.8	(24.7, 26.9)
A little important	13.1	(9.4, 16.8)	18.3	(17.1, 19.5)
Not at all important	7.0 *	(4.6, 9.3)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	37.6	(32.9, 42.2)	30.7	(29.5, 31.9)
Quite important	19.6	(16.2, 23.0)	18.0	(16.9, 19.0)
Somewhat	13.7	(10.8, 16.7)	16.8	(15.9, 17.8)
A little important	14.2	(11.3, 17.2)	15.3	(14.3, 16.2)
Not at all important	14.9	(11.2, 18.6)	19.2	(18.1, 20.4)

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

Table 50 - Importance of Māori culture and spirituality, Māori aged 15 years and over, Auckland DHB and Aotearoa, 2018

	Auckland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	17.2 *	(12.0, 22.4)	22.1	(21.1, 23.1)
Quite important	27.9	(22.4, 33.3)	23.2	(22.1, 24.3)
Somewhat	26.6	(20.0, 33.1)	25.8	(24.7, 26.9)
A little important	20.3	(15.1, 25.6)	18.3	(17.1, 19.5)
Not at all important	8.1 *	(5.2, 10.9)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	28.3	(22.3, 34.3)	30.7	(29.5, 31.9)
Quite important	19.5	(14.0, 25.0)	18.0	(16.9, 19.0)
Somewhat	14.8	(11.6, 18.0)	16.8	(15.9, 17.8)
A little important	20.6	(15.8, 25.3)	15.3	(14.3, 16.2)
Not at all important	16.8	(12.6, 21.0)	19.2	(18.1, 20.4)

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

Table 51 - Importance of Māori culture and spirituality, Māori aged 15 years and over, Waitematā DHB and Aotearoa, 2018

	Waitematā		Aotearoa	
	%	(95% CI)	%	(95% CI)
Importance of being involved in Māori culture				
Very important	16.4	(12.8, 20.0)	22.1	(21.1, 23.1)
Quite important	22.0	(18.8, 25.2)	23.2	(22.1, 24.3)
Somewhat	28.3	(23.7, 33.0)	25.8	(24.7, 26.9)
A little important	21.1	(17.1, 25.2)	18.3	(17.1, 19.5)
Not at all important	12.1	(8.7, 15.5)	10.6	(9.7, 11.6)
Importance of spirituality				
Very important	30.3	(25.4, 35.2)	30.7	(29.5, 31.9)
Quite important	18.9	(15.1, 22.6)	18.0	(16.9, 19.0)
Somewhat	15.9	(11.3, 20.6)	16.8	(15.9, 17.8)
A little important	12.6	(9.0, 16.2)	15.3	(14.3, 16.2)
Not at all important	22.3	(18.1, 26.6)	19.2	(18.1, 20.4)

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

In Te Taumata Hauora o Te Kahu o Taonui in 2018, 17.1% of Māori aged 15 years and over used te reo Māori in the home (Table 52). In Northland DHB, 25.5% of Māori used te reo Māori in the home (Table 53). Small numbers in the Te Kupenga survey sample make it difficult to assess te reo Māori use accurately for Auckland (Table 54) and Waitematā (Table 55) DHBs.

Table 52 - Use of te reo Māori in the home, Māori aged 15 years and over, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 2018

Language spoken at home	Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	2.1 *	(1.3, 2.9)	1.8	(1.3, 2.2)
Māori is used regularly	15.0	(12.6, 17.3)	18.4	(17.3, 19.5)

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

Table 53 - Use of te reo Māori in the home, Māori aged 15 years and over, Northland DHB and Aotearoa, 2018

Language spoken at home	Northland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	3.6 **	(1.7, 5.5)	1.8	(1.3, 2.2)
Māori is used regularly	21.9	(17.9, 25.9)	18.4	(17.3, 19.5)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Note: ** shows a sampling error of 50% or more but less than 100%.

Table 54 - Use of te reo Māori in the home, Māori aged 15 years and over, Auckland DHB and Aotearoa, 2018

Language spoken at home	Auckland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	S	(NA, NA)	1.8	(1.3, 2.2)
Māori is used regularly	12.4 *	(8.2, 16.5)	18.4	(17.3, 19.5)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Note: 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 55 - Use of te reo Māori in the home, Māori aged 15 years and over, Waitematā DHB and Aotearoa, 2018

Language spoken at home	Waitematā		Aotearoa	
	%	(95% CI)	%	(95% CI)
Māori is main language	S	(NA, NA)	1.8	(1.3, 2.2)
Māori is used regularly	11.2	(7.9, 14.4)	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 Taumata Hauora o Te Kahu o Taonui (97.4%) had been to a marae, and of those a majority of those (50.1%) had been in the last 12 months (Table 56). Of those who had ever been to a marae, and who knew their ancestral marae, 88% had been to an ancestral marae at some time, with 46.7% noting that they had been in the last 12 months, and 61% reporting that they would like to go more often.

These figures differed for the three DHBs. In Northland DHB, 98.5% of Māori aged 15 years and over had been to a marae, and of those 68.4% had been in the last 12 months (Table 57). Of those who had ever been to a marae and who knew their ancestral marae, 90.9% said they had been to an ancestral marae at some time, 62.9% in the last 12 months, and 50.2% would like to go more often. In Auckland DHB, 96.7% of Māori aged 15 years and over had been to a marae, and of those 43.7% had been in the last 12 months (Table 58). Of those who had ever been to a marae and who knew their ancestral marae, 88.9% said they had been to an ancestral marae at some time, although only 35.2% in the last 12 months, and 71.4% would like to go more often. In Waitematā DHB, 97.1% of Māori aged 15 years and over had been to a marae, and of those 39.8% had been in the last 12 months (Table 59). Of those who had ever been to a marae and who knew their ancestral marae, 84% said they had been to an ancestral marae at some time, although only 35.4% in the last 12 months, and 67.6% would like to go more often.

Table 56 - Access to marae, Māori aged 15 years and over, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 2018

Been to marae	Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	97.4	(96.6, 98.3)	96.6	(96.0, 97.1)
In previous 12 months [1]	50.1	(47.1, 53.2)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	88.0	(85.6, 90.3)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	46.7	(42.8, 50.7)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1] [2]	61.0	(57.8, 64.2)	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.

Table 57 - Access to marae, Māori aged 15 years and over, Northland DHB and Aotearoa, 2018

Been to marae	Northland		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	98.5	(97.4, 99.7)	96.6	(96.0, 97.1)
In previous 12 months [1]	68.4	(63.2, 73.6)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	90.9	(88.2, 93.5)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	62.9	(57.2, 68.7)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1][2]	50.2	(45.2, 55.2)	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.

Table 58 - Access to marae, Māori aged 15 years and over, Auckland DHB and Aotearoa, 2018

Been to marae	Auckland		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	96.7	(94.8, 98.5)	96.6	(96.0, 97.1)
In previous 12 months [1]	43.7	(37.0, 50.5)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	88.9	(83.9, 93.8)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	35.2	(28.5, 41.9)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1][2]	71.4	(64.6, 78.1)	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 59 - Access to marae, Māori aged 15 years and over, Waitematā DHB and Aotearoa, 2018

Been to marae	Waitematā		Aotearoa	
	%	(95% CI)	%	(95% CI)
At some time	97.1	(95.5, 98.8)	96.6	(96.0, 97.1)
In previous 12 months [1]	39.8	(34.8, 44.7)	51.8	(50.6, 53.1)
Ancestral marae at some time [1][2]	84.0	(79.3, 88.7)	84.3	(82.9, 85.6)
Ancestral marae in previous 12 months [1][2]	35.4	(29.2, 41.7)	44.3	(42.6, 45.9)
Like to go to ancestral marae more often [1][2]	67.6	(61.4, 73.8)	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.

In 2018, 12% of Māori aged 15 years and over in Te Taumata Hauora o Te Kahu o Taonui had taken part in traditional healing or massage in the past 12 months (Table 60). This figure was 19.9% for Māori in Northland DHB (Table 61), 6.6% for Māori in Auckland DHB (Table 62) and 9.2% for Māori in Waitematā DHB (Table 63).

Table 60 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 2018

Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
%	(95% CI)	%	(95% CI)
12.0	(10.0, 13.9)	12.3	(11.4, 13.2)

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

Table 61 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Northland DHB and Aotearoa, 2018

Northland		Aotearoa	
%	(95% CI)	%	(95% CI)
19.9	(16.4, 23.3)	12.3	(11.4, 13.2)

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

Table 62 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Auckland DHB and Aotearoa, 2018

Auckland		Aotearoa	
%	(95% CI)	%	(95% CI)
6.6 *	(3.6, 9.6)	12.3	(11.4, 13.2)

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

Table 63 - Māori aged 15 years and over who took part in traditional healing or massage in last 12 months, Waitematā DHB and Aotearoa, 2018

Waitematā		Aotearoa	
%	(95% CI)	%	(95% CI)
9.2	(6.4, 11.9)	12.3	(11.4, 13.2)

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

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 the NZ Census 2018.

5.1. Education

In 2018, 67.3% of Māori aged 20 years and over in Te Taumata Hauora o Te Kahu o Taonui had achieved a Level 2 Certificate or higher, compared to 85.7% of non-Māori (Table 64). This figure varied by DHB: in Northland DHB, 62.6% of Māori aged 20 years and over had achieved a Level 2 Certificate or higher (Table 65), 73.1% in Auckland DHB (Table 66), and 67.7% in Waitematā DHB (

Table 67).

Table 64 - Adults aged 20 years and over with a Level 2 Certificate or higher, Te Taumata Hauora o Te Kahu o Taonui, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	58,578	67.3	(66.7, 67.8)	622,269	85.7	(85.5, 85.9)	**0.79**	**(0.78, 0.79)**	-18.4

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 65 - Adults aged 20 years and over with a Level 2 Certificate or higher, Northland DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	20,670	62.6	(61.7, 63.5)	57,333	75.7	(74.9, 76.5)	**0.83**	**(0.82, 0.85)**	-13.1

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 66 - Adults aged 20 years and over with a Level 2 Certificate or higher, Auckland DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	16,479	73.1	(71.9, 74.2)	264,867	88.8	(88.4, 89.1)	**0.82**	**(0.82, 0.83)**	-15.7

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 67 - Adults aged 20 years and over with a Level 2 Certificate or higher, Waitematā DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	21,429	67.7	(66.8, 68.6)	300,069	84.9	(84.6, 85.3)	0.80	(0.79, 0.80)	-17.2

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.

5.2. Work

In 2018, 48.5% of Māori aged 15 years and over in Te Taumata Hauora o Te Kahu o Taonui were employed full time, and 14.8% were employed part time (Table 68). In 2018, 8.7% of Māori in Te Taumata Hauora o Te Kahu o Taonui were unemployed, 1.9 times the rate of non-Māori, and Māori were 1.1 times more likely than non-Māori to not be in the labour force.

These figures varied across the three DHBs: 42.9% of Māori aged 15 years and over were employed full time in Northland DHB (Table 69), 50% in Auckland DHB (Table 70), and 53.1% in Waitematā DHB (Table 71). Unemployment was highest for Māori in Northland DHB (11.3%) followed by Auckland DHB (7.6%), then Waitematā DHB (6.8%).

Table 68 - Labour force status, 15 years and over, Te Taumata Hauora o Te Kahu o Taonui, 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	53,379	48.5	(48.0, 48.9)	455,415	53.5	(53.3 53.6)	**0.91**	**(0.90, 0.91)**	-5.0
Employed part-time	16,242	14.8	(14.6, 15.1)	127,665	16.1	(16.0, 16.2)	**0.92**	**(0.92, 0.92)**	-1.2
Unemployed	9,030	8.7	(8.5, 8.8)	30,831	4.5	(4.4, 4.5)	**1.93**	**(1.89, 1.98)**	4.2
Not in the labour force	33,594	28.1	(27.7, 28.4)	274,434	26.0	(25.9, 26.1)	**1.08**	**(1.07, 1.09)**	2.1

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 69 - Labour force status, 15 years and over, Northland 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	17,937	42.9	(42.2, 43.5)	42,459	53.2	(52.6, 53.8)	**0.81**	**(0.80, 0.82)**	-10.3
Employed part-time	6,402	15.0	(14.6, 15.3)	14,736	17.2	(16.8, 17.6)	**0.87**	**(0.85, 0.89)**	-2.3
Unemployed	4,374	11.3	(11.0, 11.7)	3,003	4.8	(4.6, 5.0)	**2.37**	**(2.27, 2.48)**	6.6
Not in the labour force	15,075	30.9	(30.3, 31.4)	37,464	24.8	(24.4, 25.3)	**1.24**	**(1.22, 1.26)**	6.0

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.
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 70 - Labour force status, 15 years and over, Auckland 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	14,175	50.0	(49.2, 50.9)	191,106	53.0	(52.7, 53.2)	**0.94**	**(0.93, 0.96)**	-2.9
Employed part-time	4,017	14.5	(14.1, 15.0)	51,234	15.5	(15.4, 15.6)	**0.94**	**(0.91, 0.97)**	-1.0
Unemployed	2,034	7.6	(7.3, 7.9)	13,617	4.5	(4.5, 4.6)	**1.67**	**(1.60, 1.75)**	3.1
Not in the labour force	8,046	27.9	(27.2, 28.5)	104,865	27.0	(26.8, 27.2)	**1.03**	**(1.01, 1.05)**	0.9

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 71 - Labour force status, 15 years and over, Waitematā 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	21,267	53.1	(52.3, 53.8)	221,850	54.1	(53.8, 54.3)	**0.98**	**(0.97, 0.98)**	-1.0
Employed part-time	5,823	14.7	(14.3, 15.1)	61,695	16.2	(16.0, 16.3)	**0.91**	**(0.88, 0.93)**	-1.5
Unemployed	2,622	6.8	(6.5, 7.1)	14,211	4.4	(4.3, 4.4)	**1.56**	**(1.50, 1.62)**	2.4
Not in the labour force	10,473	25.4	(24.9, 25.9)	132,105	25.4	(25.2, 25.6)	1.00	(0.99, 1.02)	0.1

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 Taumata Hauora o Te Kahu o Taonui were health care and social assistance (15.9%); education and training (13.7%); retail trade (10.5%); accommodation and food services (9.3%); and professional, scientific and technical services (7.9%) (Table 72). For Māori men, the leading industries were construction (20.5%); manufacturing (11.7%); professional, scientific and technical services (7.3%); retail trade (6.9%); and transport, postal and warehousing (6.6%).

These top five industries were similar for Māori in Auckland DHB (Table 74) and Waitematā DHB (Table 75). In Northland DHB, professional, scientific and technical services were not among the leading industries for Māori (Table 73). Instead, public administration and safety was the fifth leading industry for Māori women (6.6%) and agriculture, forestry and fishing (15.3%) was the second leading industry for Māori men.

Table 72 - Leading industries in which Māori were employed, Te Taumata Hauora o Te Kahu o Taonui, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Health Care and Social Assistance	5,391	15.9%	1	42,219	15.3%	1
Education and Training	4,635	13.7%	2	34,167	12.3%	3
Retail Trade	3,558	10.5%	3	27,240	9.8%	4
Accommodation and Food Services	3,153	9.3%	4	21,024	7.6%	5
Professional, Scientific and Technical Services	2,673	7.9%	5	37,137	13.4%	2
Males						
Construction	7,359	20.5%	1	42,024	13.7%	2
Manufacturing	4,179	11.7%	2	31,425	10.3%	3
Professional, Scientific and Technical Services	2,598	7.3%	3	45,786	14.9%	1
Retail Trade	2,463	6.9%	4	24,852	8.1%	4
Transport, Postal and Warehousing	2,376	6.6%	5	14,115	4.6%	8

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

Table 73 - Leading industries in which Māori were employed, Northland DHB, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Health Care and Social Assistance	2,412	20.0%	1	5,394	20.0%	1
Education and Training	1,830	15.2%	2	3,339	12.4%	2
Accommodation and Food Services	1,416	11.8%	3	2,163	8.0%	5
Retail Trade	1,344	11.2%	4	2,865	10.6%	3
Public Administration and Safety	798	6.6%	5	1,476	5.5%	7
Males						
Construction	2,178	17.7%	1	4,971	16.5%	1
Agriculture, Forestry and Fishing	1,875	15.3%	2	4,365	14.5%	2
Manufacturing	1,809	14.7%	3	3,870	12.8%	3
Transport, Postal and Warehousing	885	7.2%	4	1,566	5.2%	5
Retail Trade	834	6.8%	5	2,496	8.3%	4

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

Table 74 - Leading industries in which Māori were employed, Auckland DHB, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Education and Training	1,179	13.2%	1	13,668	11.9%	3
Health Care and Social Assistance	1,146	12.8%	2	15,906	13.8%	2
Professional, Scientific and Technical Services	1020	11.4%	3	18,078	15.7%	1
Retail Trade	807	9.0%	4	10,101	8.8%	5
Accommodation and Food Services	750	8.4%	5	10,347	9.0%	4
Males						
Construction	1,512	16.4%	1	12,741	10.0%	2
Professional, Scientific and Technical Services	1,098	11.9%	2	23,160	18.2%	1
Manufacturing	864	9.3%	3	11,343	8.9%	3
Retail Trade	636	6.9%	4	9,744	7.7%	5
Transport, Postal and Warehousing	636	6.9%	5	6,036	4.7%	9

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

Table 75 - Leading industries in which Māori were employed, Waitematā DHB, 2018

ANZSIC Industry	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Health Care and Social Assistance	1,833	14.3%	1	20,919	15.5%	1
Education and Training	1,626	12.7%	2	17,160	12.7%	2
Retail Trade	1,407	11.0%	3	14,274	10.6%	4
Professional, Scientific and Technical Services	1,122	8.8%	4	16,812	12.5%	3
Accommodation and Food Services	987	7.7%	5	8,514	6.3%	5
Males						
Construction	3,669	25.7%	1	24,312	16.3%	1
Manufacturing	1,506	10.5%	2	16,212	10.9%	3
Professional, Scientific and Technical Services	1,128	7.9%	3	20,751	13.9%	2
Retail Trade	993	7.0%	4	12,612	8.5%	4
Public Administration and Safety	969	6.8%	5	7,059	4.7%	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 76), for employed Māori women in Te Taumata Hauora o Te Kahu o Taonui, the leading occupational groupings were professionals (24.4%); community and personal service workers (17.2%); followed by clerical and administrative workers (17%). Māori men were most likely to be employed as technicians and trade workers (18.7%); labourers (18.1%); or managers (17.2%).

These top three categories varied across the three DHBs. In Northland DHB (Table 77), Māori women were most commonly employed as professionals (21.7%), community and personal service workers (20.1%), and labourers (16.2%), while Māori men were most commonly employed as labourers (27.7%), technicians and trades workers (17.1%), and machinery operators and drivers (16.2%). In Auckland DHB (Table 78), Māori women were most commonly employed as professionals (29.0%), clerical and administrative workers (17.5%), and managers (14.7%), while Māori men were most commonly employed as professionals (22.2%), managers (18.3%), and technicians and trades workers (15.8%). In Waitematā DHB (Table 79), Māori women were most commonly employed as professionals (23.7%), clerical and administrative workers (19.2%), and community and personal service workers (16.9%), while Māori men were most commonly employed as technicians and trades workers (22.0%), managers (18.3%), and professionals (14.3%).

Table 76 - Leading occupations in which Māori were employed, Te Taumata Hauora o Te Kahu o Taonui, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Professionals	8,247	24.4%	1	88,395	31.9%	1
Community and Personal Service Workers	5,802	17.2%	2	34,032	12.3%	4
Clerical and Administrative Workers	5,736	17.0%	3	49,062	17.7%	2
Sales Workers	4,185	12.4%	4	31,998	11.6%	5
Managers	4,185	12.4%	4	43,776	15.8%	3
Labourers	3,429	10.1%	6	13,494	4.9%	6
Technicians and Trades Workers	1,473	4.4%	7	12,750	4.6%	7
Machinery Operators and Drivers	747	2.2%	8	3,258	1.2%	8
Males						
Technicians and Trades Workers	6,702	18.7%	1	52,035	17.0%	3
Labourers	6,492	18.1%	2	25,809	8.4%	4
Managers	6,159	17.2%	3	71,574	23.4%	2
Professionals	5,196	14.5%	4	78,564	25.6%	1
Machinery Operators and Drivers	4,671	13.0%	5	19,575	6.4%	6
Community and Personal Service Workers	2,751	7.7%	6	17,943	5.9%	7
Sales Workers	2,331	6.5%	7	24,648	8.0%	5
Clerical and Administrative Workers	1,509	4.2%	8	16,170	5.3%	8

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

Table 77 - Leading occupations in which Māori were employed, Northland DHB, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Professionals	2,619	21.7%	1	7,110	26.3%	1
Community and Personal Service Workers	2,421	20.1%	2	3,819	14.1%	4
Labourers	1,950	16.2%	3	2,139	7.9%	6
Clerical and Administrative Workers	1,722	14.3%	4	4,971	18.4%	2
Sales Workers	1,356	11.3%	5	2,850	10.5%	5
Managers	1,239	10.3%	6	4,398	16.3%	3
Technicians and Trades Workers	501	4.2%	7	1,440	5.3%	7
Machinery Operators and Drivers	243	2.0%	8	309	1.1%	8
Males						
Labourers	3,405	27.7%	1	4,233	14.0%	4
Technicians and Trades Workers	2,097	17.1%	2	6,321	21.0%	2
Machinery Operators and Drivers	1,986	16.2%	3	2,805	9.3%	5
Managers	1,854	15.1%	4	8,106	26.9%	1
Professionals	1,098	8.9%	5	4,350	14.4%	3
Community and Personal Service Workers	909	7.4%	6	1,503	5.0%	7
Sales Workers	600	4.9%	7	1,983	6.6%	6
Clerical and Administrative Workers	339	2.8%	8	864	2.9%	8

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

Table 78 - Leading occupations in which Māori were employed, Auckland DHB, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Professionals	2,592	29.0%	1	40,734	35.4%	1
Clerical and Administrative Workers	1,560	17.5%	2	18,228	15.8%	3
Managers	1,317	14.7%	3	18,885	16.4%	2
Community and Personal Service Workers	1,221	13.7%	4	13,452	11.7%	4
Sales Workers	1,074	12.0%	5	12,492	10.9%	5
Labourers	600	6.7%	6	5,133	4.5%	6
Technicians and Trades Workers	384	4.3%	7	4,920	4.3%	7
Machinery Operators and Drivers	192	2.1%	8	1,221	1.1%	8
Males						
Professionals	2,055	22.2%	1	38,904	30.6%	1
Managers	1,695	18.3%	2	28,437	22.3%	2
Technicians and Trades Workers	1,458	15.8%	3	17,535	13.8%	3
Labourers	1,056	11.4%	4	9,267	7.3%	5
Machinery Operators and Drivers	966	10.4%	5	7,014	5.5%	8
Sales Workers	750	8.1%	6	10,548	8.3%	4
Community and Personal Service Workers	714	7.7%	7	7,959	6.3%	6
Clerical and Administrative Workers	552	6.0%	8	7,614	6.0%	7

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

Table 79 - Leading occupations in which Māori were employed, Waitematā DHB, 2018

ANZSCO Occupation	Māori			non-Māori		
	Number	%	Rank	Number	%	Rank
Females						
Professionals	3,036	23.7%	1	40,551	30.1%	1
Clerical and Administrative Workers	2,454	19.2%	2	25,863	19.2%	2
Community and Personal Service Workers	2,160	16.9%	3	16,761	12.4%	4
Sales Workers	1,755	13.7%	4	16,656	12.4%	5
Managers	1,629	12.7%	5	20,493	15.2%	3
Labourers	879	6.9%	6	6,222	4.6%	7
Technicians and Trades Workers	588	4.6%	7	6,390	4.7%	6
Machinery Operators and Drivers	312	2.4%	8	1,728	1.3%	8
Males						
Technicians and Trades Workers	3,147	22.0%	1	28,179	18.9%	3
Managers	2,610	18.3%	2	35,031	23.5%	2
Professionals	2,043	14.3%	3	35,310	23.7%	1
Labourers	2,031	14.2%	4	12,309	8.3%	4
Machinery Operators and Drivers	1,719	12.0%	5	9,756	6.6%	6
Community and Personal Service Workers	1,128	7.9%	6	8,481	5.7%	7
Sales Workers	981	6.9%	7	12,117	8.1%	5
Clerical and Administrative Workers	618	4.3%	8	7,692	5.2%	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 89.2% of Māori aged 15 years or over in Te Taumata Hauora o Te Kahu o Taonui in 2018 reporting they performed unpaid work (Table 80), and this was similar for Māori across all three DHBs (Table 81, Table 82, and Table 83). Overall, Māori in Te Taumata Hauora o Te Kahu o Taonui were significantly more likely than non-Māori to participate in unpaid work looking after a disabled or ill household (2.0 times) or non-household (1.8 times) member. The percentage of Māori caring for others who were ill/disabled varied between DHBs, and was highest in Northland DHB, where 15.1% of Māori aged 15 years and over were caring for a disabled/ill household member, and 15.3% were caring for a disabled/ill non-household member (Table 81).

Table 80 - Unpaid work, 15 years and over, Te Taumata Hauora o Te Kahu o Taonui, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	68,091	89.2	642,231	86.9	**1.03**	**(1.02, 1.03)**	2.2
Looking after disabled/ill household member	9,288	12.2	45,171	6.1	**1.99**	**(1.95, 2.03)**	6.0
Looking after disabled/ill non-household member	9,213	12.1	49,680	6.7	**1.79**	**(1.76, 1.83)**	5.3

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 81 - Unpaid work, 15 years and over, Northland DHB, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	25,344	89.6	73,260	89.6	1.00	(1.00, 1.00)	0.0
Looking after disabled/ill household member	4,284	15.1	6,123	7.5	**2.02**	**(1.95, 2.10)**	7.7
Looking after disabled/ill non-household member	4,326	15.3	7,782	9.5	**1.61**	**(1.55, 1.66)**	5.8

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 82 - Unpaid work, 15 years and over, Auckland DHB, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	17,577	88.2	252,009	85.3	**1.03**	**(1.03, 1.04)**	2.9
Looking after disabled/ill household member	1,953	9.8	16,380	5.5	**1.77**	**(1.69, 1.85)**	4.3
Looking after disabled/ill non-household member	2,133	10.7	18,513	6.3	**1.71**	**(1.64, 1.78)**	4.4

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 83 - Unpaid work, 15 years and over, Waitematā DHB, 2018

Unpaid work	Māori		non-Māori		Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	Number	%			
Any unpaid work	25,170	89.4	316,962	87.6	**1.02**	**(1.02, 1.02)**	1.8
Looking after disabled/ill household member	3,051	10.8	22,668	6.3	**1.73**	**(1.67, 1.79)**	4.6
Looking after disabled/ill non-household member	2,754	9.8	23,385	6.5	**1.51**	**(1.46, 1.57)**	3.3

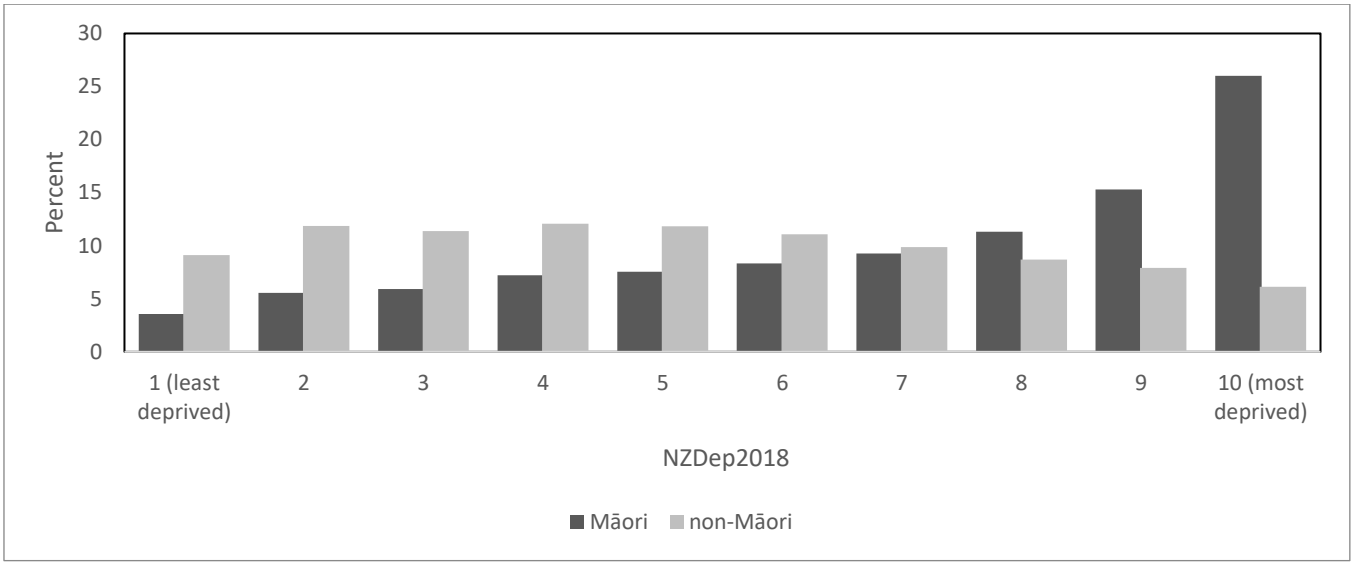
Source: 2018 Census, Statistics New Zealand.
Notes: *Percentages are NOT age-standardised due to not having detailed age-group data available.*
Ratios in **bold** show a statistically significant difference between Māori and non-Māori.

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.

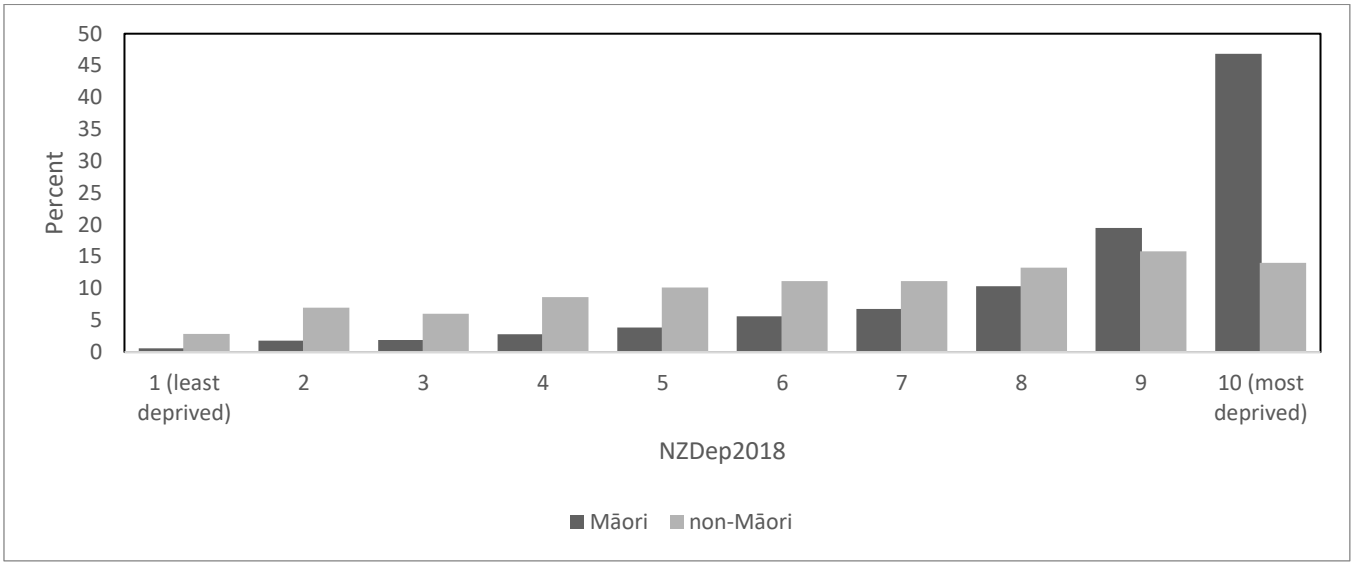
Across Te Taumata Hauora o Te Kahu o Taonui as a whole, 41% of Māori lived in the two most deprived deciles in 2018, compared to 14% for non-Māori (Figure 8). A total of 10% of Māori in Te Taumata Hauora o Te Kahu o Taonui lived in the two least deprived deciles in 2018, compared to 21% of non-Māori. Within the IMPB, the distribution of deprivation varies significantly between DHBs. Deprivation is especially marked for Māori in Northland DHB - in fact, out of the 44,400 Māori in Te Taumata Hauora o Te Kahu o Taonui living in the most deprived decile (decile 10), 31,700 (71.4%) of them are living in Northland DHB (data not shown). In Northland DHB, 66% of Māori lived in the two most deprived deciles in 2018, compared to 30% for non-Māori (Figure 9). A total of 3% of Māori in Northland DHB lived in the two least deprived deciles in 2018, compared to 10% of non-Māori. In Auckland DHB, 33% of Māori lived in the two most deprived deciles in 2018, compared to 17% for non-Māori (Figure 10). A total of 11% of Māori in Auckland DHB lived in the two least deprived deciles in 2018, compared to 18% of non-Māori. In Waitematā DHB, 20% of Māori lived in the two most deprived deciles in 2018, compared to 8% for non-Māori (Figure 11). A total of 15% of Māori in Waitematā DHB lived in the two least deprived deciles in 2018, compared to 25% of non-Māori.

Figure 8 - NZDep2018 distribution of Māori and non-Māori by decile, Te Taumata Hauora o Te Kahu o Taonui, 2018



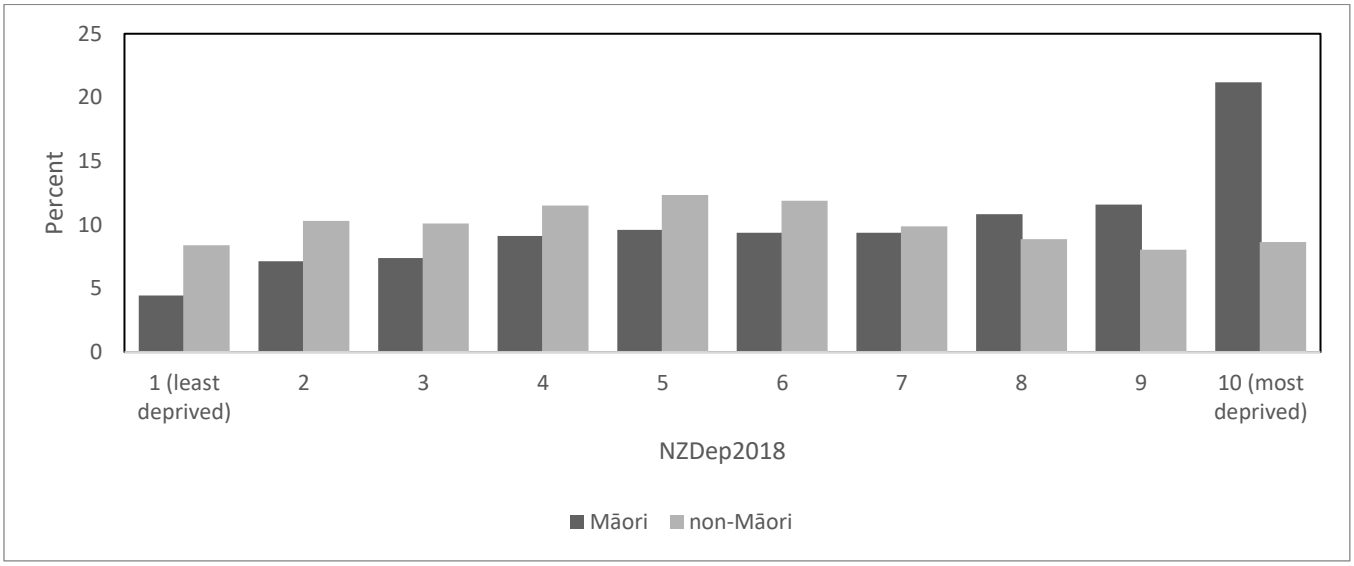
Source: Deprivation decile for estimated resident population (ERP), former DHB areas, prioritised ethnicity, provided by Stats NZ for Te Whatu Ora. Deprivation is derived according to the neighbourhood where the individual lives, based on University of Otago's NZDep2018 Socio-economic Deprivation Indices.

Figure 9 - NZDep2018 distribution of Māori and non-Māori by decile, Northland DHB, 2018



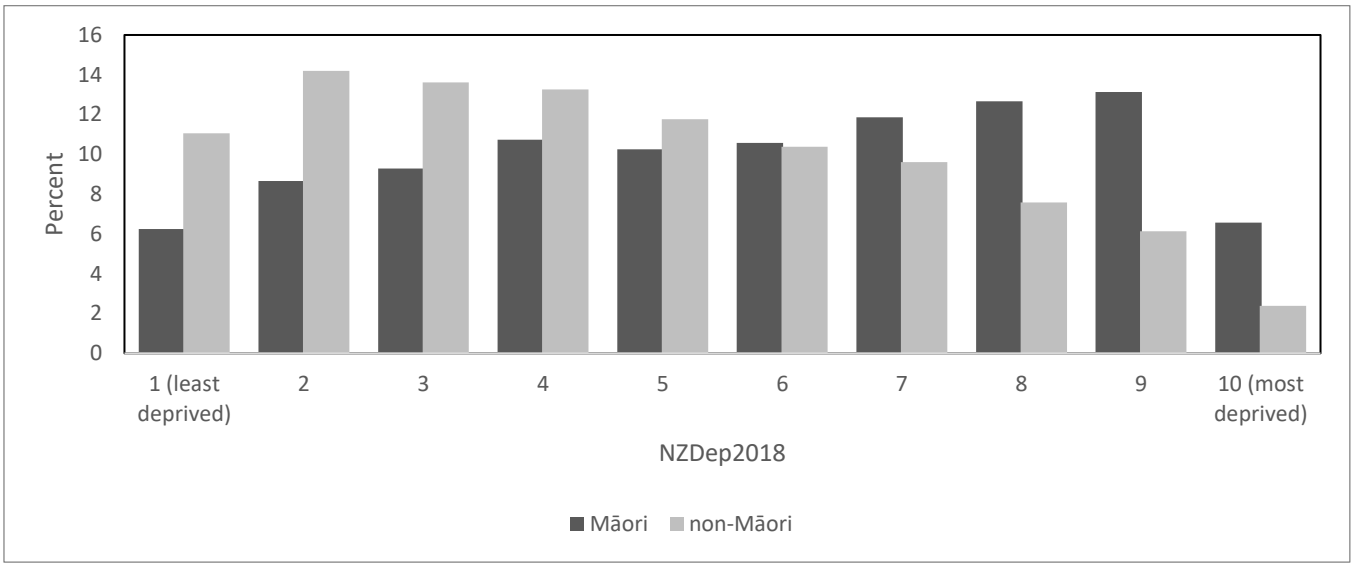
Source: Deprivation decile for estimated resident population (ERP), former DHB areas, prioritised ethnicity, provided by Stats NZ for Te Whatu Ora. Deprivation is derived according to the neighbourhood where the individual lives, based on University of Otago's NZDep2018 Socio-economic Deprivation Indices.

Figure 10 - NZDep2018 distribution of Māori and non-Māori by decile, Auckland 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, Waitematā 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, 10.5% of Māori aged 15 years and over in Te Taumata Hauora o Te Kahu o Taonui reported often putting up with feeling cold, 5.6% often went without fresh fruit and vegetables, and 8.2% often put off doctor's visits, because of cost (Table 84). These results varied somewhat between DHBs (Table 85, Table 86, Table 87), for example with 14% of Māori in Northland often putting up with the cold, however the small numbers of participants in the 2018 Te Kupenga survey makes it difficult to compare the differences between DHBs confidently.

Table 84 - Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 2018

Actions taken a lot to keep costs down	Te Taumata Hauora o Te Kahu o Taonui		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	10.5	(8.7, 12.4)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	5.6	(4.3, 7.0)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	8.2	(6.1, 10.3)	9.7	(8.8, 10.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Note: 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 85 – Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, Northland DHB, 2018

Actions taken a lot to keep costs down	Northland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	14.0	(10.3, 17.7)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	8.3 *	(5.2, 11.3)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	10.7 *	(7.3, 14.1)	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.

Table 86 – Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, Auckland DHB, 2018

Actions taken a lot to keep costs down	Auckland		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	9.7 *	(6.3, 13)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	4.8 **	(2.1, 7.5)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	7.4 **	(3.3, 11.5)	9.7	(8.8, 10.6)

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%. 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 87 – Unmet needs reported by Māori aged 15 years and over to keep costs down in the last 12 months, Waitematā DHB, 2018

Actions taken a lot to keep costs down	Waitematā		Aotearoa	
	%	(95% CI)	%	(95% CI)
Put up with feeling the cold	8.6 *	(5.5, 11.7)	9.9	(9.1, 10.7)
Go without fresh fruit and vegetables	4.5 *	(2.9, 6.2)	6.2	(5.6, 6.9)
Postpone or put off visits to the doctor	6.8 *	(4.3, 9.3)	9.7	(8.8, 10.6)

Source: Te Kupenga 2018, Statistics New Zealand customised report.
Notes: An asterisk (*) shows the sampling error is 30% or more but less than 50%. 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 Taumata Hauora o Te Kahu o Taonui are significantly more likely than non-Māori to receive an income of $20,000 or less (Table 88). In 2018, this equated to 35.5% of Māori aged 20 years and over (35,211 people) living on an income of $20,000 or less, compared to 28.6% of non-Māori. The percentage of Māori aged 20 years and over living on an income of $20,000 or less varied between DHBs, ranging from 42.7% in Northland DHB (Table 89), to 33% in Auckland DHB (Table 90), and 29.8% in Waitematā DHB (Table 91).

Table 88 – People 20 years and over whose total annual personal income in $20,000 or less, Te Taumata Hauora o Te Kahu o Taonui and Aotearoa, 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	35,211	35.5	(35.1, 35.9)	241,428	28.6	(28.4, 28.7)	**1.24**	**(1.24, 1.25)**	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.

Table 89 – People 20 years and over whose total annual personal income in $20,000 or less, Northland 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	16,416	42.7	(42.0, 43.5)	31,029	30.6	(30.1, 31.1)	**1.40**	**(1.38, 1.42)**	12.1

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 90 – People 20 years and over whose total annual personal income in $20,000 or less, Auckland 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	8,364	33.0	(32.2, 33.7)	97,833	28.8	(28.6, 29.0)	**1.15**	**(1.13, 1.17)**	4.2

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 91 – People 20 years and over whose total annual personal income in $20,000 or less, Waitematā 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	10,431	29.8	(29.3, 30.4)	112,566	27.7	(27.5, 27.9)	**1.08**	**(1.06, 1.10)**	2.2

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.

Māori in Te Taumata Hauora o Te Kahu o Taonui are 1.6 times more likely than non-Māori to be without access to a motor vehicle (Table 92). In 2018, this equated to 5.5% of Māori (7,107 people) living in Te Taumata Hauora o Te Kahu o Taonui with no access to a motor vehicle compared to 3.5% of non-Māori. The percentage of Māori without access to a motor vehicle was highest in Auckland DHB (8.7%) (Table 94), followed by Northland DHB (5.3%) (Table 93), then Waitematā DHB (3.6%) (Table 95).

Table 92 – People with no access to a motor vehicle, Te Taumata Hauora o Te Kahu o Taonui, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	7,107	5.5	(5.4, 5.6)	39,864	3.5	(3.4, 3.5)	**1.58**	**(1.54, 1.62)**	2.0

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 93 – People with no access to a motor vehicle, Northland DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	2,646	5.3	(5.1, 5.5)	2,478	1.6	(1.5, 1.7)	**3.30**	**(3.13, 3.48)**	3.7

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 94 – People with no access to a motor vehicle, Auckland DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	2,739	8.7	(8.4, 9.1)	26,562	6.0	(5.9, 6.1)	**1.46**	**(1.41, 1.51)**	2.7

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 95 – People with no access to a motor vehicle, Waitematā DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	1,722	3.6	(3.4, 3.8)	10,824	1.6	(1.5, 1.6)	**2.33**	**(2.21, 2.45)**	2.1

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 Taumata Hauora o Te Kahu o Taonui are 1.8 times more likely than non-Māori to have no access to telecommunications (Table 96). In 2018, this equated to 1.6% of Māori (2,100 people) living in Te Taumata Hauora o Te Kahu o Taonui with no access to any form of telecommunications (a functional cellphone, telephone, or the Internet) compared to 0.9% of non-Māori. The percentage of Māori without access to telecommunications was highest in Northland DHB (2.3%) (Table 97), followed by Auckland DHB (1.8%) (Table 98), then Waitematā DHB (1.0%) (Table 99) in 2018.

Table 96 – People with no access to telecommunications, Te Taumata Hauora o Te Kahu o Taonui, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	2,100	1.6	(1.6, 1.7)	8,118	0.9	(0.9, 0.9)	**1.82**	**(1.74, 1.91)**	0.7

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 97 – People with no access to telecommunications, Northland DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	1,083	2.3	(2.1, 2.4)	702	0.7	(0.7, 0.8)	**3.12**	**(2.84, 3.42)**	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.

Table 98 – People with no access to telecommunications, Auckland DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	549	1.8	(1.6, 1.9)	4,311	1.2	(1.1, 1.2)	**1.52**	**(1.39, 1.66)**	0.6

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 99 – People with no access to telecommunications, Waitematā DHB, 2018

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2018	468	1.0	(0.9, 1.1)	3,105	0.7	(0.7, 0.7)	**1.41**	**(1.28, 1.55)**	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.

5.4. Housing

Māori in Te Taumata Hauora o Te Kahu o Taonui are less likely than non-Māori to own their home (Table 100). In 2018, 69.6% of Māori aged 20 years and over in Te Taumata Hauora o Te Kahu o Taonui lived in a home they did not own/partly own or hold in a family trust compared to 56.5% of non-Māori. The percentage of Māori living in a home they did not own was highest in Auckland DHB (75.8%) (Table 102), followed by Northland DHB (67.8%) (Table 101), and Waitematā DHB (67.2%) (Table 103).

Table 100 – Housing tenure, 20 years and over, Te Taumata Hauora o Te Kahu o Taonui, 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	19,440	24.8	(24.4, 25.1)	276,111	33.2	(33.0, 33.3)	**0.75**	**(0.74, 0.76)**	-8.4
Held in a family trust	4,503	5.6	(5.4, 5.8)	92,373	10.3	(10.2, 10.4)	**0.54**	**(0.53, 0.56)**	-4.7
Not owned; not held in a family trust	43,947	69.6	(69.0, 70.3)	324,672	56.5	(56.3, 56.7)	**1.23**	**(1.22, 1.24)**	13.1

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 101 – Housing tenure, 20 years and over, Northland 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	8,847	27.9	(27.3, 28.6)	43,290	42.7	(42.1, 43.2)	**0.65**	**(0.64, 0.67)**	-14.7
Held in a family trust	1,416	4.3	(4.0, 4.5)	10,503	8.2	(8.0, 8.4)	**0.52**	**(0.49, 0.55)**	-3.9
Not owned; not held in a family trust	15,156	67.8	(66.6, 69.0)	24,885	49.2	(48.4, 49.9)	**1.38**	**(1.36, 1.40)**	18.6

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 102 – Housing tenure, 20 years and over, Auckland 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	3,423	17.4	(16.8, 18.0)	83,205	25.9	(25.7, 26.1)	**0.67**	**(0.65, 0.69)**	-8.5
Held in a family trust	1,347	6.8	(6.4, 7.2)	38,451	11.7	(11.5, 11.8)	**0.58**	**(0.55, 0.62)**	-4.8
Not owned; not held in a family trust	13,062	75.8	(74.4, 77.1)	154,638	62.4	(62.1, 62.8)	**1.21**	**(1.20, 1.22)**	13.3

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 103 – Housing tenure, 20 years and over, Waitematā 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	7,170	26.6	(26.0, 27.3)	149,616	37.5	(37.3, 37.8)	**0.71**	**(0.70, 0.72)**	-10.9
Held in a family trust	1,740	6.2	(5.9, 6.5)	43,419	9.8	(9.7, 9.9)	**0.64**	**(0.61, 0.67)**	-3.6
Not owned; not held in a family trust	15,729	67.2	(66.1, 68.2)	145,149	52.7	(52.4, 53.0)	**1.27**	**(1.26, 1.29)**	14.5

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.

Living in an overcrowded home was 1.6 times more common for Māori compared to non-Māori in Te Taumata Hauora o Te Kahu o Taonui in 2018 (Table 104). In the 2018 Census, 23.5% of Māori (29,085 people) in Te Taumata Hauora o Te Kahu o Taonui lived in overcrowded homes, compared to 14.4% of non-Māori. The percentage of Māori living in an overcrowded home in 2018 was highest in Northland DHB (27.4%) (Table 105), followed by Auckland DHB (24.3%) (Table 106), and Waitematā DHB (19.3%) (Table 107).

Table 104 – People living in crowded households (requiring at least one more bedroom), Te Taumata Hauora o Te Kahu o Taonui, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	29,085	23.5	(23.2, 23.7)	117,534	14.4	(14.4, 14.5)	**1.62**	**(1.60, 1.64)**	9.0

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 105 – People living in crowded households (requiring at least one more bedroom), Northland DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	12,588	27.4	(26.9, 27.8)	6,084	9.2	(8.9, 9.5)	**2.98**	**(2.96, 2.99)**	18.2

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 106 – People living in crowded households (requiring at least one more bedroom), Auckland DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	7,212	24.3	(23.7, 24.9)	63,231	18.8	(18.7, 19.0)	**1.29**	**(1.26, 1.32)**	5.5

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 107 – People living in crowded households (requiring at least one more bedroom), Waitematā DHB, 2018

Measure	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Household crowding	9,285	19.3	(18.9, 19.7)	48,219	11.8	(11.7, 11.9)	**1.64**	**(1.61, 1.67)**	7.5

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.

In 2018, 44.9% of Māori in Te Taumata Hauora o Te Kahu o Taonui lived in a home that was sometimes or always damp, and 37.8% of Māori lived in a house with mould (Table 108). Māori in Te Taumata Hauora o Te Kahu o Taonui were 1.6 times more likely than non-Māori to live in a damp home and 1.6 times more likely to live in a mouldy home. The percentage of Māori living in damp or mouldy homes was highest in Northland DHB (51.2% damp and 42.8% mouldy) (Table 109), followed by Auckland DHB (43.7% damp and 36.9% mouldy) (Table 110), and Waitematā DHB (39.5% damp and 33.6% mouldy) (Table 111).

Table 108 – People experiencing housing quality issues sometimes or always, Te Taumata Hauora o Te Kahu o Taonui, 2018

Housing quality issues	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
Dampness	51,225	44.9	(44.5, 45.3)	228,951	27.7	(27.6, 27.9)	**1.62**	**(1.61, 1.63)**	17.1
Mould	43,590	37.8	(37.5, 38.2)	199,155	23.9	(23.7, 24.0)	**1.59**	**(1.57, 1.60)**	14.0

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.

Table 109 – People experiencing housing quality issues sometimes or always, Northland 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	22,044	51.2	(50.5, 51.9)	23,916	30.7	(30.3, 31.2)	**1.67**	**(1.64, 1.69)**	20.5
Mould	18,507	42.8	(42.1, 43.4)	19,749	25.1	(24.7, 25.6)	**1.70**	**(1.67, 1.73)**	17.6

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 110 – People experiencing housing quality issues sometimes or always, Auckland 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	12,072	43.7	(42.9, 44.5)	97,155	29.2	(28.9, 29.4)	**1.50**	**(1.48, 1.52)**	14.6
Mould	10,305	36.9	(36.1, 37.6)	85,506	25.4	(25.2, 25.6)	**1.45**	**(1.43, 1.48)**	11.5

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. 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 111 – People experiencing housing quality issues sometimes or always, Waitematā 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	17,109	39.5	(38.9, 40.1)	107,880	26.1	(25.9, 26.3)	**1.51**	**(1.49, 1.53)**	13.4
Mould	14,778	33.6	(33.1, 34.2)	93,900	22.5	(22.3, 22.6)	**1.50**	**(1.48, 1.52)**	11.2

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. 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 Taumata Hauora o Te Kahu o Taonui were 1.2 times as likely as non-Māori to live in homes without any source of heating in 2018 (Table 112). This equated to 9.4% of Māori (11,304 people) in Te Taumata Hauora o Te Kahu o Taonui who were without heating compared to 8.1% of non-Māori in 2018. The percentage of Māori living without heating was highest in Auckland DHB (11.3%) (Table 114), followed by Northland DHB (10.1%) (Table 113), and Waitematā DHB (7.5%) (Table 115).

Table 112 – People living in households where there is no source of heating, Te Taumata Hauora o Te Kahu o Taonui, 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	11,304	9.4	(9.2, 9.6)	71,436	8.1	(8.0, 8.2)	**1.16**	**(1.14, 1.18)**	1.3

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 113 – People living in households where there is no source of heating, Northland 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	4,542	10.1	(9.8, 10.4)	4,674	5.5	(5.3, 5.7)	**1.83**	**(1.76, 1.90)**	4.6

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 114 – People living in households where there is no source of heating, Auckland 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	3,357	11.3	(10.9, 11.7)	39,531	10.6	(10.5, 10.7)	**1.06**	**(1.03, 1.10)**	0.7

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 115 – People living in households where there is no source of heating, Waitematā 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	3,405	7.5	(7.2, 7.8)	27,231	6.3	(6.2, 6.4)	**1.19**	**(1.15, 1.23)**	1.2

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.

5.5. Primary Care Enrolment

In October 2023, 14.3% of Māori in Te Taumata Hauora o Te Kahu o Taonui were not enrolled with primary health care, significantly higher than for non-Māori (Table 116). This percentage of Māori not enrolled with primary care is 10.3% in Northland DHB (Table 117), 11.9% in Auckland DHB (Table 118), and 20.1% in Waitematā DHB (Table 119).

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 fact that a larger number of non-Māori (100.7%) in Te Taumata Hauora o Te Kahu o Taonui are enrolled with primary care than exist in the Census population denominator also indicates there may be a mismatch between the ethnicity recording between these two sources.

The poor ethnicity data quality makes it difficult to assess how many Māori in Te Taumata Hauora o Te Kahu o Taonui 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 116 – People enrolled with primary care, Te Taumata Hauora o Te Kahu o Taonui, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	157,141	85.7	(85.3, 86.1)	1,134,544	100.7	(100.5, 100.9)	**0.85**	**(0.85, 0.85)**	-15.0

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 117 - People enrolled with primary care, Northland DHB, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	66,931	89.7	(89.0, 90.4)	125,393	96.8	(96.3, 97.4)	**0.93**	**(0.92, 0.93)**	-7.1

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.

Table 118 - People enrolled with primary care, Auckland DHB, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	35,259	88.1	(87.2, 89.1)	437,928	101.2	(100.9, 101.5)	**0.87**	**(0.87, 0.87)**	-13.1

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.

Table 119 - People enrolled with primary care, Waitematā DHB, October 2023

Year	Māori			non-Māori			Māori/non-Māori rate ratio (95% CI)		Difference in percentage
	Number	%	(95% CI)	Number	%	(95% CI)			
2023	54,951	79.9	(79.2, 80.5)	571,223	101.2	(100.9, 101.5)	**0.79**	**(0.79, 0.79)**	-21.3

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.

Ngā āpitihanga
Appendices

Appendix 1: IMPB Māori population projections

Table 120 - Māori population projections, single year, Te Taumata Hauora o Te Kahu o Taonui (mapped to DHB 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	8,140	8,570	16,720	8,080	8,410	16,500	8,050	8,420	16,450	8,010	8,450	16,470
05-09	8,670	9,330	18,010	8,510	9,260	17,780	8,280	9,030	17,300	8,140	8,770	16,910
10-14	8,100	8,380	16,480	8,340	8,700	17,040	8,630	9,070	17,710	8,710	9,300	18,010
15-19	7,260	7,900	15,180	7,370	7,980	15,360	7,530	8,060	15,590	7,720	8,150	15,880
20-24	7,230	7,500	14,730	7,200	7,570	14,770	7,350	7,700	15,050	7,450	7,860	15,310
25-29	6,950	7,020	13,960	7,120	7,190	14,310	7,210	7,370	14,590	7,220	7,410	14,630
30-34	5,460	5,230	10,700	5,810	5,620	11,430	6,180	5,940	12,110	6,510	6,410	12,930
35-39	4,790	4,660	9,440	4,850	4,650	9,500	4,920	4,750	9,670	5,110	4,820	9,930
40-44	4,840	4,680	9,540	4,740	4,620	9,360	4,680	4,590	9,270	4,670	4,500	9,180
45-49	5,210	5,130	10,350	5,200	5,010	10,210	5,200	4,950	10,140	4,950	4,870	9,820
50-54	4,710	4,750	9,460	4,700	4,770	9,470	4,810	4,750	9,550	4,960	4,780	9,720
55-59	4,680	4,290	8,970	4,740	4,380	9,120	4,750	4,490	9,250	4,660	4,480	9,140
60-64	3,370	2,870	6,230	3,610	3,120	6,720	3,810	3,360	7,170	4,060	3,600	7,640
65-69	2,440	2,160	4,610	2,570	2,250	4,820	2,680	2,310	5,000	2,830	2,430	5,260
70-74	1,550	1,330	2,890	1,660	1,400	3,060	1,790	1,500	3,290	1,920	1,640	3,550
75-79	1,020	820	1,830	1,060	860	1,910	1,080	920	1,990	1,130	940	2,070
80-84	590	420	1,010	620	440	1,070	690	480	1,170	740	520	1,260
85+	430	190	630	440	220	670	460	250	710	500	260	770
All Ages	**85,600**	**85,200**	**170,700**	**86,700**	**86,500**	**173,100**	**88,100**	**88,000**	**176,000**	**89,300**	**89,200**	**178,500**

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	8,020	8,500	16,510	8,070	8,510	16,590	8,190	8,690	16,870	8,330	8,790	17,140
05-09	8,060	8,580	16,630	7,960	8,460	16,450	7,940	8,320	16,250	7,870	8,310	16,190
10-14	8,660	9,450	18,110	8,640	9,350	17,970	8,510	9,320	17,830	8,280	9,080	17,350
15-19	7,990	8,260	16,250	8,240	8,600	16,840	8,510	8,960	17,470	8,810	9,340	18,140
20-24	7,490	8,120	15,620	7,530	8,240	15,770	7,650	8,340	15,990	7,800	8,400	16,200
25-29	7,210	7,320	14,540	7,280	7,400	14,680	7,240	7,460	14,710	7,370	7,570	14,950
30-34	6,910	6,750	13,670	7,150	7,060	14,190	7,310	7,210	14,520	7,380	7,370	14,760
35-39	5,280	5,040	10,320	5,550	5,230	10,780	5,900	5,640	11,530	6,250	5,950	12,200
40-44	4,630	4,510	9,140	4,680	4,510	9,190	4,750	4,510	9,270	4,830	4,600	9,440
45-49	4,840	4,610	9,450	4,690	4,500	9,190	4,600	4,440	9,050	4,530	4,400	8,930
50-54	4,980	4,850	9,830	5,000	4,830	9,820	4,990	4,730	9,740	4,990	4,670	9,650
55-59	4,620	4,420	9,050	4,520	4,460	8,970	4,520	4,480	9,010	4,610	4,460	9,080
60-64	4,290	3,850	8,120	4,500	4,050	8,560	4,580	4,150	8,720	4,580	4,260	8,840
65-69	2,960	2,550	5,510	3,170	2,620	5,790	3,390	2,880	6,260	3,570	3,090	6,660
70-74	2,060	1,730	3,780	2,180	1,880	4,080	2,300	1,980	4,270	2,410	2,040	4,440
75-79	1,160	1,030	2,190	1,270	1,070	2,350	1,370	1,120	2,490	1,480	1,190	2,660
80-84	760	560	1,340	770	580	1,350	810	620	1,420	820	670	1,490
85+	550	280	820	580	320	900	600	360	950	650	380	1,040
All Ages	**90,500**	**90,400**	**180,900**	**91,800**	**91,700**	**183,400**	**93,100**	**93,200**	**186,300**	**94,600**	**94,600**	**189,100**

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	8,460	8,920	17,380	8,550	9,040	17,590	8,660	9,140	17,790	8,750	9,250	18,010
05-09	7,870	8,360	16,220	7,890	8,420	16,320	7,960	8,490	16,450	8,110	8,640	16,760
10-14	8,150	8,840	16,990	8,080	8,670	16,740	8,000	8,560	16,550	7,950	8,420	16,370
15-19	8,910	9,570	18,480	8,890	9,740	18,630	8,870	9,660	18,550	8,770	9,660	18,410
20-24	8,010	8,500	16,510	8,300	8,630	16,910	8,550	8,970	17,530	8,850	9,340	18,190
25-29	7,460	7,750	15,210	7,510	8,020	15,530	7,540	8,130	15,680	7,670	8,240	15,910
30-34	7,390	7,410	14,800	7,400	7,330	14,730	7,470	7,390	14,870	7,430	7,470	14,900
35-39	6,600	6,440	13,040	7,020	6,780	13,800	7,250	7,090	14,340	7,430	7,250	14,670
40-44	5,030	4,690	9,720	5,210	4,920	10,120	5,490	5,120	10,590	5,850	5,530	11,380
45-49	4,540	4,330	8,880	4,510	4,350	8,870	4,570	4,350	8,920	4,650	4,350	9,000
50-54	4,760	4,600	9,350	4,670	4,340	9,010	4,520	4,250	8,770	4,440	4,200	8,630
55-59	4,770	4,500	9,270	4,790	4,590	9,390	4,830	4,570	9,400	4,840	4,500	9,330
60-64	4,520	4,250	8,760	4,480	4,210	8,690	4,370	4,260	8,630	4,400	4,290	8,680
65-69	3,810	3,310	7,110	4,040	3,540	7,580	4,250	3,750	8,010	4,330	3,860	8,200
70-74	2,560	2,150	4,720	2,680	2,270	4,950	2,860	2,330	5,180	3,070	2,540	5,620
75-79	1,590	1,310	2,880	1,700	1,390	3,090	1,830	1,540	3,370	1,940	1,640	3,580
80-84	870	700	1,570	900	770	1,650	980	780	1,760	1,040	800	1,850
85+	710	390	1,120	760	440	1,200	760	470	1,230	800	520	1,320
All Ages	**95,900**	**96,000**	**191,900**	**97,400**	**97,500**	**194,800**	**98,700**	**98,900**	**197,700**	**100,300**	**100,400**	**200,800**

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	8,860	9,340	18,220	8,960	9,430	18,390	9,050	9,530	18,560	9,120	9,620	18,730
05-09	8,260	8,790	17,050	8,380	8,940	17,320	8,520	9,060	17,580	8,630	9,180	17,830
10-14	7,920	8,410	16,330	7,910	8,480	16,390	7,940	8,550	16,510	8,040	8,630	16,660
15-19	8,550	9,430	17,990	8,430	9,210	17,640	8,360	9,040	17,410	8,290	8,950	17,250
20-24	9,170	9,740	18,920	9,300	9,990	19,290	9,290	10,190	19,480	9,300	10,130	19,430
25-29	7,830	8,310	16,150	8,060	8,440	16,500	8,360	8,570	16,940	8,650	8,950	17,600
30-34	7,550	7,600	15,150	7,670	7,790	15,460	7,740	8,070	15,820	7,780	8,200	16,000
35-39	7,510	7,420	14,930	7,540	7,470	15,020	7,550	7,410	14,960	7,640	7,500	15,140
40-44	6,220	5,860	12,080	6,600	6,350	12,950	7,020	6,710	13,730	7,270	7,030	14,310
45-49	4,720	4,460	9,190	4,950	4,550	9,480	5,130	4,790	9,930	5,420	5,010	10,430
50-54	4,380	4,170	8,550	4,410	4,120	8,510	4,390	4,140	8,520	4,450	4,150	8,600
55-59	4,840	4,430	9,270	4,620	4,380	8,980	4,530	4,140	8,680	4,420	4,050	8,460
60-64	4,490	4,270	8,760	4,650	4,320	8,970	4,690	4,420	9,110	4,730	4,420	9,150
65-69	4,360	3,980	8,350	4,310	3,970	8,280	4,290	3,950	8,240	4,180	4,000	8,180
70-74	3,220	2,730	5,950	3,440	2,940	6,380	3,670	3,160	6,840	3,910	3,370	7,280
75-79	2,050	1,710	3,750	2,200	1,820	4,000	2,300	1,900	4,210	2,450	1,940	4,390
80-84	1,130	840	1,960	1,220	920	2,140	1,320	1,000	2,320	1,450	1,160	2,600
85+	850	590	1,440	920	620	1,530	970	670	1,640	1,000	680	1,690
All Ages	**102,000**	**102,100**	**204,100**	**103,600**	**103,700**	**207,300**	**105,100**	**105,300**	**210,500**	**106,700**	**107,000**	**213,700**

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	9,200	9,710	18,900	9,270	9,790	19,080	9,350	9,880	19,230	9,430	9,960	19,400
05-09	8,750	9,310	18,060	8,860	9,410	18,270	8,960	9,520	18,470	9,050	9,610	18,650
10-14	8,190	8,780	16,970	8,320	8,930	17,250	8,460	9,060	17,540	8,590	9,210	17,800
15-19	8,270	8,810	17,070	8,210	8,810	17,030	8,220	8,860	17,080	8,260	8,950	17,190
20-24	9,190	10,120	19,310	8,970	9,910	18,870	8,850	9,680	18,530	8,780	9,520	18,300
25-29	8,960	9,320	18,270	9,290	9,730	19,020	9,420	9,970	19,400	9,420	10,180	19,590
30-34	7,910	8,310	16,220	8,070	8,400	16,470	8,290	8,520	16,830	8,610	8,660	17,270
35-39	7,620	7,570	15,180	7,750	7,690	15,440	7,870	7,890	15,770	7,930	8,180	16,110
40-44	7,450	7,190	14,640	7,530	7,370	14,910	7,570	7,430	15,000	7,580	7,370	14,960
45-49	5,800	5,420	11,210	6,180	5,750	11,930	6,550	6,250	12,790	6,990	6,610	13,600
50-54	4,530	4,170	8,680	4,610	4,260	8,870	4,820	4,360	9,170	5,020	4,590	9,610
55-59	4,330	4,020	8,340	4,280	3,980	8,260	4,320	3,930	8,240	4,300	3,960	8,260
60-64	4,740	4,330	9,090	4,750	4,290	9,040	4,540	4,240	8,780	4,460	4,010	8,480
65-69	4,200	4,030	8,240	4,300	4,020	8,320	4,470	4,060	8,530	4,520	4,160	8,680
70-74	4,000	3,490	7,490	4,040	3,620	7,660	3,990	3,610	7,620	3,970	3,590	7,560
75-79	2,620	2,120	4,740	2,750	2,270	5,020	2,940	2,450	5,380	3,160	2,660	5,820
80-84	1,550	1,250	2,800	1,660	1,320	2,980	1,780	1,420	3,200	1,860	1,500	3,350
85+	1,080	690	1,770	1,140	730	1,890	1,230	790	2,050	1,340	900	2,230
All Ages	**108,300**	**108,600**	**217,100**	**110,000**	**110,300**	**220,300**	**111,700**	**112,000**	**223,500**	**113,300**	**113,700**	**226,900**

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	9,520	10,040	19,560	9,600	10,130	19,730	9,690	10,220	19,900	9,750	10,300	20,070
05-09	9,120	9,700	18,820	9,210	9,780	18,990	9,290	9,870	19,160	9,380	9,970	19,340
10-14	8,730	9,330	18,060	8,840	9,460	18,300	8,950	9,580	18,520	9,050	9,680	18,730
15-19	8,330	9,010	17,340	8,480	9,160	17,660	8,630	9,310	17,950	8,760	9,460	18,230
20-24	8,710	9,420	18,140	8,680	9,270	17,960	8,630	9,270	17,900	8,640	9,330	17,950
25-29	9,420	10,130	19,550	9,310	10,120	19,430	9,090	9,900	18,990	8,960	9,690	18,650
30-34	8,920	9,040	17,950	9,230	9,410	18,640	9,570	9,830	19,380	9,700	10,090	19,780
35-39	7,980	8,320	16,300	8,100	8,440	16,540	8,270	8,500	16,780	8,500	8,640	17,150
40-44	7,670	7,460	15,130	7,650	7,530	15,180	7,800	7,660	15,460	7,910	7,860	15,770
45-49	7,220	6,940	14,170	7,400	7,100	14,510	7,500	7,290	14,790	7,530	7,340	14,870
50-54	5,310	4,810	10,120	5,690	5,210	10,900	6,080	5,560	11,610	6,440	6,040	12,490
55-59	4,360	3,970	8,330	4,430	3,980	8,420	4,510	4,080	8,580	4,720	4,180	8,900
60-64	4,350	3,940	8,280	4,270	3,900	8,170	4,230	3,870	8,110	4,260	3,820	8,090
65-69	4,570	4,180	8,740	4,580	4,120	8,700	4,590	4,070	8,670	4,380	4,050	8,430
70-74	3,890	3,640	7,520	3,900	3,670	7,570	4,000	3,660	7,660	4,180	3,710	7,880
75-79	3,400	2,870	6,270	3,510	2,970	6,490	3,560	3,110	6,660	3,520	3,100	6,620
80-84	1,960	1,490	3,440	2,090	1,620	3,710	2,190	1,730	3,920	2,370	1,880	4,240
85+	1,480	1,010	2,480	1,580	1,090	2,670	1,700	1,150	2,850	1,840	1,250	3,100
All Ages	**114,900**	**115,300**	**230,200**	**116,600**	**117,000**	**233,500**	**118,200**	**118,800**	**236,900**	**119,900**	**120,400**	**240,300**

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

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	9,850	10,390	20,230	9,930	10,470	20,400
05-09	9,460	10,050	19,520	9,550	10,150	19,690
10-14	9,140	9,770	18,930	9,230	9,870	19,110
15-19	8,910	9,600	18,510	9,030	9,740	18,770
20-24	8,670	9,410	18,070	8,740	9,470	18,220
25-29	8,900	9,510	18,420	8,820	9,410	18,240
30-34	9,710	10,290	19,980	9,720	10,240	19,960
35-39	8,810	8,790	17,610	9,120	9,180	18,290
40-44	7,980	8,160	16,140	8,030	8,290	16,320
45-49	7,550	7,280	14,830	7,640	7,390	15,030
50-54	6,870	6,400	13,290	7,120	6,730	13,860
55-59	4,930	4,420	9,330	5,220	4,620	9,830
60-64	4,230	3,860	8,110	4,310	3,890	8,190
65-69	4,320	3,820	8,150	4,210	3,770	7,970
70-74	4,220	3,820	8,050	4,270	3,840	8,110
75-79	3,510	3,080	6,580	3,430	3,140	6,570
80-84	2,580	2,070	4,640	2,780	2,230	5,020
85+	1,940	1,340	3,280	2,100	1,390	3,490
All Ages	**121,600**	**122,100**	**243,700**	**123,300**	**123,800**	**247,100**

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

Table 121 - Māori population projections, single year, Northland 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	3,370	3,460	6,830	3,340	3,390	6,740	3,310	3,400	6,690	3,260	3,400	6,660
05-09	3,650	3,940	7,600	3,650	3,880	7,540	3,600	3,830	7,430	3,610	3,740	7,350
10-14	3,400	3,490	6,890	3,480	3,720	7,200	3,640	3,900	7,540	3,710	4,090	7,800
15-19	2,780	3,070	5,860	2,850	3,060	5,920	2,950	3,080	6,030	3,070	3,110	6,190
20-24	2,190	2,320	4,510	2,190	2,410	4,600	2,230	2,480	4,710	2,280	2,620	4,900
25-29	2,400	2,320	4,720	2,390	2,360	4,750	2,350	2,400	4,760	2,350	2,420	4,780
30-34	2,030	1,960	4,000	2,220	2,090	4,310	2,390	2,240	4,620	2,510	2,350	4,860
35-39	1,780	1,640	3,420	1,800	1,720	3,520	1,890	1,820	3,710	2,030	1,930	3,960
40-44	1,810	1,690	3,510	1,820	1,670	3,490	1,820	1,660	3,480	1,850	1,670	3,520
45-49	2,060	1,950	4,010	2,070	1,890	3,960	2,110	1,910	4,020	2,030	1,910	3,940
50-54	2,000	1,930	3,930	1,980	1,950	3,930	2,000	1,930	3,920	2,080	1,940	4,020
55-59	2,080	1,840	3,920	2,120	1,880	3,990	2,130	1,950	4,090	2,100	1,950	4,050
60-64	1,600	1,350	2,940	1,730	1,470	3,190	1,830	1,570	3,400	1,920	1,650	3,570
65-69	1,210	1,050	2,260	1,250	1,090	2,350	1,310	1,120	2,430	1,410	1,200	2,610
70-74	810	680	1,490	860	720	1,580	900	760	1,660	970	830	1,790
75-79	540	440	970	580	450	1,020	590	470	1,060	620	480	1,100
80-84	310	220	530	310	220	530	340	240	580	370	260	630
85+	220	120	330	220	120	340	220	130	350	230	120	360
All Ages	**34,300**	**33,500**	**67,700**	**34,900**	**34,100**	**69,000**	**35,600**	**34,900**	**70,500**	**36,400**	**35,700**	**72,100**

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	3,250	3,400	6,650	3,250	3,420	6,680	3,280	3,470	6,750	3,320	3,500	6,820
05-09	3,580	3,680	7,260	3,520	3,620	7,150	3,490	3,560	7,050	3,430	3,540	6,980
10-14	3,740	4,160	7,900	3,810	4,120	7,920	3,810	4,070	7,890	3,750	4,000	7,750
15-19	3,180	3,270	6,450	3,290	3,440	6,730	3,370	3,680	7,050	3,520	3,850	7,370
20-24	2,340	2,650	4,990	2,380	2,730	5,110	2,430	2,710	5,140	2,500	2,700	5,200
25-29	2,360	2,440	4,800	2,350	2,460	4,810	2,330	2,520	4,850	2,350	2,560	4,910
30-34	2,620	2,410	5,040	2,660	2,490	5,140	2,630	2,500	5,130	2,570	2,520	5,090
35-39	2,090	2,060	4,150	2,250	2,130	4,380	2,420	2,260	4,680	2,580	2,390	4,970
40-44	1,890	1,710	3,600	1,940	1,780	3,730	1,960	1,850	3,820	2,040	1,940	3,980
45-49	1,990	1,840	3,830	1,930	1,800	3,730	1,940	1,780	3,710	1,920	1,750	3,670
50-54	2,090	1,980	4,070	2,140	2,000	4,140	2,140	1,940	4,090	2,170	1,950	4,120
55-59	2,110	1,930	4,040	2,050	1,940	3,990	2,030	1,960	4,000	2,040	1,930	3,970
60-64	2,020	1,740	3,750	2,100	1,820	3,920	2,140	1,860	4,000	2,150	1,930	4,080
65-69	1,460	1,270	2,730	1,570	1,300	2,870	1,690	1,420	3,110	1,780	1,510	3,290
70-74	1,070	880	1,940	1,110	940	2,060	1,150	990	2,130	1,200	1,010	2,210
75-79	620	520	1,130	660	540	1,200	710	570	1,280	740	590	1,330
80-84	370	270	650	390	290	680	430	300	730	450	320	760
85+	260	130	390	270	130	400	260	140	390	280	140	430
All Ages	**37,000**	**36,300**	**73,400**	**37,700**	**37,000**	**74,600**	**38,200**	**37,600**	**75,800**	**38,800**	**38,100**	**76,900**

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	3,360	3,530	6,890	3,380	3,580	6,960	3,420	3,620	7,030	3,450	3,640	7,090
05-09	3,380	3,530	6,900	3,360	3,520	6,880	3,350	3,550	6,900	3,390	3,590	6,980
10-14	3,740	3,890	7,630	3,700	3,830	7,530	3,640	3,770	7,410	3,600	3,710	7,310
15-19	3,580	4,020	7,600	3,610	4,080	7,690	3,670	4,040	7,720	3,680	4,000	7,680
20-24	2,600	2,700	5,300	2,700	2,850	5,540	2,800	3,010	5,810	2,890	3,240	6,130
25-29	2,360	2,670	5,030	2,400	2,680	5,080	2,420	2,750	5,170	2,470	2,720	5,190
30-34	2,540	2,510	5,050	2,540	2,510	5,050	2,510	2,510	5,030	2,490	2,570	5,060
35-39	2,680	2,490	5,170	2,790	2,540	5,340	2,820	2,610	5,430	2,790	2,620	5,410
40-44	2,160	2,040	4,200	2,220	2,160	4,380	2,370	2,230	4,600	2,550	2,360	4,910
45-49	1,930	1,750	3,690	1,970	1,780	3,760	2,020	1,850	3,870	2,040	1,910	3,950
50-54	2,080	1,940	4,010	2,040	1,860	3,900	1,970	1,820	3,790	1,980	1,800	3,770
55-59	2,110	1,940	4,040	2,110	1,980	4,090	2,160	1,990	4,150	2,170	1,940	4,110
60-64	2,120	1,920	4,030	2,120	1,900	4,020	2,060	1,910	3,970	2,050	1,940	3,980
65-69	1,860	1,570	3,430	1,950	1,650	3,600	2,030	1,730	3,770	2,070	1,780	3,850
70-74	1,300	1,080	2,380	1,340	1,150	2,480	1,430	1,170	2,600	1,540	1,270	2,820
75-79	790	650	1,430	880	690	1,570	920	750	1,670	950	800	1,750
80-84	470	330	800	460	360	810	490	370	860	520	380	900
85+	310	150	460	330	160	490	340	180	520	360	180	540
All Ages	**39,300**	**38,700**	**78,000**	**39,900**	**39,300**	**79,200**	**40,400**	**39,900**	**80,300**	**41,000**	**40,400**	**81,400**

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	3,480	3,660	7,140	3,500	3,690	7,190	3,530	3,720	7,240	3,550	3,750	7,300
05-09	3,420	3,630	7,050	3,450	3,670	7,120	3,490	3,700	7,190	3,520	3,740	7,260
10-14	3,550	3,680	7,230	3,490	3,670	7,160	3,470	3,660	7,130	3,470	3,690	7,150
15-19	3,620	3,930	7,550	3,600	3,830	7,430	3,560	3,760	7,320	3,500	3,700	7,200
20-24	3,040	3,410	6,450	3,100	3,580	6,680	3,130	3,650	6,780	3,190	3,610	6,810
25-29	2,540	2,710	5,250	2,650	2,720	5,360	2,740	2,860	5,610	2,850	3,030	5,880
30-34	2,500	2,610	5,110	2,520	2,720	5,240	2,560	2,730	5,300	2,580	2,800	5,390
35-39	2,730	2,640	5,370	2,710	2,630	5,340	2,700	2,630	5,340	2,680	2,640	5,320
40-44	2,710	2,490	5,200	2,820	2,590	5,410	2,930	2,650	5,580	2,960	2,720	5,680
45-49	2,110	2,000	4,120	2,240	2,100	4,330	2,300	2,220	4,520	2,450	2,300	4,750
50-54	1,960	1,770	3,730	1,980	1,780	3,750	2,020	1,810	3,820	2,070	1,870	3,940
55-59	2,200	1,940	4,140	2,110	1,940	4,040	2,070	1,860	3,930	2,010	1,830	3,830
60-64	2,050	1,910	3,960	2,120	1,920	4,040	2,130	1,960	4,090	2,180	1,980	4,160
65-69	2,090	1,850	3,950	2,060	1,840	3,900	2,070	1,830	3,900	2,010	1,840	3,850
70-74	1,620	1,350	2,970	1,690	1,410	3,100	1,780	1,480	3,270	1,870	1,560	3,430
75-79	1,000	820	1,820	1,090	890	1,980	1,130	940	2,070	1,200	950	2,160
80-84	540	390	930	580	430	1,010	660	470	1,130	700	530	1,230
85+	390	210	590	420	220	630	420	240	650	440	250	690
All Ages	**41,600**	**41,000**	**82,600**	**42,100**	**41,600**	**83,700**	**42,700**	**42,200**	**84,900**	**43,200**	**42,800**	**86,000**

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	3,580	3,780	7,360	3,620	3,820	7,440	3,640	3,850	7,500	3,680	3,880	7,570
05-09	3,550	3,770	7,330	3,580	3,800	7,380	3,610	3,830	7,440	3,640	3,860	7,490
10-14	3,500	3,730	7,230	3,530	3,770	7,300	3,570	3,800	7,370	3,600	3,840	7,440
15-19	3,470	3,640	7,100	3,410	3,610	7,030	3,360	3,590	6,950	3,340	3,590	6,920
20-24	3,200	3,570	6,770	3,140	3,510	6,640	3,120	3,400	6,520	3,080	3,340	6,420
25-29	2,940	3,260	6,200	3,100	3,430	6,530	3,160	3,600	6,760	3,190	3,670	6,860
30-34	2,630	2,780	5,410	2,700	2,780	5,480	2,800	2,780	5,590	2,900	2,930	5,830
35-39	2,660	2,690	5,350	2,670	2,730	5,400	2,690	2,840	5,530	2,730	2,860	5,590
40-44	2,930	2,730	5,660	2,870	2,750	5,620	2,850	2,740	5,590	2,840	2,740	5,590
45-49	2,640	2,430	5,060	2,800	2,560	5,360	2,910	2,670	5,570	3,020	2,730	5,750
50-54	2,080	1,940	4,020	2,160	2,020	4,180	2,280	2,120	4,400	2,350	2,240	4,590
55-59	2,010	1,810	3,820	2,000	1,780	3,780	2,020	1,790	3,810	2,060	1,820	3,880
60-64	2,190	1,920	4,120	2,220	1,930	4,160	2,140	1,930	4,070	2,100	1,860	3,960
65-69	2,000	1,870	3,870	2,000	1,840	3,840	2,080	1,850	3,930	2,090	1,890	3,980
70-74	1,920	1,610	3,530	1,950	1,690	3,630	1,920	1,680	3,600	1,930	1,670	3,600
75-79	1,300	1,040	2,340	1,370	1,100	2,470	1,420	1,150	2,570	1,510	1,220	2,730
80-84	730	570	1,300	780	590	1,370	860	650	1,510	880	700	1,570
85+	470	240	720	490	260	750	530	280	820	590	320	910
All Ages	**43,800**	**43,400**	**87,200**	**44,400**	**44,000**	**88,300**	**45,000**	**44,600**	**89,500**	**45,500**	**45,200**	**90,700**

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	3,720	3,920	7,630	3,740	3,950	7,700	3,780	3,990	7,760	3,800	4,020	7,820
05-09	3,660	3,890	7,550	3,700	3,920	7,610	3,730	3,950	7,680	3,760	3,990	7,750
10-14	3,640	3,880	7,520	3,670	3,910	7,580	3,700	3,950	7,640	3,720	3,970	7,700
15-19	3,330	3,610	6,940	3,360	3,650	7,020	3,400	3,690	7,090	3,430	3,730	7,160
20-24	3,020	3,270	6,300	2,990	3,210	6,200	2,930	3,180	6,120	2,880	3,170	6,040
25-29	3,250	3,640	6,890	3,260	3,600	6,860	3,200	3,530	6,730	3,180	3,430	6,610
30-34	3,020	3,090	6,110	3,110	3,320	6,430	3,270	3,500	6,760	3,330	3,670	7,000
35-39	2,750	2,930	5,680	2,800	2,910	5,710	2,870	2,900	5,770	2,970	2,910	5,880
40-44	2,820	2,750	5,570	2,800	2,800	5,600	2,820	2,840	5,660	2,830	2,950	5,780
45-49	3,050	2,800	5,850	3,020	2,810	5,830	2,970	2,830	5,800	2,940	2,820	5,760
50-54	2,500	2,320	4,820	2,680	2,450	5,130	2,850	2,590	5,430	2,960	2,690	5,650
55-59	2,110	1,880	3,990	2,120	1,940	4,070	2,190	2,030	4,220	2,320	2,130	4,440
60-64	2,040	1,830	3,870	2,050	1,810	3,860	2,040	1,790	3,830	2,060	1,800	3,860
65-69	2,150	1,920	4,060	2,160	1,870	4,030	2,190	1,880	4,080	2,110	1,890	4,000
70-74	1,880	1,680	3,550	1,860	1,710	3,570	1,870	1,680	3,550	1,950	1,690	3,640
75-79	1,600	1,300	2,900	1,660	1,340	3,000	1,690	1,420	3,110	1,660	1,410	3,070
80-84	930	690	1,620	1,010	760	1,770	1,060	810	1,870	1,110	840	1,950
85+	630	370	1,000	660	390	1,050	700	400	1,110	780	470	1,260
All Ages	**46,100**	**45,800**	**91,900**	**46,700**	**46,400**	**93,000**	**47,200**	**47,000**	**94,200**	**47,800**	**47,600**	**95,400**

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

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	3,840	4,050	7,890	3,870	4,080	7,950
05-09	3,800	4,030	7,820	3,830	4,060	7,890
10-14	3,750	4,000	7,760	3,780	4,030	7,820
15-19	3,470	3,770	7,240	3,500	3,810	7,310
20-24	2,860	3,160	6,020	2,850	3,180	6,030
25-29	3,140	3,370	6,510	3,080	3,300	6,390
30-34	3,360	3,740	7,100	3,430	3,710	7,140
35-39	3,070	3,060	6,130	3,190	3,230	6,410
40-44	2,870	2,970	5,840	2,890	3,040	5,930
45-49	2,940	2,820	5,760	2,920	2,830	5,750
50-54	3,070	2,750	5,820	3,100	2,820	5,930
55-59	2,390	2,250	4,630	2,540	2,320	4,860
60-64	2,090	1,830	3,930	2,150	1,900	4,040
65-69	2,080	1,820	3,900	2,020	1,800	3,820
70-74	1,960	1,740	3,700	2,020	1,770	3,790
75-79	1,680	1,400	3,080	1,630	1,420	3,050
80-84	1,190	900	2,090	1,270	960	2,230
85+	820	510	1,340	890	530	1,420
All Ages	**48,400**	**48,200**	**96,600**	**49,000**	**48,800**	**97,800**

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

Table 122 - Māori population projections, single year, Auckland 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	1,620	1,710	3,340	1,530	1,610	3,140	1,490	1,550	3,040	1,440	1,530	2,970
05-09	1,720	1,800	3,520	1,610	1,800	3,410	1,490	1,690	3,180	1,370	1,540	2,910
10-14	1,690	1,730	3,420	1,690	1,670	3,360	1,670	1,670	3,340	1,590	1,600	3,190
15-19	1,680	1,840	3,520	1,730	1,860	3,590	1,750	1,870	3,620	1,720	1,840	3,560
20-24	2,140	2,100	4,250	2,060	2,110	4,170	2,080	2,090	4,170	2,090	2,060	4,150
25-29	1,970	2,050	4,010	2,070	2,090	4,160	2,120	2,170	4,290	2,090	2,150	4,230
30-34	1,420	1,340	2,760	1,500	1,460	2,960	1,570	1,530	3,100	1,650	1,680	3,330
35-39	1,230	1,240	2,460	1,250	1,150	2,400	1,230	1,140	2,370	1,210	1,120	2,330
40-44	1,220	1,230	2,460	1,160	1,260	2,420	1,120	1,210	2,330	1,080	1,090	2,180
45-49	1,270	1,250	2,530	1,240	1,210	2,450	1,210	1,190	2,390	1,130	1,180	2,310
50-54	1,120	1,110	2,230	1,120	1,080	2,200	1,130	1,040	2,170	1,120	1,000	2,110
55-59	1,110	1,090	2,200	1,110	1,100	2,220	1,110	1,110	2,220	1,070	1,030	2,100
60-64	780	670	1,450	810	720	1,530	830	760	1,590	880	860	1,730
65-69	530	480	1,020	570	510	1,080	610	520	1,130	620	520	1,140
70-74	320	300	620	360	300	660	390	330	720	410	370	780
75-79	210	180	390	220	190	410	220	210	430	230	210	440
80-84	120	80	200	120	100	220	140	110	250	150	110	260
85+	100	30	140	100	40	160	110	60	170	130	70	190
All Ages	**20,300**	**20,200**	**40,500**	**20,300**	**20,300**	**40,500**	**20,300**	**20,300**	**40,500**	**20,000**	**20,000**	**39,900**

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	1,430	1,550	2,980	1,450	1,540	2,990	1,500	1,600	3,100	1,560	1,640	3,210
05-09	1,320	1,430	2,740	1,250	1,360	2,620	1,180	1,270	2,440	1,140	1,220	2,360
10-14	1,480	1,560	3,040	1,420	1,510	2,930	1,330	1,530	2,860	1,230	1,450	2,670
15-19	1,740	1,790	3,530	1,720	1,760	3,480	1,740	1,720	3,460	1,740	1,740	3,470
20-24	2,070	2,180	4,260	2,120	2,260	4,380	2,190	2,300	4,500	2,240	2,340	4,580
25-29	2,060	2,040	4,110	2,060	2,020	4,080	1,980	2,030	4,020	2,000	2,030	4,040
30-34	1,800	1,840	3,640	1,880	1,930	3,810	1,990	1,980	3,970	2,050	2,070	4,130
35-39	1,240	1,110	2,350	1,280	1,170	2,460	1,370	1,310	2,670	1,440	1,390	2,830
40-44	1,050	1,090	2,140	1,050	1,050	2,090	1,080	970	2,050	1,080	970	2,060
45-49	1,100	1,090	2,190	1,030	1,030	2,060	980	1,060	2,050	950	1,030	1,980
50-54	1,090	1,030	2,120	1,080	1,030	2,110	1,060	1,000	2,070	1,040	990	2,030
55-59	1,030	960	1,990	970	940	1,910	980	910	1,890	990	880	1,870
60-64	930	920	1,850	1,000	970	1,970	1,010	990	1,990	1,010	1,000	2,010
65-69	660	550	1,210	690	570	1,260	710	620	1,330	740	650	1,390
70-74	420	380	800	460	400	870	500	430	930	540	450	980
75-79	240	240	490	260	240	510	300	240	540	320	270	590
80-84	160	120	290	170	140	310	180	150	320	170	170	340
85+	130	70	200	130	80	220	140	100	240	150	120	270
All Ages	**20,000**	**20,000**	**39,900**	**20,000**	**20,000**	**40,000**	**20,200**	**20,200**	**40,400**	**20,400**	**20,400**	**40,800**

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	1,610	1,690	3,290	1,630	1,720	3,350	1,660	1,730	3,390	1,690	1,770	3,470
05-09	1,130	1,240	2,370	1,150	1,280	2,430	1,200	1,300	2,500	1,260	1,360	2,630
10-14	1,150	1,340	2,490	1,110	1,240	2,350	1,050	1,180	2,220	980	1,090	2,070
15-19	1,700	1,700	3,400	1,610	1,690	3,300	1,570	1,650	3,220	1,490	1,690	3,170
20-24	2,260	2,360	4,620	2,300	2,330	4,630	2,290	2,310	4,600	2,330	2,290	4,620
25-29	2,050	2,060	4,110	2,050	2,200	4,250	2,110	2,290	4,400	2,190	2,350	4,540
30-34	2,060	2,090	4,150	2,050	2,000	4,050	2,060	1,980	4,040	1,980	2,010	3,990
35-39	1,560	1,570	3,130	1,720	1,740	3,460	1,810	1,840	3,650	1,940	1,900	3,830
40-44	1,100	980	2,080	1,140	990	2,120	1,190	1,060	2,240	1,280	1,200	2,480
45-49	950	940	1,890	930	950	1,880	940	910	1,850	980	850	1,830
50-54	1,000	1,010	2,010	980	930	1,910	920	880	1,800	880	920	1,800
55-59	1,000	860	1,870	980	900	1,890	990	910	1,900	980	890	1,870
60-64	1,000	940	1,940	960	880	1,840	900	870	1,770	920	840	1,760
65-69	790	760	1,550	850	820	1,670	920	870	1,790	930	900	1,830
70-74	560	450	1,020	600	480	1,090	620	500	1,120	650	540	1,190
75-79	350	310	650	350	320	670	400	340	740	430	370	800
80-84	180	180	360	200	200	400	210	190	410	240	190	430
85+	170	110	280	180	120	300	180	140	320	190	170	350
All Ages	**20,600**	**20,600**	**41,200**	**20,800**	**20,800**	**41,600**	**21,000**	**21,000**	**42,000**	**21,300**	**21,300**	**42,700**

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	1,800	1,890	3,690	1,800	1,890	3,700	1,810	1,900	3,700	1,810	1,900	3,710
05-09	1,510	1,610	3,120	1,550	1,640	3,190	1,580	1,680	3,250	1,600	1,700	3,300
10-14	1,110	1,230	2,340	1,170	1,290	2,450	1,220	1,340	2,570	1,270	1,390	2,660
15-19	1,200	1,300	2,500	1,170	1,270	2,440	1,170	1,300	2,470	1,200	1,350	2,540
20-24	2,150	2,320	4,480	2,060	2,250	4,320	2,000	2,160	4,160	1,970	2,070	4,040
25-29	2,400	2,400	4,790	2,420	2,440	4,860	2,400	2,420	4,830	2,330	2,420	4,750
30-34	2,240	2,370	4,610	2,300	2,420	4,720	2,330	2,460	4,800	2,400	2,440	4,840
35-39	1,980	1,980	3,960	2,010	1,990	4,000	2,080	2,030	4,110	2,090	2,180	4,270
40-44	1,900	1,830	3,730	1,970	1,940	3,920	2,000	1,970	3,970	2,000	1,900	3,900
45-49	1,220	1,110	2,330	1,310	1,200	2,510	1,440	1,390	2,830	1,620	1,570	3,190
50-54	920	750	1,660	930	760	1,690	950	780	1,730	1,000	790	1,790
55-59	830	840	1,660	810	810	1,620	820	730	1,550	810	750	1,560
60-64	940	840	1,790	930	840	1,770	890	870	1,760	880	800	1,690
65-69	870	770	1,640	890	750	1,640	910	730	1,640	900	780	1,680
70-74	870	820	1,690	880	840	1,730	880	790	1,680	850	740	1,590
75-79	560	460	1,030	580	480	1,050	620	570	1,190	680	630	1,310
80-84	360	310	670	400	330	730	420	340	760	450	360	810
85+	270	210	470	280	230	510	300	240	560	320	270	590
All Ages	**23,100**	**23,000**	**46,200**	**23,500**	**23,400**	**46,900**	**23,800**	**23,700**	**47,500**	**24,200**	**24,100**	**48,200**

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	1,810	1,900	3,720	1,820	1,900	3,720	1,820	1,900	3,720	1,810	1,900	3,720
05-09	1,610	1,710	3,330	1,620	1,720	3,350	1,630	1,730	3,360	1,640	1,740	3,380
10-14	1,320	1,430	2,750	1,360	1,480	2,840	1,400	1,520	2,910	1,430	1,550	2,980
15-19	1,250	1,370	2,620	1,310	1,430	2,750	1,380	1,490	2,870	1,430	1,550	2,980
20-24	1,920	2,020	3,940	1,850	1,930	3,790	1,830	1,900	3,730	1,830	1,930	3,750
25-29	2,300	2,400	4,700	2,220	2,430	4,650	2,130	2,360	4,490	2,060	2,270	4,330
30-34	2,410	2,450	4,860	2,460	2,430	4,890	2,480	2,470	4,950	2,470	2,460	4,920
35-39	2,160	2,290	4,450	2,240	2,350	4,590	2,300	2,390	4,700	2,340	2,440	4,780
40-44	2,020	1,890	3,910	1,950	1,920	3,870	1,990	1,930	3,920	2,050	1,970	4,020
45-49	1,710	1,690	3,400	1,840	1,750	3,590	1,920	1,860	3,780	1,940	1,890	3,830
50-54	1,060	870	1,930	1,160	1,000	2,160	1,250	1,100	2,340	1,370	1,280	2,660
55-59	820	730	1,550	870	670	1,540	880	680	1,560	900	700	1,610
60-64	840	760	1,590	800	800	1,600	780	770	1,560	790	690	1,490
65-69	910	800	1,710	900	790	1,690	890	780	1,670	850	820	1,670
70-74	800	730	1,530	820	700	1,520	840	680	1,520	860	670	1,530
75-79	760	690	1,450	780	720	1,500	800	750	1,540	800	700	1,500
80-84	460	360	810	460	370	830	470	370	840	510	460	970
85+	370	290	650	410	320	720	440	350	790	470	360	830
All Ages	**24,500**	**24,400**	**48,900**	**24,900**	**24,700**	**49,600**	**25,200**	**25,100**	**50,300**	**25,600**	**25,400**	**50,900**

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

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	1,810	1,900	3,700	1,810	1,890	3,700
05-09	1,640	1,740	3,390	1,650	1,750	3,390
10-14	1,450	1,570	3,030	1,470	1,590	3,060
15-19	1,480	1,590	3,080	1,530	1,640	3,170
20-24	1,850	1,980	3,830	1,900	2,000	3,910
25-29	2,030	2,170	4,210	1,980	2,120	4,100
30-34	2,400	2,460	4,850	2,370	2,440	4,810
35-39	2,400	2,420	4,830	2,410	2,430	4,840
40-44	2,070	2,130	4,200	2,140	2,230	4,370
45-49	1,940	1,820	3,760	1,960	1,820	3,780
50-54	1,550	1,460	3,020	1,650	1,580	3,230
55-59	950	720	1,670	1,010	790	1,800
60-64	780	720	1,500	800	700	1,500
65-69	850	750	1,600	800	710	1,510
70-74	850	720	1,570	860	740	1,600
75-79	770	650	1,420	720	650	1,370
80-84	570	510	1,080	640	560	1,210
85+	490	380	870	530	380	910
All Ages	**25,900**	**25,700**	**51,600**	**26,200**	**26,000**	**52,200**

Table 123 - Māori population projections, single year, Waitematā 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	3,150	3,400	6,550	3,210	3,410	6,620	3,250	3,470	6,720	3,310	3,520	6,840
05-09	3,300	3,590	6,890	3,250	3,580	6,830	3,190	3,510	6,690	3,160	3,490	6,650
10-14	3,010	3,160	6,170	3,170	3,310	6,480	3,320	3,500	6,830	3,410	3,610	7,020
15-19	2,800	2,990	5,800	2,790	3,060	5,850	2,830	3,110	5,940	2,930	3,200	6,130
20-24	2,900	3,080	5,970	2,950	3,050	6,000	3,040	3,130	6,170	3,080	3,180	6,260
25-29	2,580	2,650	5,230	2,660	2,740	5,400	2,740	2,800	5,540	2,780	2,840	5,620
30-34	2,010	1,930	3,940	2,090	2,070	4,160	2,220	2,170	4,390	2,350	2,380	4,740
35-39	1,780	1,780	3,560	1,800	1,780	3,580	1,800	1,790	3,590	1,870	1,770	3,640
40-44	1,810	1,760	3,570	1,760	1,690	3,450	1,740	1,720	3,460	1,740	1,740	3,480
45-49	1,880	1,930	3,810	1,890	1,910	3,800	1,880	1,850	3,730	1,790	1,780	3,570
50-54	1,590	1,710	3,300	1,600	1,740	3,340	1,680	1,780	3,460	1,760	1,840	3,590
55-59	1,490	1,360	2,850	1,510	1,400	2,910	1,510	1,430	2,940	1,490	1,500	2,990
60-64	990	850	1,840	1,070	930	2,000	1,150	1,030	2,180	1,260	1,090	2,340
65-69	700	630	1,330	750	650	1,390	760	670	1,440	800	710	1,510
70-74	420	350	780	440	380	820	500	410	910	540	440	980
75-79	270	200	470	260	220	480	270	240	500	280	250	530
80-84	160	120	280	190	120	320	210	130	340	220	150	370
85+	110	40	160	120	60	170	130	60	190	140	70	220
All Ages	**31,000**	**31,500**	**62,500**	**31,500**	**32,100**	**63,600**	**32,200**	**32,800**	**65,000**	**32,900**	**33,500**	**66,500**

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	3,340	3,550	6,880	3,370	3,550	6,920	3,410	3,620	7,020	3,450	3,650	7,110
05-09	3,160	3,470	6,630	3,190	3,480	6,680	3,270	3,490	6,760	3,300	3,550	6,850
10-14	3,440	3,730	7,170	3,410	3,720	7,120	3,370	3,720	7,080	3,300	3,630	6,930
15-19	3,070	3,200	6,270	3,230	3,400	6,630	3,400	3,560	6,960	3,550	3,750	7,300
20-24	3,080	3,290	6,370	3,030	3,250	6,280	3,030	3,330	6,350	3,060	3,360	6,420
25-29	2,790	2,840	5,630	2,870	2,920	5,790	2,930	2,910	5,840	3,020	2,980	6,000
30-34	2,490	2,500	4,990	2,610	2,640	5,240	2,690	2,730	5,420	2,760	2,780	5,540
35-39	1,950	1,870	3,820	2,020	1,930	3,940	2,110	2,070	4,180	2,230	2,170	4,400
40-44	1,690	1,710	3,400	1,690	1,680	3,370	1,710	1,690	3,400	1,710	1,690	3,400
45-49	1,750	1,680	3,430	1,730	1,670	3,400	1,680	1,600	3,290	1,660	1,620	3,280
50-54	1,800	1,840	3,640	1,780	1,800	3,570	1,790	1,790	3,580	1,780	1,730	3,500
55-59	1,480	1,530	3,020	1,500	1,580	3,070	1,510	1,610	3,120	1,580	1,650	3,240
60-64	1,340	1,190	2,520	1,400	1,260	2,670	1,430	1,300	2,730	1,420	1,330	2,750
65-69	840	730	1,570	910	750	1,660	990	840	1,820	1,050	930	1,980
70-74	570	470	1,040	610	540	1,150	650	560	1,210	670	580	1,250
75-79	300	270	570	350	290	640	360	310	670	420	330	740
80-84	230	170	400	210	150	360	200	170	370	200	180	390
85+	160	80	230	180	110	280	200	120	320	220	120	340
All Ages	**33,500**	**34,100**	**67,600**	**34,100**	**34,700**	**68,800**	**34,700**	**35,400**	**70,100**	**35,400**	**36,100**	**71,400**

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	3,490	3,700	7,200	3,540	3,740	7,280	3,580	3,790	7,370	3,610	3,840	7,450
05-09	3,360	3,590	6,950	3,380	3,620	7,010	3,410	3,640	7,050	3,460	3,690	7,150
10-14	3,260	3,610	6,870	3,270	3,600	6,860	3,310	3,610	6,920	3,370	3,620	6,990
15-19	3,630	3,850	7,480	3,670	3,970	7,640	3,630	3,970	7,610	3,600	3,970	7,560
20-24	3,150	3,440	6,590	3,300	3,450	6,740	3,460	3,650	7,120	3,630	3,810	7,440
25-29	3,050	3,020	6,070	3,060	3,140	6,200	3,010	3,090	6,110	3,010	3,170	6,180
30-34	2,790	2,810	5,600	2,810	2,820	5,630	2,900	2,900	5,800	2,960	2,890	5,850
35-39	2,360	2,380	4,740	2,510	2,500	5,000	2,620	2,640	5,260	2,700	2,730	5,430
40-44	1,770	1,670	3,440	1,850	1,770	3,620	1,930	1,830	3,750	2,020	1,970	3,990
45-49	1,660	1,640	3,300	1,610	1,620	3,230	1,610	1,590	3,200	1,630	1,590	3,220
50-54	1,680	1,650	3,330	1,650	1,550	3,200	1,630	1,550	3,180	1,580	1,480	3,060
55-59	1,660	1,700	3,360	1,700	1,710	3,410	1,680	1,670	3,350	1,690	1,670	3,350
60-64	1,400	1,390	2,790	1,400	1,430	2,830	1,410	1,480	2,890	1,430	1,510	2,940
65-69	1,160	980	2,130	1,240	1,070	2,310	1,300	1,150	2,450	1,330	1,180	2,520
70-74	700	620	1,320	740	640	1,380	810	660	1,460	880	730	1,610
75-79	450	350	800	470	380	850	510	450	960	560	470	1,030
80-84	220	190	410	240	210	440	280	220	490	280	230	520
85+	230	130	380	250	160	410	240	150	390	250	170	430
All Ages	**36,000**	**36,700**	**72,700**	**36,700**	**37,400**	**74,000**	**37,300**	**38,000**	**75,400**	**38,000**	**38,700**	**76,700**

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	3,660	3,870	7,540	3,700	3,910	7,610	3,740	3,950	7,690	3,780	3,990	7,770
05-09	3,510	3,740	7,250	3,550	3,790	7,340	3,600	3,840	7,440	3,640	3,880	7,530
10-14	3,410	3,670	7,080	3,460	3,720	7,180	3,490	3,750	7,250	3,530	3,770	7,300
15-19	3,530	3,890	7,420	3,490	3,860	7,350	3,490	3,850	7,350	3,530	3,870	7,400
20-24	3,780	4,000	7,790	3,870	4,100	7,970	3,900	4,230	8,130	3,880	4,230	8,100
25-29	3,040	3,210	6,250	3,130	3,280	6,420	3,280	3,300	6,570	3,450	3,500	6,950
30-34	3,040	2,970	6,010	3,080	3,010	6,090	3,090	3,130	6,220	3,040	3,090	6,130
35-39	2,770	2,780	5,550	2,800	2,810	5,620	2,820	2,820	5,640	2,910	2,910	5,820
40-44	2,140	2,080	4,220	2,280	2,280	4,560	2,420	2,400	4,820	2,540	2,540	5,080
45-49	1,620	1,600	3,220	1,690	1,570	3,260	1,770	1,680	3,450	1,850	1,740	3,580
50-54	1,560	1,500	3,060	1,560	1,520	3,080	1,510	1,500	3,010	1,510	1,470	2,980
55-59	1,680	1,610	3,280	1,590	1,530	3,110	1,550	1,440	2,990	1,540	1,430	2,970
60-64	1,500	1,550	3,050	1,570	1,600	3,170	1,620	1,610	3,230	1,600	1,580	3,170
65-69	1,330	1,210	2,540	1,310	1,270	2,580	1,310	1,310	2,620	1,320	1,360	2,680
70-74	940	810	1,750	1,030	860	1,890	1,110	950	2,060	1,180	1,020	2,200
75-79	580	500	1,070	610	530	1,130	640	540	1,180	700	550	1,250
80-84	330	240	570	360	250	610	380	280	660	420	350	760
85+	260	190	460	280	220	500	310	230	540	320	220	550
All Ages	**38,700**	**39,400**	**78,100**	**39,400**	**40,100**	**79,500**	**40,000**	**40,800**	**80,800**	**40,700**	**41,500**	**82,200**

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	3,820	4,040	7,850	3,850	4,080	7,940	3,900	4,130	8,030	3,940	4,180	8,120
05-09	3,690	3,930	7,610	3,730	3,970	7,700	3,770	4,010	7,780	3,810	4,050	7,860
10-14	3,580	3,820	7,400	3,620	3,870	7,500	3,670	3,920	7,600	3,720	3,980	7,700
15-19	3,600	3,870	7,470	3,630	3,930	7,560	3,690	3,970	7,660	3,720	4,010	7,730
20-24	3,840	4,230	8,060	3,770	4,150	7,910	3,730	4,120	7,850	3,730	4,110	7,840
25-29	3,620	3,660	7,280	3,770	3,860	7,630	3,860	3,950	7,810	3,900	4,090	7,980
30-34	3,040	3,160	6,200	3,070	3,200	6,270	3,160	3,280	6,440	3,310	3,290	6,600
35-39	2,980	2,900	5,870	3,070	2,970	6,040	3,100	3,020	6,130	3,110	3,140	6,250
40-44	2,620	2,630	5,250	2,690	2,680	5,370	2,720	2,720	5,440	2,740	2,730	5,470
45-49	1,940	1,880	3,820	2,070	1,990	4,060	2,200	2,190	4,390	2,350	2,310	4,660
50-54	1,530	1,480	3,000	1,520	1,480	3,000	1,590	1,460	3,040	1,670	1,560	3,230
55-59	1,490	1,370	2,860	1,470	1,390	2,860	1,480	1,410	2,880	1,430	1,390	2,820
60-64	1,610	1,570	3,180	1,600	1,520	3,110	1,510	1,440	2,950	1,480	1,350	2,830
65-69	1,330	1,390	2,730	1,410	1,430	2,840	1,480	1,480	2,960	1,530	1,490	3,020
70-74	1,210	1,060	2,270	1,210	1,090	2,300	1,190	1,140	2,340	1,190	1,180	2,370
75-79	760	620	1,370	800	690	1,500	900	730	1,620	970	810	1,780
80-84	460	370	830	480	400	880	500	430	930	530	440	970
85+	340	240	580	370	240	630	400	270	670	430	310	730
All Ages	**41,400**	**42,200**	**83,700**	**42,100**	**42,900**	**85,100**	**42,900**	**43,700**	**86,500**	**43,600**	**44,400**	**88,000**

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	3,990	4,220	8,210	4,040	4,280	8,310	4,090	4,330	8,420	4,140	4,380	8,530
05-09	3,850	4,100	7,940	3,890	4,140	8,030	3,930	4,190	8,120	3,980	4,240	8,210
10-14	3,770	4,020	7,790	3,810	4,070	7,880	3,850	4,110	7,970	3,900	4,160	8,050
15-19	3,750	4,030	7,780	3,810	4,080	7,890	3,850	4,130	7,990	3,900	4,180	8,090
20-24	3,770	4,130	7,900	3,840	4,130	7,970	3,870	4,190	8,050	3,930	4,230	8,160
25-29	3,870	4,090	7,960	3,830	4,090	7,920	3,760	4,010	7,770	3,720	3,990	7,710
30-34	3,490	3,500	6,980	3,660	3,660	7,320	3,820	3,860	7,670	3,900	3,960	7,860
35-39	3,070	3,100	6,170	3,060	3,180	6,240	3,100	3,210	6,310	3,190	3,290	6,490
40-44	2,830	2,820	5,650	2,900	2,810	5,710	2,990	2,890	5,880	3,030	2,940	5,970
45-49	2,460	2,450	4,920	2,540	2,540	5,090	2,610	2,600	5,210	2,650	2,630	5,280
50-54	1,750	1,620	3,370	1,850	1,760	3,610	1,980	1,870	3,840	2,110	2,070	4,180
55-59	1,430	1,360	2,790	1,440	1,370	2,810	1,440	1,370	2,800	1,500	1,350	2,850
60-64	1,470	1,350	2,820	1,420	1,290	2,710	1,410	1,310	2,720	1,410	1,330	2,740
65-69	1,510	1,460	2,970	1,520	1,460	2,980	1,510	1,410	2,920	1,420	1,340	2,760
70-74	1,210	1,230	2,440	1,220	1,260	2,480	1,290	1,300	2,590	1,370	1,350	2,710
75-79	1,040	880	1,920	1,070	910	1,990	1,070	940	2,010	1,060	990	2,050
80-84	570	440	1,010	620	490	1,110	660	550	1,210	750	580	1,320
85+	480	350	830	510	380	900	560	400	950	590	420	1,010
All Ages	**44,300**	**45,100**	**89,400**	**45,000**	**45,900**	**90,900**	**45,800**	**46,700**	**92,400**	**46,500**	**47,400**	**94,000**

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

Age Groups	Female	Male	Total	Female	Male	Total
	2042			2043		
00-04	4,200	4,440	8,640	4,250	4,500	8,750
05-09	4,020	4,280	8,310	4,070	4,340	8,410
10-14	3,940	4,200	8,140	3,980	4,250	8,230
15-19	3,960	4,240	8,190	4,000	4,290	8,290
20-24	3,960	4,270	8,220	3,990	4,290	8,280
25-29	3,730	3,970	7,700	3,760	3,990	7,750
30-34	3,950	4,090	8,030	3,920	4,090	8,010
35-39	3,340	3,310	6,650	3,520	3,520	7,040
40-44	3,040	3,060	6,100	3,000	3,020	6,020
45-49	2,670	2,640	5,310	2,760	2,740	5,500
50-54	2,250	2,190	4,450	2,370	2,330	4,700
55-59	1,590	1,450	3,030	1,670	1,510	3,170
60-64	1,360	1,310	2,680	1,360	1,290	2,650
65-69	1,390	1,250	2,650	1,390	1,260	2,640
70-74	1,410	1,360	2,780	1,390	1,330	2,720
75-79	1,060	1,030	2,080	1,080	1,070	2,150
80-84	820	660	1,470	870	710	1,580
85+	630	450	1,070	680	480	1,160
All Ages	**47,300**	**48,200**	**95,500**	**48,100**	**49,000**	**97,100**

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[9] (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.

[9] 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[10].

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[11]. 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-

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

[11] 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

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.

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 124 - 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

Variable name	StatsNZ quality rating	External Data Quality Panel quality rating	Notes
			the total number of respondents in all categories.
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)[12]. 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.

[12] 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 9and10 - the most socio-economically challenged areas.

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 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[13].

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[14].

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 socio-economic deprivation. It is based on nine variables from the 2018 Census which cover eight different dimensions of socio-economic 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 socio-economic 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.

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 composed 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.

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

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

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 125 - 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 126 - 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

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