

**Te Aka Whai Ora**  
Māori Health Authority

# Māori Health Priorities

A report commissioned by the interim Māori Health Authority  
(iMHA) to inform development of the interim  
New Zealand Health Plan (iNZHP)

Elana Curtis, Belinda Loring, Ricci Harris, Melissa McLeod, Clair Mills, Nina Scott, Papaarangi Reid

6<sup>th</sup> March 2022

ISBN - 978-1-7386069-1-7  
IP - 02

# Executive summary

The health system performs worse for Māori in virtually every domain measured. Māori experience higher exposure to social, environmental and commercial determinants of poor health, most of which can be modified by Government action either through health sector or cross-sectoral actions. The health system needs to perform better for Māori in every sphere, for every condition, through every service and every interaction. This will require transformational redesign rather than incremental changes to the status quo.

## **The strategic health priorities in this report include:**

- Cancer,
- Long-term conditions (cardiovascular disease, diabetes, stroke, chronic respiratory disease),
- First 1000 days, and
- Mental health.

These priorities draw focus to the biggest contributors to health loss and health inequity for Māori and also represent the greatest potential for intervention. Addressing these four health priorities require actions in a core set of synergistic domains:

- Māori governance that is empowered to govern,
- Implementation of evidence-based policies for prevention,
- Integrated whānau-centred services at all levels of the system,
- Primary care that works for Māori,
- A culturally safe workforce, including a strengthened Māori workforce, and
- Universal responsibility of the whole health sector for monitoring performance by ethnicity and requirement to act upon results.

Action on these areas is a responsibility for the entire health system (and whole-of-government). The ways in which the Māori Health Authority can best use its leadership and prioritise its capacity to assist the health system achieve these improvements for Māori is to be defined.

- New structures arising through the reforms may have the primary responsibility for progressing certain priorities (e.g. the Mental Health & Wellbeing Commission and the Public Health Agency) – so the role of the MHA may be to ensure the overall strategic priority given to these areas, and the content of their work programmes, is consistent with the scale and nature of activities needed to achieve the gains required for Māori.
- In other areas, where more radical transformation is needed to correct longstanding failures for Māori, e.g. primary care, the MHA may need to have overall leadership of a work programme to re-design the entire primary care system, including the full spectrum of levers for change.

# Table of Contents

- Executive Summary \_\_\_\_\_ 2
- Introduction \_\_\_\_\_ 4
- Objectives \_\_\_\_\_ 4
- Background \_\_\_\_\_ 4
- Health Reforms \_\_\_\_\_ 4
- Understanding Māori Health Inequities \_\_\_\_\_ 4
- Developing the future New Zealand Health Plan \_\_\_\_\_ 5
- Process of Plan Development \_\_\_\_\_ 6
- Key Health Priorities \_\_\_\_\_ 7
  - 1. Cancer \_\_\_\_\_ 8
  - 2. Long Term Conditions \_\_\_\_\_ 9
  - 3. First 1000 Days \_\_\_\_\_ 10
  - 4. Mental Health \_\_\_\_\_ 11
- Key System Enabler Priorities \_\_\_\_\_ 12
  - 1. Māori Governance That is Empowered to Govern \_\_\_\_\_ 13
  - 2. Implementation of Evidence-Based Policies for Prevention \_\_\_\_\_ 14
  - 3. Integrated Whānau-Centred Services \_\_\_\_\_ 15
  - 4. Primary Care That Works for Māori \_\_\_\_\_ 16
  - 5. A Culturally Safe Workforce, Including a Strengthened Māori Workforce\_\_\_\_ 17
  - 6. Responsibility of the Whole Health Sector for Monitoring Performance by Ethnicity, and Requirement to Act Upon Results \_\_\_\_\_ 18
- Summary \_\_\_\_\_ 19
- Appendix 1 – Data Sources for Identifying Māori Health Priorities \_\_\_\_\_ 20
- Downstream Measures of Health Outcomes \_\_\_\_\_ 20
- Upstream Measures of Causes of Health Outcomes \_\_\_\_\_ 31
- References \_\_\_\_\_ 37

# Introduction

This report has been commissioned by the interim Māori Health Authority (iMHA) to inform their positioning on what the priorities for the interim New Zealand Health Plan (iNZHP) are for Māori.

## Objectives

The key objectives of this report are to:

1. Identify key priorities for the iNZHP for Māori.
2. Provide direction for the iMHA's focus during its two-year transitioning period.

This report has identified the high-level strategic priorities which we believe will make the greatest contribution to improving Māori health and wellbeing. Further work will be needed to identify the next steps and timing/ phasing for each priority area.

## Background

### Health Reforms

In 2021, the Government committed to reforming the health system in Aotearoa New Zealand (NZ) as a key response to the 2018 independent review into NZ's health system known as The Health and Disability System Review/Hauora Manaaki Ki Aotearoa Whānui (the review) (1). This review identified a fragmented health system with inequitable service delivery and inequitable health outcomes, particularly for Māori.

Key changes to the health system since the 2021 commitment to reform include:

- Development of a new national entity known as Health New Zealand/Hauora Aotearoa (Health NZ). Health NZ will replace 20 District Health Boards and will be responsible for the planning and commissioning of hospital, primary and community health services, including a national public health service.
- Establishment of the Māori Health Authority (MHA) that will have shared responsibility for decision making, planning and delivery of health services alongside Health NZ. It is expected that Iwi-Māori Partnership Boards will be established to help shape services to meet local needs.
- A new Public Health Agency (PHA)<sup>2</sup> will be a stand-alone business unit within the Ministry of Health (MoH) to lead population and public health policy, strategy, regulation, intelligence, surveillance and monitoring functions across NZ's health system.

The MoH will continue in its role as chief steward and kaitiaki for the health system overall.

### Understanding Māori health inequities

Health inequities result from a complex suite of potential causes (2). Despite this context, it is important to acknowledge that there are basic determinants of health associated with how society is structured and how colonisation, power, racism and privilege is distributed and addressed that are the fundamental drivers of ethnic health inequities within Aotearoa New Zealand (3).

<sup>1</sup> <https://www.futureofhealth.govt.nz/about-the-reforms/how-health-system-changing/>

<sup>2</sup> <https://www.health.govt.nz/about-ministry/leadership-ministry/expert-groups/health-and-disability-system-reforms>

Three main pathways are identified as contributing to ethnic inequities in health (3, 4):

- differential access to the determinants of health or exposures leading to disease incidence (e.g. education, employment, income, housing, income support, dealings with the criminal justice system, health literacy, deprivation),
- differential access to healthcare (e.g. Māori experiencing unmet need, and longer and slower pathways through health care).
- differences in the quality of care received (e.g. screening for and treatment of ischaemic heart disease, pain relief during labour and childbirth, diagnosis and treatment of mental health, diabetes screening and management, and higher levels of adverse events in hospital).

It is important that future planning acknowledges that the health sector itself plays a major role in developing and perpetuating inequities in health outcomes between Māori and non-Māori (5), and that far more can be done to address the social, environmental and commercial determinants of health inequities.

## Developing the future New Zealand Health Plan

In order for the future New Zealand Health Plan to address the challenges identified within the review, we make the following recommendations for both the iMHA and iHNZ:

- Change needs to be transformational in nature. Things will need to change at all levels within NZ's health system in order to achieve different outcomes and eliminate inequities.
- The Indigenous rights of Māori to a health system capable of meeting Māori health need, Māori aspirations and the elimination of Māori health inequities must be prioritised.

Explicit reference to the Indigenous rights of Māori as tangata whenua requires an understanding of the Treaty of Waitangi<sup>3</sup> (both articles and principles) and other international agreements such as The United Nations Declaration on the Rights of Indigenous Peoples(6).

- A commitment to, and the prioritisation of, equity must be at the core of any developments. This commitment requires more than a statement of intent. It is imperative that future plans clearly articulate how equity is prioritised by providing specific examples.
- A structural analysis of health inequity causation is required. Aligned with this is the need to reject victim-blame or cultural-deficit analyses for Māori health inequities that are likely to exacerbate health inequities rather than eliminate them (7). It remains necessary to understand the role of racism and white privilege in the development and maintenance of Māori health inequities. Similarly, a more nuanced understanding of how white fragility (8) operates to undermine a pro-equity and Treaty-compliant health system will be required for appropriate interventions to achieve equity for Māori to be developed and implemented.
- The process of transforming NZ's health system must enable whānau, hapū, iwi and Māori communities to develop, test and refine solutions. The process of transformation must enhance wellbeing for Māori and result in obvious benefits at whānau, hapū, iwi and Māori community levels.
- Future planning should provide a platform for Māori health to be the responsibility of the entire system and avoid the channelling of Māori health responsibility to the MHA alone.

<sup>3</sup> Te Tiriti o Waitangi, February 6, 1840, <http://www.treatyofwaitangi.govt.nz/>

- It is important to acknowledge that the challenges for NZ's health system are complex and that there are no easy 'overnight' solutions. The solutions require a long-term commitment and we should expect outcomes to be seen in a similar timeframe.
- Levers for Māori governance of health system performance are required. This will require comprehensive Māori governance of Health NZ and the Government to be Treaty-compliant as the new health system is developed. We acknowledge the importance of including both mana whenua and urban Māori representatives in any Māori governance structures.
- New Zealand's health system should aim for integrated and multi-sectorial service delivery that is whānau/family centric. This will require a rapid transformation of the siloed service-centric and disease-centric healthcare delivery that characterises NZ's health system at present.
- When setting priorities, it is difficult to avoid presenting an overly 'reductionist' list or using arbitrary categories (e.g. life-course groupings). We recommend that this is avoided where possible.
- We acknowledge the fundamental threat that climate change poses to human survival in Aotearoa and te āo whānui (9). We expect the health system to provide greater leadership in this area, including cross-sectoral advocacy on climate mitigation actions (many which have shorter-term co-benefits for Māori health) and agreeing to targets for a climate positive health system.

## Process of Plan Development

This report has been developed within a limited period of time (i.e. 2-3 weeks). Because of this timeframe, the process included consultation with a small group of leading Māori and non-Māori public health experts to draw on their collective and existing expertise. Two brainstorming sessions were held via Zoom with the following participants:

- Professor Papaarangi Reid
- Associate Professor Elana Curtis
- Dr Nina Scott
- Associate Professor Ricci Harris
- Dr Melissa McLeod
- Dr Clair Mills
- Dr Belinda Loring

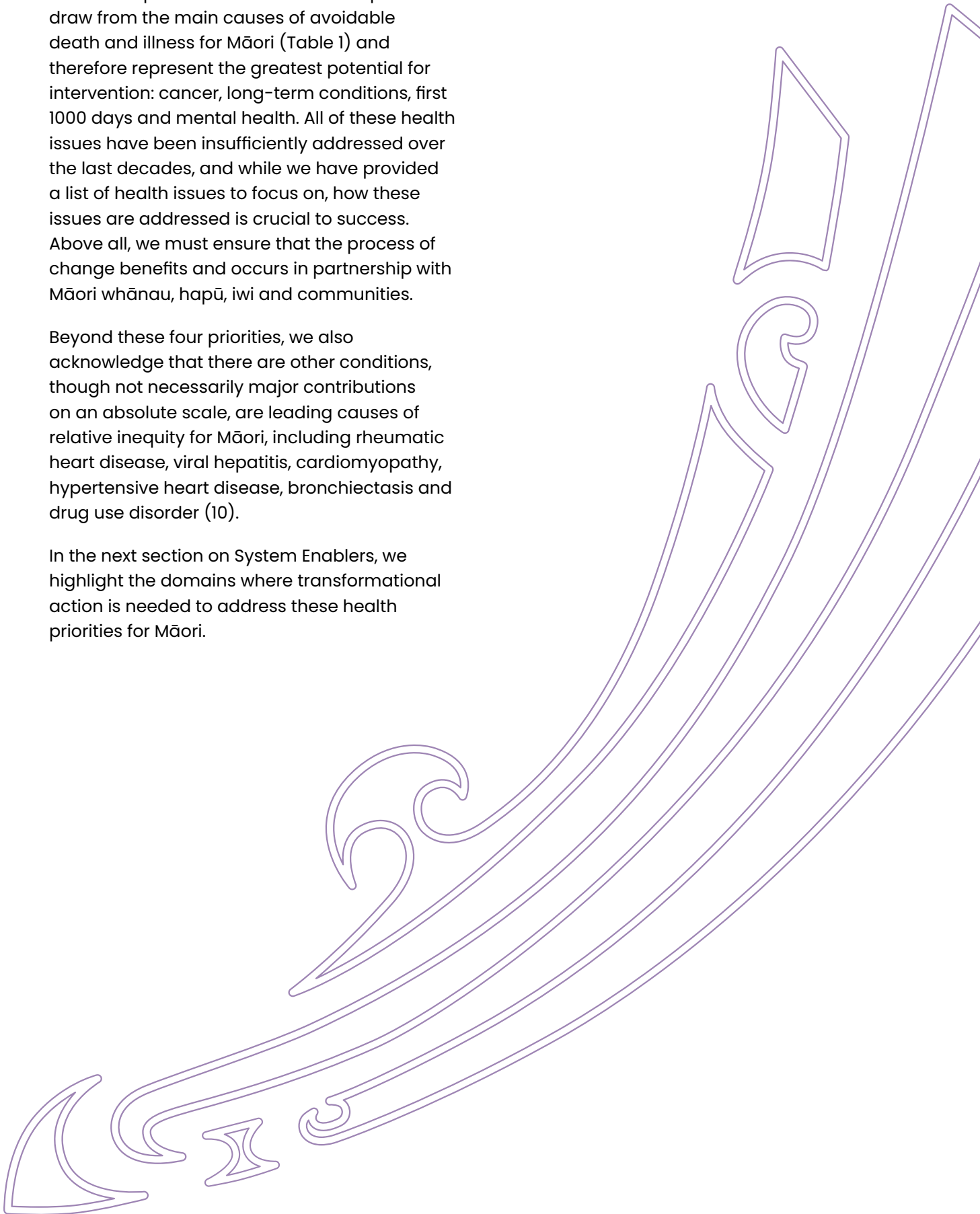
Project coordination and leadership was undertaken by Associate Professor Elana Curtis. Report writing was led by Dr Belinda Loring and Associate Professor Elana Curtis with overall peer review by the experts listed above.

# Key Health Priorities

The health priorities selected in this report draw from the main causes of avoidable death and illness for Māori (Table 1) and therefore represent the greatest potential for intervention: cancer, long-term conditions, first 1000 days and mental health. All of these health issues have been insufficiently addressed over the last decades, and while we have provided a list of health issues to focus on, how these issues are addressed is crucial to success. Above all, we must ensure that the process of change benefits and occurs in partnership with Māori whānau, hapū, iwi and communities.

Beyond these four priorities, we also acknowledge that there are other conditions, though not necessarily major contributions on an absolute scale, are leading causes of relative inequity for Māori, including rheumatic heart disease, viral hepatitis, cardiomyopathy, hypertensive heart disease, bronchiectasis and drug use disorder (10).

In the next section on System Enablers, we highlight the domains where transformational action is needed to address these health priorities for Māori.



# 1 Cancer

## Rationale

Cancer is a leading cause of illness and death for Māori, making up 25% of amenable mortality for Māori females and 10% for Māori males (Table 3). There are persisting disparities in cancer incidence, mortality and survival between Māori and non-Māori, with cancer making an important contribution to the life expectancy gap for Māori (Table 5 and Table 6). Lung cancer alone contributes almost 1 year to the life expectancy gap between Māori and non-Māori, non-Pacific women (11). Māori diagnosed with cancer are more likely to be diagnosed at a later stage, die (and to die sooner) than non-Māori with cancer (12).

The factors underpinning overall worse cancer incidence, mortality and survival for Māori are systemic. Broad health system actions that impact multiple cancers—such as improving access for Māori to prevention, timely diagnosis and appropriate treatment, regardless of income or place of residence, increased Māori control in cancer decision making and Māori-led services—are crucial (13).

## Opportunities for transformation

- More than two-thirds of all Māori cancer deaths occur from very poor-prognosis cancers - key to reducing cancer deaths for Māori is preventing the cancer in the first place. More than half of the top 10 most common cancers and cancer deaths among Māori have known aetiological exposures that disproportionately impact Māori: o tobacco exposure (lung and pancreatic cancers),
  - > infectious diseases (stomach and liver cancers),
  - > obesogenic environment/diet and obesity/diabetes mellitus (breast, uterine, colorectal and pancreatic cancers) and
  - > familial genetic predisposition (stomach cancer).

- If prevention is not possible, or is unsuccessful, early detection can save lives if cancers are detected, when curative treatment is still possible.
  - > Screening programmes need to work much better for Māori (e.g. HPV self-testing kits, more inclusive Hep B & C surveillance programme, reduced Māori age at screening for bowel cancer).
  - > Many of the most commonly diagnosed cancers among Māori are diagnosed outside of screening programmes. Diagnosis of these cancers principally relies on detection through primary care, so barriers to primary care for Māori need to be removed.
- Once cancer is diagnosed, the priority becomes ensuring access to timely best-practice treatment. Māori are underserved in each of these post-diagnosis priorities.
- Continuing to explore programmes for lung cancer early detection and improving funding (including equitable prioritisation) of pharmacological treatments for lung cancer must be prioritised given the huge impact lung cancer has for Māori (14).

## Key documents & sources of evidence

1. Gurney JK, Robson B, Koea J, Scott N, Stanley J, Sarfati D. The most commonly diagnosed and most common causes of cancer death for Māori New Zealanders. *N Z Med J.* 2020;133(1521):77-96.
2. Te Aho o Te Kahu. 2022. Pūrongo Ārai Mate Pukupuku, Cancer Prevention Report. Wellington: Te Aho o Te Kahu, Cancer Control Agency.



## 2 Long term conditions

### Rationale

A small group of long term noncommunicable conditions: diabetes, cardiovascular disease, chronic respiratory disease and stroke, not only form the largest causes of death and disability for Māori, but often coexist in the same people, and share common preventable risk factors. These long-term conditions are highly preventable, and Māori experience higher rates of exposure to the leading causes of these conditions, namely tobacco, obesogenic environments, unhealthy diets, and alcohol. These risk factors are strongly patterned by social, commercial and environmental determinants such as poverty, social exclusion and racism.

Cardiovascular disease is the leading cause of overall health loss for Māori (Table 11) with stroke, diabetes, and chronic obstructive pulmonary disease also featuring in the top ten causes. Coronary heart disease causes 69% of amenable deaths for Māori males and 56% for Māori females (Table 3). Coronary heart disease, diabetes, chronic obstructive pulmonary disease and strokes collectively make a large contribution to the life expectancy gap between Māori and non-Māori, non-Pacific (Table 5 and Table 6). Not only do Māori experience higher rates of morbidity and mortality from these long-term conditions, but Māori suffer earlier onset of illness and disability. Māori develop diabetes up to 10 years younger and progress earlier to more serious disease, yet are less likely to receive appropriate HbA1 monitoring and appropriate diabetes-related renal-screening tests than non-Māori (15).

### Opportunities for transformation

- Multiple interventions have been shown to work in the prevention and management of long-term conditions; and yet very few are in place for Māori. Interventions must be tailored for Māori and be developed in partnership with Māori communities and build community capacity. This includes improving access to secondary prevention for Māori, through integrated interventions that address control of blood pressure, sugars and lipids, body weight, smoking cessation and lifestyle interventions.
- There is great potential in NZ to implement internationally recommended evidence-based interventions on shared risk factors, especially tobacco, alcohol and unhealthy diet (including addressing the commercial determinants of obesogenic environments), as detailed later in this report.
- Fundamentally redesigning a primary care system which has no barriers for Māori.

### Key documents & sources of evidence

1. Walsh M, Grey C. The contribution of avoidable mortality to the life expectancy gap in Māori and Pacific populations in New Zealand—a decomposition analysis. *N Z Med J.* 2019;132(1492):46–60.
2. Health Quality and Safety Commission. A window on the quality of Aotearoa New Zealand’s health care 2019 – a view on Māori health equity. Wellington: Health Quality & Safety Commission; 2019.
3. Ministry of Health. Wai 2575 Māori Health Trends Report. Wellington: Ministry of Health.; 2019.

## 3 First 1000 Days

### Rationale

The 1,000 days between a woman's pregnancy and a child's 2nd birthday offer a unique window of opportunity to shape healthier and more prosperous futures. There is increasing evidence that factors during this 1000 day window, including nutrition, stress, health, and relationships can have a profound impact on a child's ability to grow, learn, and rise out of poverty. Many of the causes of Māori morbidity and mortality such as obesity, heart disease, and mental health problems have their origins in early life (16).

Infant mortality and maternal mortality are higher for Māori than non-Māori (Table 8 and Table 9). In 2021, the government's Perinatal and Maternal Mortality Review Committee wrote in their annual report that "year after year, the Perinatal and Maternal Mortality Review Committee (PMMRC) reports show inequity continues and no significant progress is being made to reduce mortality and morbidity for whānau Māori..." (17). The leading causes of avoidable deaths in Māori children, including prematurity, SUDI, respiratory disease and "external causes" (accident, injury and assault) are all amenable to prevention (18).

There are missed opportunities to deliver appropriate care and support for Māori women and children during this critical 1000 day window. Nearly 50% of Māori women do not have a Lead Maternity Care Giver in the first trimester of their pregnancy (15). With 35.4 percent of Māori children living in a single-parent household (19), better supporting wellbeing and resources of Māori mothers is critical. Childhood immunisation can be seen as a proxy for access to preventative and well child services. It has always been less well delivered to Māori children, but since the beginning of the COVID-19 pandemic, has worsened markedly (Table 14), with less than half of Māori children now fully vaccinated at 18 months of age.

### Opportunities for transformation

- Antenatal and birthing care – including wrap-around support for wāhine hapū (including identifying opportunities to provide longer-term intervention/prevention rather than episodic care e.g. ongoing support to prevent gestational diabetes turning into diabetes, oral health).
- Immunisation and well-child services that work for Māori,
- Improving standards of living and housing (impacting skin & respiratory infections, SUDI, injury, mental health, nutrition and long-term outcomes), and
- Whānau orientated interventions providing intensive support for the first 1000 days.

### Key documents & sources of evidence

1. Health Quality and Safety Commission. A window on the quality of Aotearoa New Zealand's health care 2019 – a view on Māori health equity. Wellington: Health Quality & Safety Commission; 2019.
2. Perinatal and Maternal Mortality Review Committee. Fourteenth Annual Report of the Perinatal and Maternal Mortality Review Committee | Te Pūrongo ā-Tau Tekau mā Whā o te Komiti Arotake Mate Pēpi, Mate Whaea Hoki. Wellington: Health Quality & Safety Commission; 2021.

## 4 Mental Health

### Rationale

Mental health conditions, including anxiety and depression, traumatic brain injury, alcohol use disorders, and schizophrenia are all among the top ten contributors to overall health loss for Māori (Table 11). Māori are more likely to experience mental health conditions than non-Māori (Table 12). Suicide is the second leading cause of death for Māori males (Table 2) and a major contributor to the life expectancy gap for Māori males (Table 6) and females (Table 5). Māori experience poorer mental health care – they are less likely to receive pharmaceutical treatment in relation to need (20), and are more likely to be placed in seclusion (21).

Poor mental health is a consequence of many of the same drivers of health inequities for Māori – racism, colonisation, intergenerational trauma, poverty and cultural disconnection. A significantly higher proportion of Māori than non-Māori experience stress and difficulty in daily life, and experience social isolation (also considered as loneliness) and exclusion (22). There is a strong positive relationship between individual mental wellbeing and whānau wellbeing for Māori.

Action to improve mental health cannot ignore action on the causes of distress in Māori lives, and just continue with more programmes to build “resilience” to cope with life stressors which could be removed by social policy changes. At the same time, work is needed to transform mental wellbeing services to meet the needs of Māori whānau.

### Opportunities for transformation

- A whole-of-government approach to wellbeing to tackle social determinants and support prevention activities that impact on multiple outcomes for Māori, not just mental health and addiction, including poverty, racism & discrimination, and optimising the environment in the first 1000 days.
- In the face of enormous harm to our communities from alcohol and other drug abuse, we need to act on international evidence for effective public health and legislative interventions.
- Improving access to better quality primary care and strengthening NGOs working with Māori.
- Shifting from a focus on treatment and care to a united drive for wellbeing, through Kaupapa Māori services that address the whole person, the whānau and socioeconomic and community environments, working with education, justice, Oranga Tamariki and housing agencies.
- Urgently complete the national suicide prevention strategy and implementation plan and ensure the strategy is supported by significantly increased resources for suicide prevention and postvention.
- A genuine te Tiriti partnership with the Mental Health and Wellbeing Commission, including Māori participation in governance arrangements, a partnership between the Commission and iwi or Māori, and a strong Māori workstream within the Commission.

### Key documents & sources of evidence

1. Russell L. Te Oranga Hinengaro: Report on Māori Mental Wellbeing Results from the New Zealand Mental Health Monitor & Health and Lifestyles Survey. Wellington: Health Promotion Agency/Te Hiringa Hauora; 2018
2. Inquiry into Mental Health and Addiction. 2019. Oranga Tāngata, Oranga Whānau: A Kaupapa Māori Analysis of Consultation with Māori for the Government Inquiry into Mental Health and Addiction. Department of Internal Affairs: Wellington.
3. Te Mauri: The Life Force. Rangatahi Suicide Report – Te Pūrongo mō te Mate Whakamomori o te Rangatahi. 2020. Ngā Pou Arawhenua, Child and Youth Mortality Review Committee, Suicide Mortality Review Committee. Health and Quality Safety Commission of New Zealand: Wellington

# Key System Enabler Priorities

Addressing the priority health issues for Māori identified in this report, requires transformational action on six synergistic domains:

- Māori governance that is empowered to govern,
- Implementation of evidence-based policies for prevention.
- Integrated whānau-centred services at all levels of the system,
- Primary care that works for Māori,
- A culturally safe workforce, including a strengthened Māori workforce, and
- Universal responsibility of the health sector for monitoring performance by ethnicity and requirement to act upon results.



# 1 Māori Governance that is empowered to govern

## Rationale

In terms of honouring Māori tino rangatiratanga rights that are enshrined in the Te Tiriti o Waitangi, the Waitangi Tribunal found that; out of all the health strategies and policies reviewed as part of WAI2575, none were compliant (23). Māori participation in governance through health sector boards has not enabled Māori decision making as Māori membership is always in the minority. Māori “advisory boards” are often convened as an afterthought, un/under-paid, and are engaged late or not at all, with no formal decision-making or veto powers, nor requirements to act upon Māori advice. The autonomy of Māori within the health sector to govern as Māori is limited when operating within the institutions of the Crown and reporting to non-Māori managers and leadership. Māori initiatives are subjected to a high degree of scrutiny, evaluation and reporting to non-Māori on non-Māori terms. Frequently, Māori governance is tokenistic, with endorsement sought after policies and programmes have been designed, rather than a meaningful co-design and dialogue with Māori technical and content experts at all stages of development.

The health system reforms must be based on a genuine Te Tiriti partnership. Iwi partnership boards are an important measure but are insufficient alone to ensure equity or a Treaty compliant system. There must be mana-enhancing engagement with the Māori health workforce, and Māori technical experts at all levels of health system design, to ensure that Māori governance is supported with the appropriate capacity at all levels. Māori governance needs the resources to be able to govern effectively, including access to information and technical expertise.

## Opportunities for transformation

- Ensure mana whenua/Iwi Māori Partnership Boards are in place.
- Enable urban Māori input at a governance level.
- Avoid non-Māori governing Māori governance. Governance must be Māori led and allow for scrutiny of non-Māori performance not the other way around.
- Incorporate consequences if advice from Māori governance bodies are not appropriately responded to or demonstrated within health outcomes or health inequities.

## Key documents & sources of evidence

1. Waitangi Tribunal. Hauora: Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry. WAI2575. Waitangi Tribunal Report. Lower Hutt, New Zealand: Legislation Direct; 2019.

## 2 Implementation of evidence-based policies for prevention

### Rationale

The Health and Disability System Review (1) strongly recommended that population health and prevention must be strengthened to make progress towards equity and overall health improvement. This includes action on social and commercial determinants of health which have a strong influence on Māori health inequities. Non-communicable diseases are the leading cause of health loss and health inequity for Māori, yet many risk factors associated with them (such as obesogenic environments and food, harmful alcohol consumption, physical inactivity and tobacco use) are largely preventable through population health policies. Human-induced climate change and planetary degradation is a looming threat to Māori wellbeing and survival, yet becomes lost as a priority for health and political leaders in favour of more immediate crises.

Māori are disproportionately exposed to health harms including tobacco (Table 16), alcohol (Table 17), obesogenic environments, food “deserts” (24), poor housing, neighbourhood deprivation (Table 20), racism (25) and poverty (26). Tobacco alone causes 22.6% of Māori deaths (Table 7). Compared to non-Māori non-Pacific, 28.4% of the gap in life expectancy for Māori men and 32.9% of gap in life expectancy for Māori women is due to smoking attributable deaths (27). Prevention is not just about reducing risk but also enhancing factors that contribute to well-being/hauora e.g. whanau wellbeing (te kupenga), access to te reo Māori, creating environments that do not discriminate against people with disabilities, and reducing the price of fruit and vegetables.

### Opportunities for transformation

- Reinstating a requirement for long-term planning within the health system (to include disease determinants and other priority downstream threats such as climate change).
- Prioritise evidence-based policy interventions to address health priorities for Māori o Tobacco control (increasing price, reducing availability, enhanced cessation support).
  - > Alcohol (reducing affordability, availability, and marketing with a particular focus on socioeconomically deprived areas).
  - > Obesity and diet (pricing measures to make unhealthy foods/beverages more expensive with fruit and vegetables cheaper, restricting marketing to children, restricting density and location of unhealthy food outlets) and reducing access to unhealthy foods and beverages.
  - > Increase measures to enhance food sovereignty for Māori communities.
- Prioritise and facilitate easier cross sectoral action (at national, regional and locality levels) on key social determinants to health with particular impact on Māori health, including:
  - > Poverty
  - > Housing
  - > Climate change
  - > Substance use (e.g. methamphetamine),
  - > Racism
  - > Lived experience of disability (Tangata Whaikaha).

### Key documents & sources of evidence

1. Te Aho o Te Kahu. 2022. Pūrongo Ārai Mate Pukupuku, Cancer Prevention Report. Wellington: Te Aho o Te Kahu, Cancer Control Agency.
2. Ministry of Health. Tatau Kahukura: Māori health chart book 2015. Wellington, NZ: Ministry of Health; 2015

## Integrated whānau-centred services

### Rationale

A need for services that are less fragmented, individual-focused and siloed has been a unanimous recommendation from any review of health outcomes for Māori (1, 12, 17, 23, 28). Improvements in Māori health require a much greater focus on understanding the health needs of communities, addressing these needs in a more connected way, and expanding outreach and home-based care, and addressing the social and cultural determinants of health. This applies across all health issues, including cancer, long term conditions, mental health and the first 1000 days. Examples of Māori-led approaches to integrated service delivery in primary care, public health services and secondary services should be referenced and expanded.

To begin to address Māori health inequities, health services must provide a safe, culturally aligned, racism free space, offer comprehensive wellbeing screening and support where “any door is the right door”, backed up with community engagement, well developed primary and secondary and tertiary pathways, systems level solutions, and Māori leadership. Words to this affect have been in New Zealand health sector strategies and plans for at least two decades (29-31), with insufficient commitment to resourcing or large-scale implementation.

### Opportunities for transformation

- Substantially increase models of care that prioritise integrated and connected service delivery that are Māori whānau-centred, Māori led, flexible and cross-discipline. Many successful examples exist (e.g. WHIRI/ WHRAP model in Waikato, Whānau Ora, Auckland Māori Regional Coordination Hub for COVID-19, He Pikinga Waiora Implementation Framework).
- This approach must be implemented at all levels of the health system, including:
  - > Primary care/community services.
  - > Public health services.
  - > Secondary/hospital services (especially for services that address first 1000 days, long-term conditions, mental health and cancer).

### Key documents & sources of evidence

1. Health and Disability System Review. Health and Disability System Review – Final Report – Pūrongo Whakamutunga. . Wellington: HDSR; 2020.
2. He Pikinga Waiora Implementation Framework (2018) <http://www.hpwcommunity.com/applying-the-framework>

## Primary care that works for Māori

### Rationale

The Waitangi Tribunal report on Stage One of the Health Services and Outcomes Kaupapa Inquiry (23) found significant concerns with the way the primary health care system in NZ has been legislated, administered, funded, and monitored by the Crown since the passing of the New Zealand Public Health and Disability Act 2000. They found that the primary care system significantly underfunded Māori, and that the primary care legislative and policy framework, governance, delivery and monitoring of care was not fit for purpose to provide equity for Māori. Even without adjusting for higher need, the government underspends approximately \$51.5 million each year on Māori primary care, compared to if Māori accessed primary care at the same rate as non-Māori<sup>4</sup>. The private business model for primary care in NZ is a fundamental barrier to achieving health equity for Māori.

Having primary care for Māori that is accessible, affordable, available, appropriate and high quality would offer enormous benefit and make positive changes in all leading health areas for Māori, including cancer, long term conditions, mental health and the first 1000 days. The health reforms offer considerable opportunity and scope to radically redesign the primary care system to work for Māori – how much this opportunity is realised will depend on the degree of Māori autonomy, leadership and governance throughout the reform process.

### Opportunities for transformation

- Overhaul all available levers to design a primary care system that works for Māori – including funding arrangements, legislation, administration, workforce, monitoring etc.
- MHA leadership of primary care redesign (process to start now).
- Increase funding to Māori providers that appropriately values the critical role that they play within the primary care system.
- Reduce barriers to access (cost, geographic, hours, cultural safety, transport).
- Shift from focus on illness to wellbeing, and shift from individual to whānau focus, including incentivising cross-sectoral work at locality level. Shift from siloed to intersectoral service design and delivery.

### Key documents & sources of evidence

1. Waitangi Tribunal. Hauora: Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry. WAI2575. Waitangi Tribunal Report. Lower Hutt, New Zealand: Legislation Direct; 2019.

<sup>4</sup> Reid et al (2022), & Paine et al (2022) unpublished TKHM



## A culturally safe workforce, including a strengthened Māori workforce

### Rationale

The Māori health and disability workforce is a major enabler for improved health outcomes and equity for Māori. Māori continue to be under-represented in the health and disability workforce in almost all areas (32). The Māori health and disability workforce needs a substantial uplift in capacity and capability.

This is not just about training and numbers – it requires a health system which is a safe space for Māori to work – an environment which values, supports and protects the Māori health workforce, free from discrimination and racism. To fix this, the cultural safety of health organisations (not just professionals) needs to be monitored and improved (7).

In addition, work is needed to increase the cultural safety of the entire health workforce in Aotearoa. Māori are 3.43 times more likely than non-Māori to experience unfair treatment by a health professional on the basis of ethnicity (26). Cultural safety requires healthcare professionals and organisations to examine and address their own racism (e.g. biases), attitudes, assumptions, stereotypes, prejudices, structures and characteristics that may affect the quality of care provided (7).

### Opportunities for transformation

- Support educational interventions to increase Māori access to health professional training within the tertiary sector e.g. Māori secondary school recruitment programmes, bridging/foundation education, equity admission processes and Māori academic and pastoral support programmes.
- Support health sector interventions to increase the number and type of Māori health workers within the current workforce e.g. upskilling pathways, social justice recruitment and HR processes for employment, retention policies.
- Support interventions to ensure the non-Māori workforce can deliver culturally safe healthcare (as the priority) followed by culturally competent healthcare.
- Assess and improve the cultural safety of health organisations (from national to local levels).
- Ensure that Māori staff are supported to engage and partner in health reforms and that their ideas are prioritised.

### Key documents & sources of evidence

1. Curtis E, Jones R, Tipene-Leach D, Walker C, Loring B, Paine S-J, et al. Why cultural safety rather than cultural competency is required to achieve health equity: a literature review and recommended definition. *International Journal for Equity in Health*. 2019;18(1):174.
2. Curtis, E. T. (2018). Vision 20: 20 and indigenous health workforce development: Institutional strategies and initiatives to attract underrepresented students into elite courses. In *Achieving Equity and Quality in Higher Education* (pp. 119-142). Palgrave Macmillan, Cham.

## Responsibility of the whole health sector for monitoring performance by ethnicity, and requirement to act upon results

### Rationale

Undercounting of Māori remains a problem in national health datasets including the National Health Index (NHI) (3, 33-35). High quality ethnicity data is critical for understanding and informing progress on Māori health inequities. Accurate ethnicity data is also important at an individual level, to ensure all Māori have access to targeted services. But accurate data alone is not sufficient. Māori health improvement requires an ethnicity data & intelligence system, underpinned by high quality ethnicity data, whereby data is regularly analysed by the health system to assess performance, areas for improvement are quickly identified, improvement strategies implemented and progress is reviewed again to ensure adequate corrections have been made. For Māori, the health intelligence and surveillance system currently fails at all of these steps. NZ's data and information systems for public health, monitoring and surveillance are fragmented, eroded and dispersed. There is no agency with a mandate to coordinate data collection or analysis and reporting across the public health system. This hampers our ability to comprehensively, accurately and regularly monitor population health in NZ.

District Health Boards have had a legislative responsibility to monitor ethnic health inequities, but this monitoring has resulted in a proliferation of reports documenting the magnitude of Māori health inequities, unsupported by actions or follow-up (23). Additionally, there have been no consequences or penalties for inaction or poor performance on Māori health equity. This has contributed to a normalisation and acceptance of Māori health inequities. "Equity" and "Treaty of Waitangi" reliably appear as priority boxes in strategic plans, yet are not meaningfully reflected in resource allocation, process, or actions, nor is it specified how non-performance on equity will be assessed and remedied.

### Opportunities for transformation

- Non-performativity on Māori health inequities must have consequences. Expectations for performance on equity can be set at the organisation, service and health professional level.
  - o Include equity/ Māori KPIs within health service delivery.
    - Include funding and other implications if KPIs are not met.
- Ensure ethnicity data is collected according to Ministry of Health Ethnicity Data Protocols (36) across the health system as an ongoing quality improvement activity.
- Ensure that there is a universal responsibility for all aspects of the health system to monitor their performance on equity, in real-time, with public transparency of performance. This function requires sufficient dedicated resource. This includes both:
  - o Monitoring of health and healthcare inequities for Māori and system for responsiveness to Māori e.g. staff cultural safety, racism, funding allocation.
- Ensure health systems and services identify and implement potential solutions to address identified inequities.
- Ensure health systems and services must monitor the impacts of their corrective actions, to identify if inequities have been addressed or if further/different remedial action is needed.

### Key documents & sources of evidence

1. Cormack D, M. M. Improving and maintaining quality in ethnicity data collections in the health and disability sector. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare.; 2010.
2. Waitangi Tribunal. Hauora: Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry. WAI2575. Waitangi Tribunal Report. Lower Hutt, New Zealand: Legislation Direct.; 2019.
3. Ministry of Health. 2017. HISO 10001:2017 Ethnicity Data Protocols. Wellington: Ministry of Health.

# Summary

The health system needs to perform better for Māori in every sphere, for every condition, through every service and every interaction. This will require transformational redesign rather than incremental changes to the status quo. The health system has a strong role in creating and perpetuating health inequities (5) and is responsible for achieving health equity at all levels of health including process and outcomes. In addition to inadequate healthcare delivered by an inequitable health system, Māori experience higher exposure to causative risk factors, most of which can be modified by Government action either through the health sector or cross-sectoral actions on social, environmental, and commercial determinants of health.

The strategic health priorities in this report (cancer, long-term conditions, first 1000 days and mental health) have been highlighted because they are the biggest contributors to health loss and health inequity for Māori and also represent the greatest potential for intervention. The actions to address these four health priorities centre on a core set of synergistic areas:

- Māori governance that is empowered to govern,
- Implementation of evidence-based policies for prevention,
- Integrated whānau-centred services at all levels of the system,
- Primary care that works for Māori,
- A culturally safe workforce, including a strengthened Māori workforce, and
- Universal responsibility of the health sector for monitoring performance by ethnicity and requirement to act upon results.

Action on these areas is a responsibility for the entire health system (and whole-of-government). The ways in which the Māori Health Authority can best use its leadership and prioritise its capacity to assist the health system achieve these improvements for Māori is yet to be defined. As this new organisation starts to form, it will be critical to ensure that the MHA is not set up for failure by overly high expectations, inadequate resourcing and being perceived to be responsible for “all Māori health”. Responsibility for addressing inequitable services and systems remains with the Government and the entire system, especially the MoH and Health NZ, who will remain responsible for the majority of policy development and commissioning of services.

There are new structures arising through the reforms which may have the primary responsibility for progressing certain priorities (e.g. the Mental Health & Wellbeing Commission and the Public Health Agency) – so the role of the MHA may be to ensure the overall strategic priority given to these areas, and the content of their work programmes, is consistent with the scale and nature of activities needed to achieve the gains required for Māori.

In other areas, where more urgent radical transformation is needed to correct longstanding failures for Māori, e.g. primary care, the MHA may need to have overall leadership of a work programme to re-design the entire primary care system, including the full spectrum of levers for change.

# Appendix 1 – Data sources for identifying Māori health priorities

Based on routinely collected health data, there are several key sources of evidence that inform priority areas for Māori health improvement. These include downstream measures of health outcomes, such as leading causes of morbidity and mortality, and more upstream causes of poor health outcomes including discriminatory treatment/access to health services, exposure to harmful risk factors such as tobacco, and exclusion from power and resources. Measures along the entire causative pathway need to be actively considered, as interventions also need to address the full spectrum of causes.

## Downstream measures of health outcomes

Table 1 indicates the main causes of avoidable death and illness for Māori, including the contributors to the life expectancy gap, causes of death and health loss and inequities in health loss.

**Table 1 – Leading causes of death, health loss and inequities in life expectancy and health loss for Māori, by sex.**

Disease	Wāhine					Tane				
	Life expectancy gap <sup>a</sup>	Cause of death <sup>b</sup>	Years of life lost <sup>b</sup>	Health loss <sup>c</sup>	Inequities in health loss <sup>c</sup>	Life expectancy gap <sup>a</sup>	Cause of death <sup>b</sup>	Years of life lost <sup>b</sup>	Health loss <sup>c</sup>	Inequities in health loss <sup>c</sup>
Ischaemic heart disease	2	2	2	1	1	1	1	1	1	1
Lung cancer	1	1	1	4	3	2	2	3	4	3
Suicide						4	3	2		
Anxiety and depressive disorders				2					2	
Diabetes	3	5		3	2	3	4	5	3	2
Breast cancer	6		3							
Chronic obstructive pulmonary disease	4	3	4		4	6				4
Cerebrovascular disease (stroke)	5	4	5							
Motor vehicle accidents						5	5	4		
Traumatic brain injury				5	6				5	6
Alcohol use disorders				6	5				6	5

Source: <sup>a</sup>Walsh & Grey, 2019 (11), <sup>b</sup>Tatau Kahukura, 2015 (26), <sup>c</sup>Ministry of Health, 2013 (10).

Notes: This table displays results from separate analyses and should be regarded as indicative only. It draws from analyses with different methodologies, datasets, year ranges and comparator groups. Estimates in c are not disaggregated by sex, so health loss rankings listed in above table for are both sexes combined.

# 1 Mortality

## Causes of death

The leading causes of death for Māori are routinely reported by the Ministry of Health in Tatau Kahukura Māori Health Chart Book and can be seen in Table 1 and Table 2. For Māori males, the conditions which cause the greatest number of deaths are ischaemic heart disease, lung cancer, suicide, diabetes, and motor vehicle crashes. For Māori females, the top five causes of death are lung cancer, ischemic heart disease, chronic obstructive pulmonary disease, cerebrovascular disease and diabetes. If we consider the causes of death which contribute to the greatest number of years of life lost (rather than just the greatest number of deaths), then breast cancer rises up the list to be the 3rd leading cause of YLL lost for Māori females, and suicide and motor vehicle crashes move higher up the list for Māori males.

In 2006, the Ministry of Health calculated that inequality in health care accounted for approximately 62% (males) and 54% (females) of the total Māori–non-Māori mortality inequality (adjusted for age) (5). That is, achieving equity in health care access and quality could make a substantial contribution towards achieving equity in health outcomes between ethnic groups.

**Table 2 – Major causes of death, ranked by age-standardised mortality rates, by gender, Māori and non-Māori, 2010–12** **Table 3– Major causes of death, ranked by YLL, by gender, Māori and non-Māori, 2010–12**

	Males	Females
Māori	Ischaemic heart disease	Lung cancer
	Lung cancer	Ischaemic heart disease
	Suicide	Chronic obstructive pulmonary disease
	Diabetes	Cerebrovascular disease (stroke)
	Motor vehicle accidents	Diabetes
Non-Māori	Ischaemic heart disease	Ischaemic heart disease
	Suicide	Breast cancer
	Lung cancer	Cerebrovascular disease (stroke)
	Cerebrovascular disease (stroke)	Lung cancer
	Motor vehicle accidents	Colorectal cancer

Notes: Figures are age-standardised to the total Māori population as recorded in the 2001 Census. Prioritised ethnicity has been used - see 'Ngā tapuāe me ngā raraunga: Methods and data sources' for further information. Source: Mortality Collection Data Set (MORT), Ministry of Health

Source: Tatau Kahukura 2015

**Table 3 - Major causes of death, ranked by YLL, by gender, Māori and non-Māori, 2010–12**

	Males	Females
Māori	Ischaemic heart disease	Lung cancer
	Suicide	Ischaemic heart disease
	Lung cancer	Breast cancer
	Motor vehicle accidents	Chronic obstructive pulmonary disease
	Diabetes	Cerebrovascular disease (stroke)
Non-Māori	Ischaemic heart disease	Ischaemic heart disease
	Lung cancer	Cerebrovascular disease (stroke)
	Cerebrovascular disease (stroke)	Breast cancer
	Suicide	Lung cancer
	Colorectal cancer	Colorectal cancer

Note: Prioritised ethnicity has been used - see 'Ngā tapuae me ngā raraunga: Methods and data sources' for further information. Source: Mortality Collection Data Set (MORT), Ministry of Health

Source: Tatau Kahukura 2015

**Table 4 - Amenable mortality by causal group, by ethnic group, 2006**

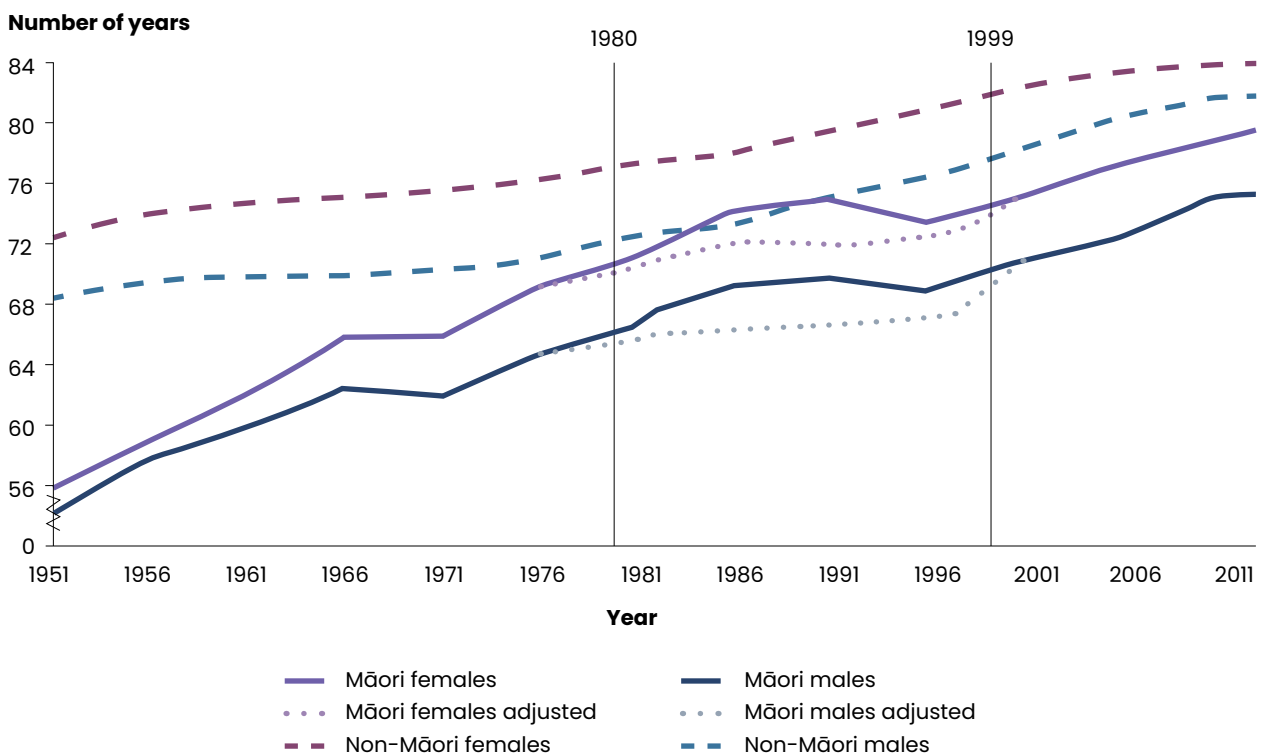
		Infection	Maternal and infant	Injury	Cancer	CVD	Other chronic	Total
<b>Male</b>								
Māori	ASR	1.9	6.4	51.6	32.1	221.5	7.2	320.5
		0.6–4.3	4.2–9.3	43.5–60.7	24.4–41.5	200.9–243.6	4.0–11.8	296.7–345.7
	%	0.58	1.98	16.09	10.01	69.10	2.24	100.00
Pacific	ASR	1.7	4.7	21.5	30.2	184.2	5.9	248.2
		0.0–9.6	2.4–8.5	14.5–30.7	19.5–44.5	156.1–215.9	2.2–12.8	216.8–282.9
	%	0.69	1.91	8.68	12.15	74.21	2.36	100.00
Asian	ASR	0.4	4.3	6.7	7.1	42.6	2.6	63.8
		0.0–2.4	1.7–8.8	3.6–11.4	3.4–13.1	32.5–55.0	0.7–6.8	51.5–78.0
	%	0.67	6.67	10.49	11.15	66.87	4.15	100.00
<b>Female</b>								
Māori	ASR	0.2	6.5	21.8	46.7	106.3	8.0	189.6
		0.0–1.3	4.2–9.6	16.9–27.6	38.3–56.5	92.7–121.4	4.6–12.7	172.2–208.3
	%	0.12	3.45	11.50	24.65	56.08	4.20	100.00
Pacific	ASR	2.2	3.5	4.6	40.7	100.5	8.6	160.0
		0.4–6.4	1.4–7.1	1.8–9.5	29.3–55.0	80.9–123.4	3.7–17.0	136.1–187.0
	%	1.36	2.17	2.87	25.40	62.79	5.40	100.00
Asian	ASR	0.5	2.4	7.8	13.0	17.9	2.2	43.8
		0.0–2.8	0.7–6.2	4.4–12.9	8.0–19.9	11.7–26.2	0.4–6.4	34.1–55.3
	%	1.16	5.53	17.83	29.69	40.81	4.98	100.00

Source: MOH 2010 (5) Note: Compared to non-Māori, non-Pacific, non-Asian ethnic group. ASR = age-standardised rate

## Life expectancy

Life expectancy is another important measure of inequity, and overall the gap in life expectancy at birth between Māori and non-Māori is 7.3 years for males and 6.8 years for females. Comparisons between Māori and non-Māori life expectancy over time are complicated by the fact that non-Māori is not a static comparison group – for example in 1991 the non-Māori category was 91.3% NZ European, 5.3% Pacific and 3.2% Asian, whereas in 2013 it was 78.1% NZ European, 7.2% Pacific and 13.3% Asian.

**Table 5 - Life expectancy at birth, by sex, Māori and non-Māori, 1951-2013**

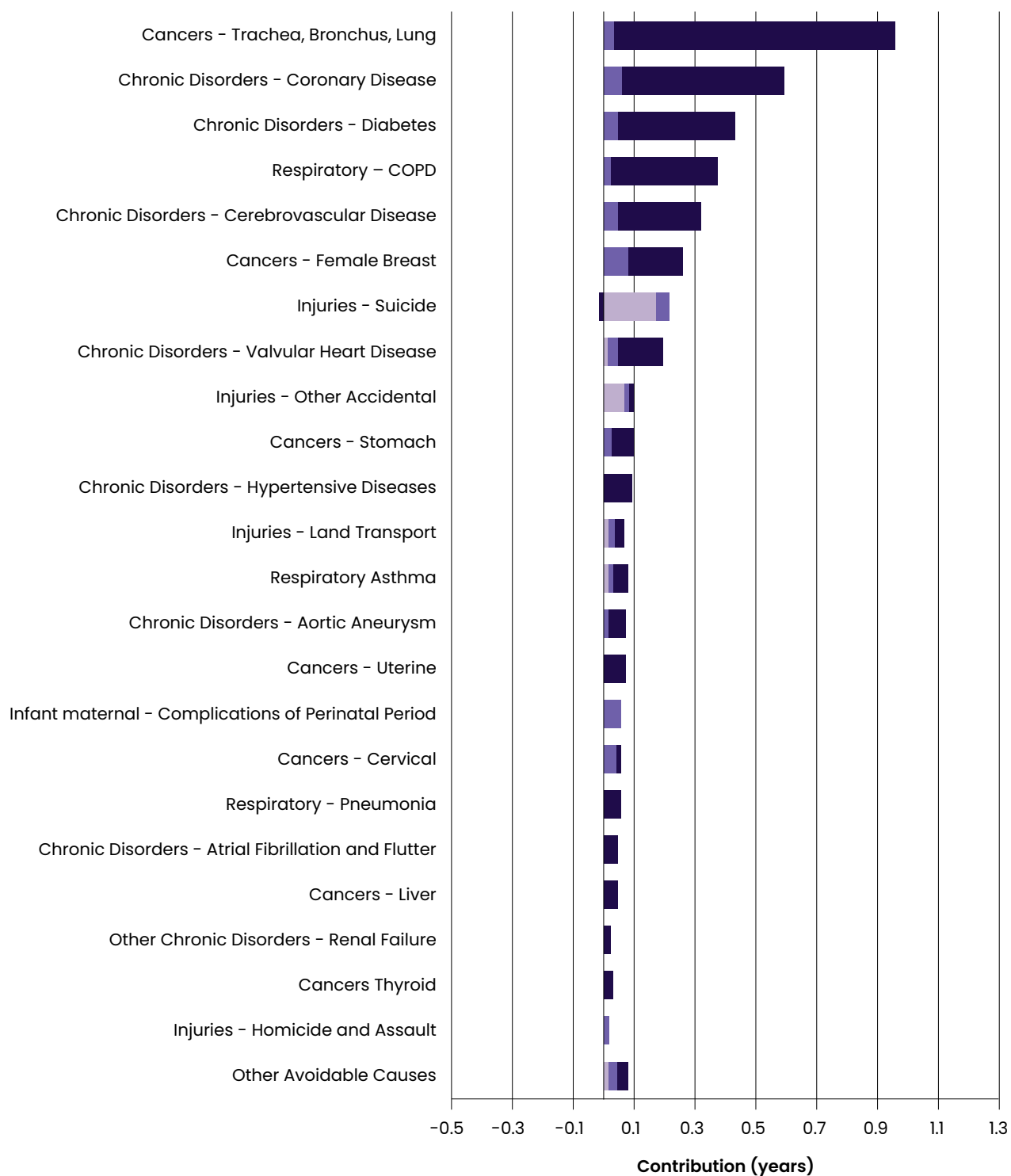


Notes: Adjusted life expectancy estimates for Māori 1980-1999 use estimates from the New Zealand Census Mortality Study (NZCMS) graphed at the mid-point of each time period. From 2001, adjusted estimates are close to unadjusted. Prioritised ethnicity has been used

Source: Tatau Kahukura 2015

A 2019 analysis (11) of contributing causes to the life expectancy gap for Māori compared to non-Māori non-Pacific (Table 5 and Table 6) was highly consistent with the leading causes of overall Māori mortality: lung cancer, heart disease, diabetes, COPD, strokes and breast cancer remain the leading contributors to the life expectancy gap for Māori females, and heart disease, lung cancer, diabetes, suicide, road traffic crashes and COPD remain the leading causes for Māori males.

**Table 6 - Decomposition of the life expectancy gap by leading avoidable causes, by age-group, for Māori females**

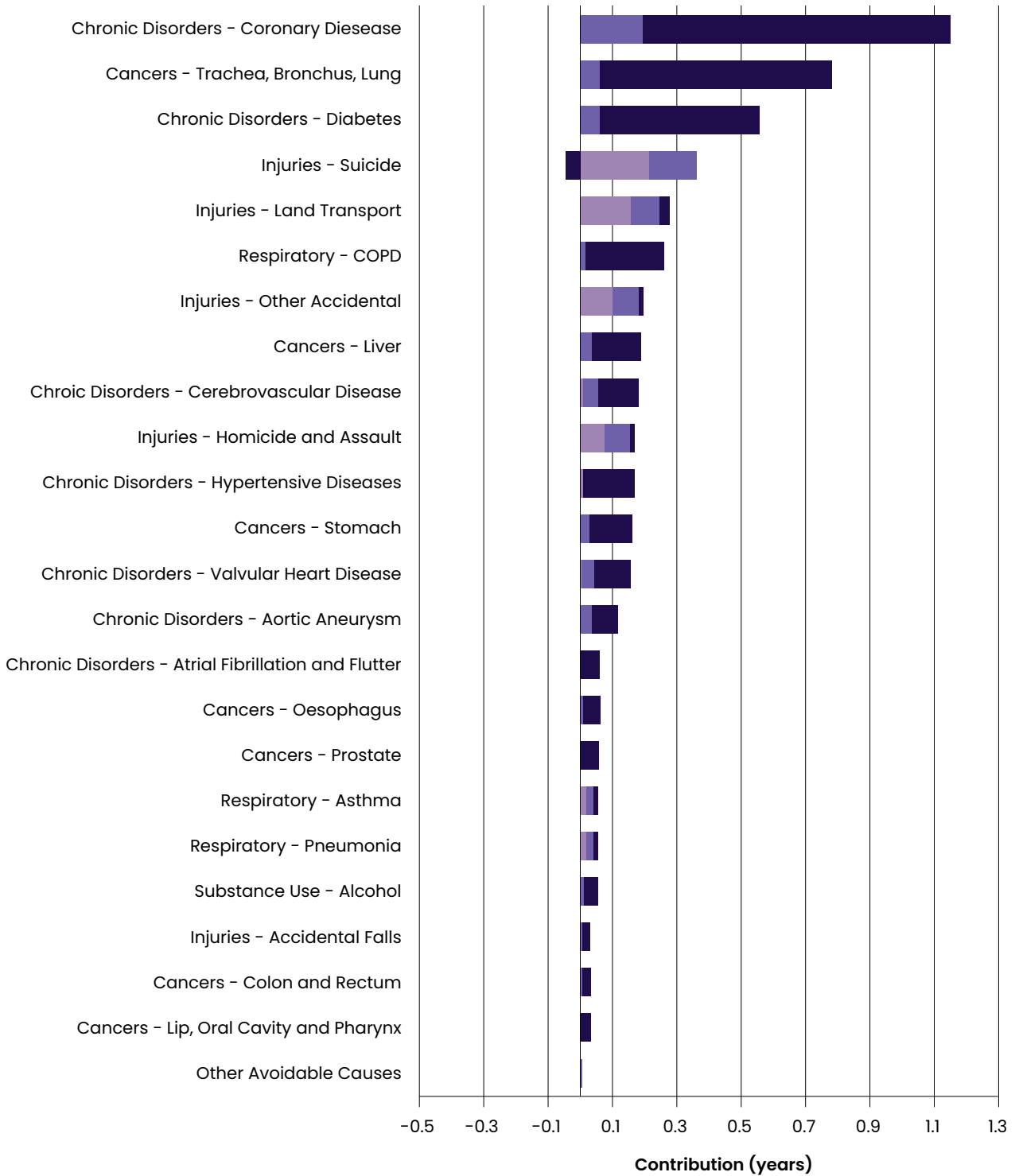


Source: Walsh and Grey, 2019 (11)

0 to 29 years    30 to 49 years    50 to 74 years



**Table 7 – Decomposition of the life expectancy gap by leading avoidable causes, by age-group, for Māori males**

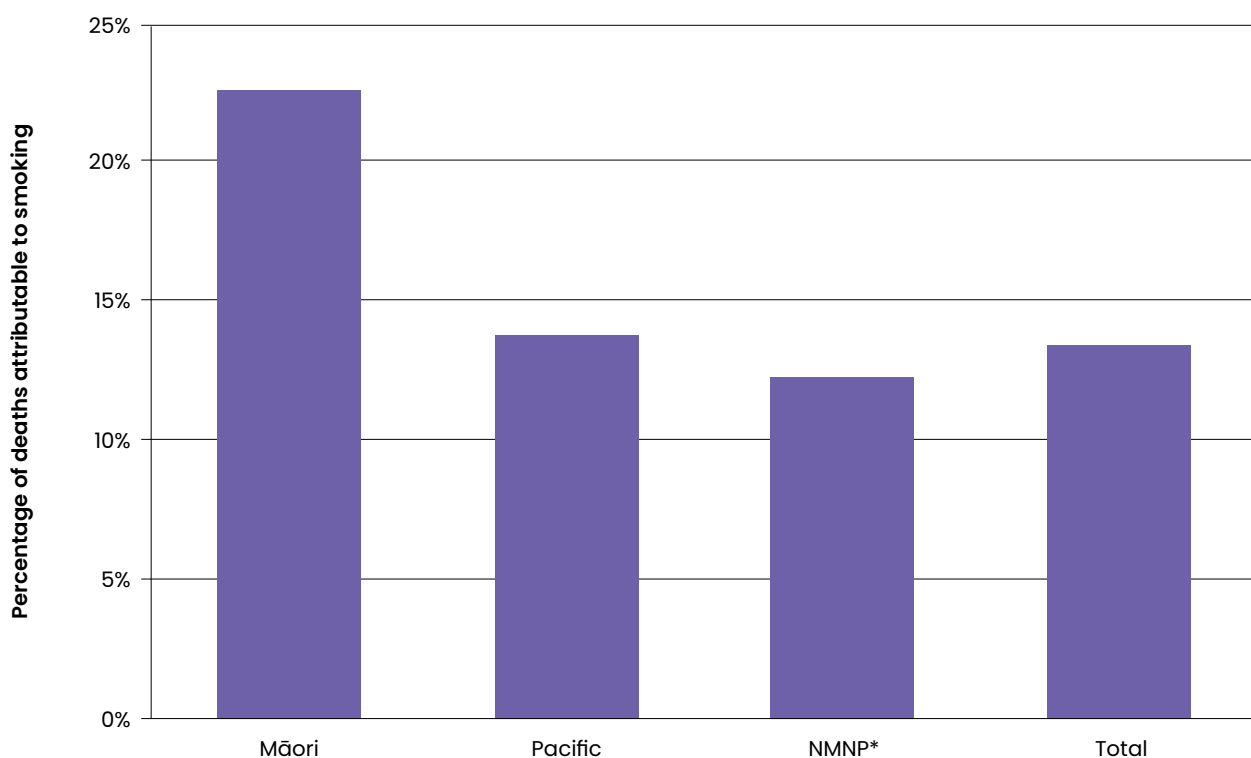


Source: Walsh and Grey, 2019 (11)

0 to 29 years    30 to 49 years    50 to 74 years

Another way to examine mortality is to consider the leading causes of the conditions resulting in deaths. One recent analysis for example (27) found that 22.6% of Māori deaths could be attributed to tobacco (Table 7). Furthermore, they found that compared to non-Māori non-Pacific, 28.4% of the gap in life expectancy for Māori men and 32.9% of gap in life expectancy for Māori women was due to smoking attributable deaths.

**Table 8 – Percentage of deaths attributable to smoking, by ethnicity, 2013–2015**



Source: Walsh & Wright, 2020 (27)

\*non-Māori/non-Pacific

### Maternal and child mortality

Maternal and child deaths deserve separate consideration, because while they make a small contribution to the overall number of deaths each year, they are especially tragic and preventable. They also represent underinvestment in preventative services and wellbeing for Māori in the first 1000 days of a child’s life. Infant mortality and maternal mortality are both higher for Māori than non-Māori (Table 8 and Table 9). In 2021, the government’s own Perinatal and Maternal Mortality Review Committee wrote in their annual report that “year after year, the Perinatal and Maternal Mortality Review Committee (PMMRC) reports show inequity continues and no significant progress is being made to reduce mortality and morbidity for whānau Māori...” (17).

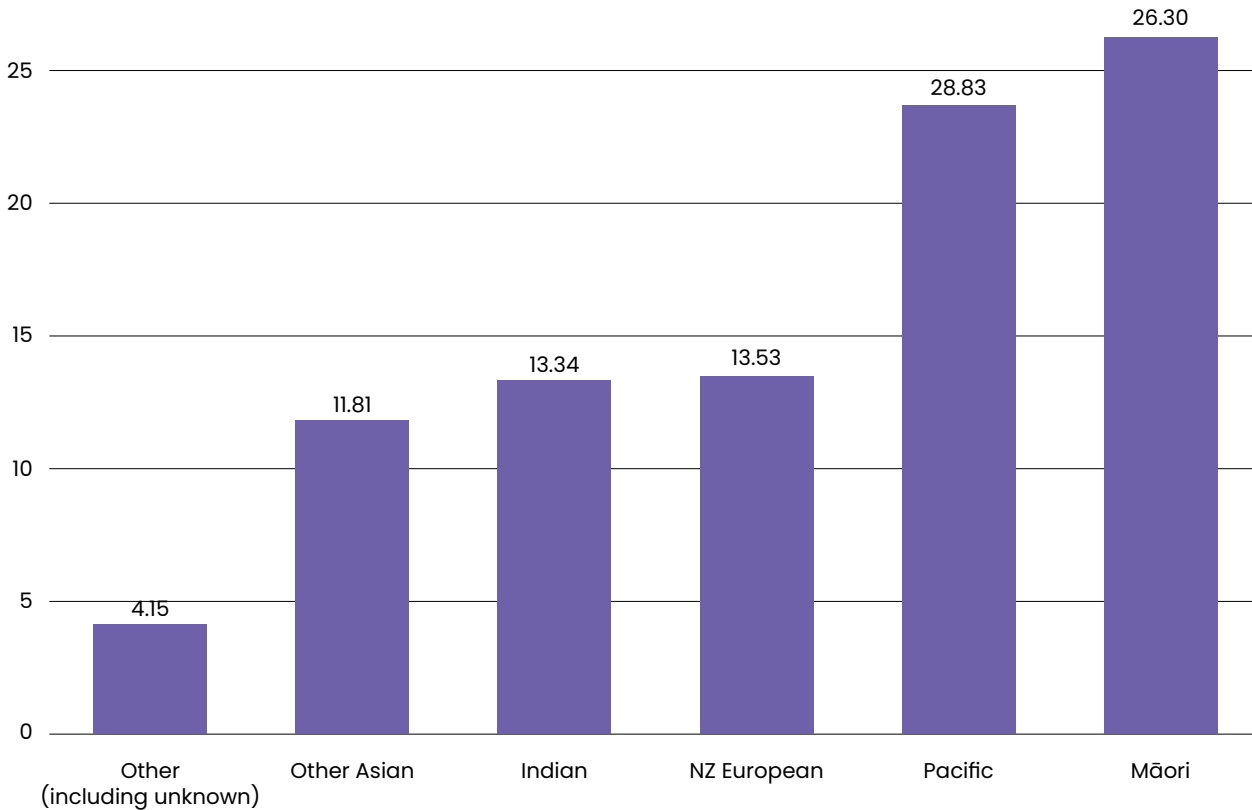
The leading causes of avoidable deaths in Māori children vary by age group, with prematurity being the leading cause in Māori children <28days of age, SUDI & respiratory disease in children aged 28 days–1 year, and “external causes” (accident, injury and assault) the leading cause of avoidable death in those 5–15 years of age (18).

**Table 9 - Infant health indicators, by sex, Māori and non-Māori, 2010-12**

Indicator	Males	Māori Females	Total	Males	Non-Māori Females	Total
Low birthweight, rate per 1000 live births, 2010-12	67.5 (64.5-70.6)	79.9 (76.6-83.4)	73.6 (71.3-75.9)	59.6 (57.8-61.5)	63.3 (61.4-65.3)	61.4 (60.1-62.8)
Infant mortality, rate per 1000 live births, 2010-12	7.6 (6.6-8.7)	5.9 (5.0-6.9)	6.8 (6.1-7.5)	4.9 (4.4-5.4)	4.0 (3.5-4.5)	4.5 (4.1-4.8)
Sudden unexpected death in infancy (SUDI), rate per 1000 live births, 2010-12	2.1 (1.6-2.7)	1.5 (1.0-2.0)	1.8 (1.4-2.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.4 (0.3-0.5)
Sudden infant death syndrome (SIDS), rate per 1000 live births, 2010-12	0.9 (0.6-1.3)	0.4 (0.2-0.8)	0.7 (0.5-0.9)	0.2 (0.1-0.4)	0.2 (0.1-0.3)	0.2 (0.1-0.3)

Sources: Tatau Kahukura 2015 (26) Mortality Collection Data Set (MORT), Ministry of Health; Statistics New Zealand

**Table 10 - Maternal mortality ratios (per 100,000 maternities) by prioritised ethnicity, 2006-2015**



Source: Dawson et al (37)

## 2 Morbidity

Measures of causes of death and life expectancy cannot be used alone to guide priorities. Measures of morbidity describe what makes us unwell and affect the quality of our lives.

### Healthy life expectancy

This is important because data show us that Māori can expect to live fewer years of their life in good health compared to non-Māori. In 2013, Māori males had a health expectancy of 54.3 years, compared with 66.7 years for non-Māori males<sup>5</sup>. Māori females had a health expectancy of 60.4 years, compared with 67.4 years for non-Māori females. Comparing 1996 with 2013, the time spent in good health has decreased 1.7 years for Māori males.

### Disability

Disability survey data is another source of measuring the impact that chronic conditions is having on Māori lives. The most recent figures reported by the Ministry of Health show that approximately 1 in 5 Māori aged 15–24 years, 1 in 4 Māori aged 25–44 years and almost 1 in 2 Māori aged 45–64 years are living with at least one long term disability not alleviated by an assistive device.

**Table 11 – Disability prevalence, by age group and sex, Māori and non-Māori, 2013**

Indicator	Males	Māori Females	Total	Males	Non-Māori Females	Total
Total disabled (of total population), 0–14 years, percent, 2013	19.0	10.6	14.9	11.0	7.2	9.2
Total disabled (of total population), 15–24 years, percent, 2013	20.3	23.5	20.9	14.0	13.8	13.9
Total disabled (of total population), 25–44 years, percent, 2013	24.7	22.2	23.3	14.0	15.3	14.7
Total disabled (of total population), 45–64 years, percent, 2013	39.6	45.3	43.6	26.0	26.1	26.1
Total disabled (of total population), 45–64 years, percent, 2013	73.7	50.0	62.2	55.1	57.0	55.9

Note: Crude rates and prioritised ethnicity have been used – see 'Ngā tapuae me ngā raraunga: Methods and data sources' for further information. Data from: 2013 New Zealand Disability Survey Statistics New Zealand

Sources: Tatau Kahukura 2015

<sup>5</sup> Ministry of Social Development. The Social Report 2016 <https://socialreport.msd.govt.nz/health/health-expectancy.html>

## Burden of disease/overall health loss

Burden of disease analyses are a way of quantifying the combined impact of the deaths and ill health caused by particular conditions, often measured in terms of lost Disability Adjusted Life Years (DALYs). Unfortunately, the most recent Global Burden of Disease Study estimate for NZ released in 2020 only provided estimates for the total population. The MoH stated<sup>6</sup> they were working closely with Institute of Health Metrics and Evaluation to prepare estimates of health loss for Māori and non-Māori so this will feature in future Global Burden of Disease Study cycles.

A MoH analysis from 2013 lists the conditions which make the greatest contribution to overall health loss for Māori (Table 11). In addition to all of the leading causes of mortality mentioned above, mental health conditions and injury feature very strongly: anxiety and depression, traumatic brain injury, alcohol use disorders, and schizophrenia are all among the top ten contributors to overall health loss for Māori. Māori are also more likely to experience mental health conditions than non-Māori Table 11.

**Table 12 – Leading causes of overall health loss, Māori, 2006**

Condition	DALYs	Percent	Rank
Coronary heart disease	13,897	8.8	1
Anxiety and depressive disorders	7964	5.0	2
Diabetes	6910	4.4	3
Lung Cancer	6155	3.9	4
Traumatic brain injury	6072	3.8	5
Alcohol use disorders	6064	3.8	6
Chronic obstructive pulmonary disease (COPD)	5364	3.4	7
Stroke	3845	2.4	8
Schizophrenia and related psychotic disorders	3467	2.2	9
Internal injury	3332	2.1	10
SUDI	3209	2.0	11
Back (spinal) disorders	3187	2.0	12
Pre-term birth	3140	2.0	13
Asthma	2474	1.6	14
Breast cancer (female)	2380	1.5	15
Drug use disorders	2274	1.4	16
Eczema and dermatitis	2193	1.4	17
Primary insomnia	2143	1.4	18
Poisoning	1785	1.1	19
Stillbirth	1770	1.1	20
Migraine	1713	1.1	21
Cardiomyopathy	1692	1.1	22
Bipolar disorder	1617	1.0	23
Stomach cancer	1594	1.0	24

Source: Ministry of Health. 2013 (10)

<sup>6</sup> <https://www.health.govt.nz/news-media/news-items/global-burden-disease-study-provides-important-insights-health-new-zealanders>

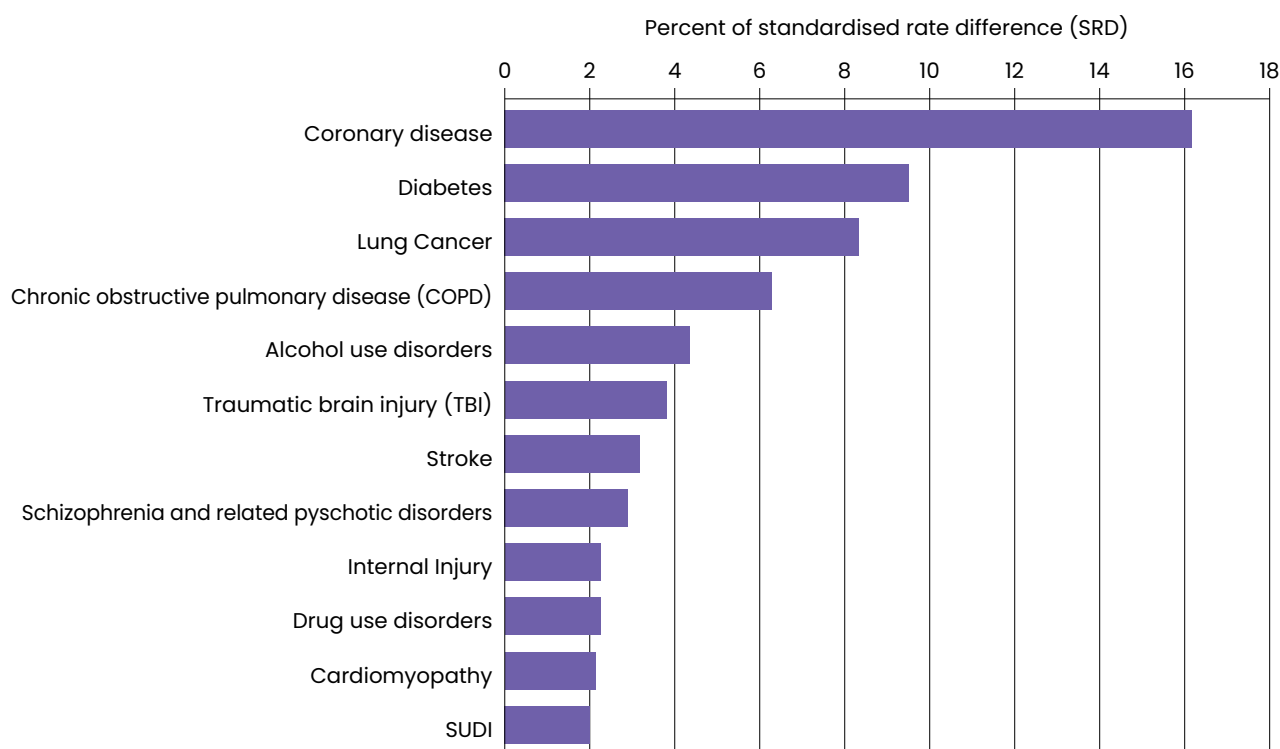
**Table 13 – High or very high probability of anxiety or depressive disorder, by gender, Māori and non-Māori, 2013/14**

Indicator	Māori			Non-Māori			Rate ratios (Māori compared with non-Māori)		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
High or very high probability of anxiety or depressive disorder, 15+ years, percent, 2013/14	9.6	9.5	9.4	4.5	7.6	6.0	2.04	1.28	1.56
	(7.1-13.0)	(7.5-11.8)	(7.7-11.4)	(3.6-5.6)	(6.4-9.0)	(5.2-7.0)	(1.36-3.04)	(0.98-1.66)	(1.24-1.97)

Source: Tatau Kahukura, 2015

In terms of the inequity between Māori and non-Māori, Māori sustain greater health loss in most condition groups. On an absolute scale, 26% of the excess burden experienced by Māori was caused by vascular disorders, 15% by cancers, 12% by mental illness, 11% by injury, and 9% by diabetes and other endocrine disorders (10).

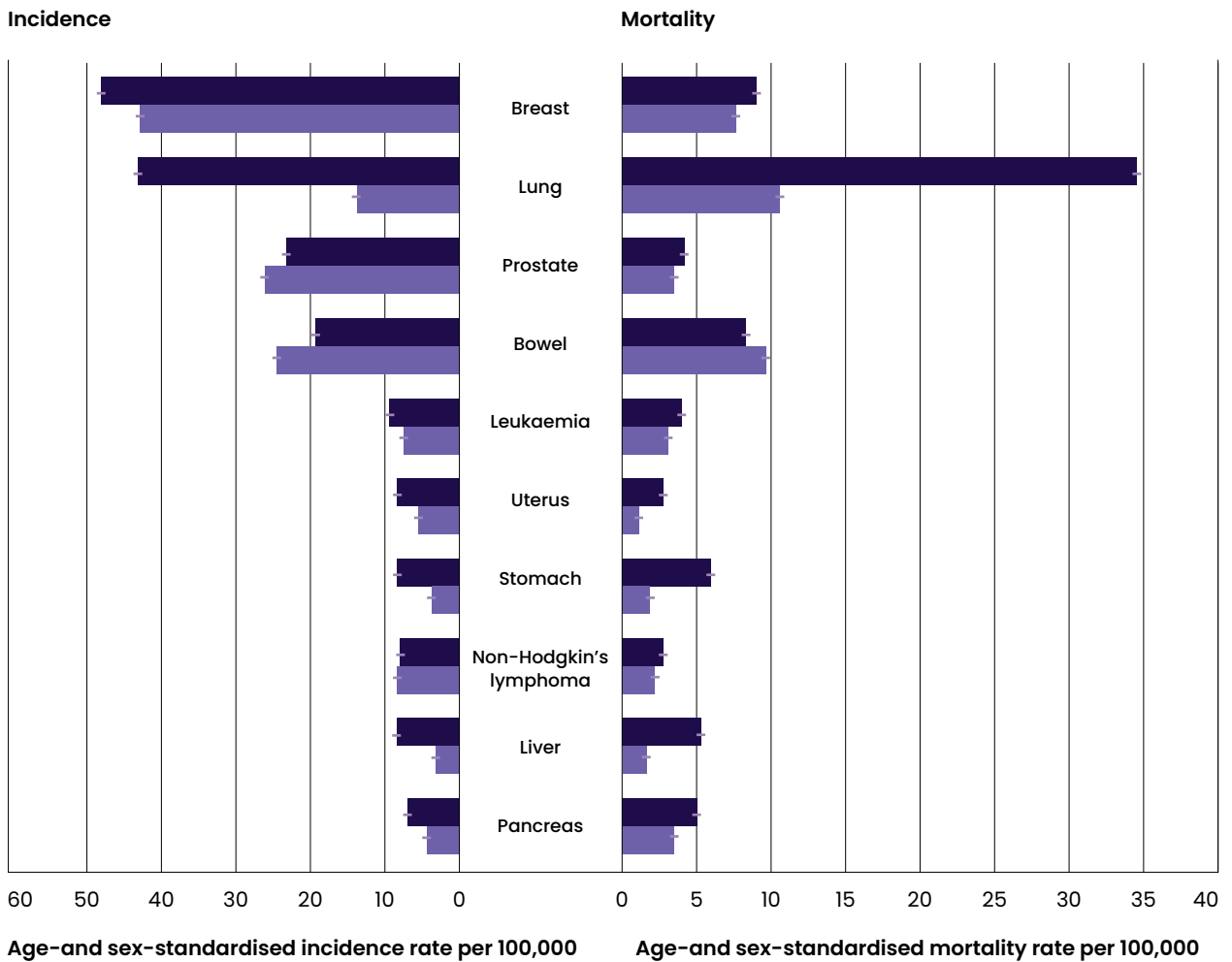
**Table 14 – Contributors to absolute inequity in health loss between Māori and non-Māori, 2006**



Source: Ministry of Health. 2013(10)

Several conditions which, though not necessarily major contributors on an absolute scale, dominate the picture on a relative scale. Among these, rheumatic heart disease, viral hepatitis, cardiomyopathy, hypertensive heart disease, bronchiectasis and drug use disorder are particularly noteworthy because health loss per capita is at least four times as high in Māori as in non-Māori (10).

**Table 15 – Incidence and mortality rates for Māori and non-Māori, non-Pacific, non-Asian by cancer type, 2007–2017**



Source: Te Aho o Te Kahu, 2022 (38)

■ Māori      ■ Non-Māori/Non-Pacific peoples/Non-Asian

## Upstream measures of causes of health outcomes

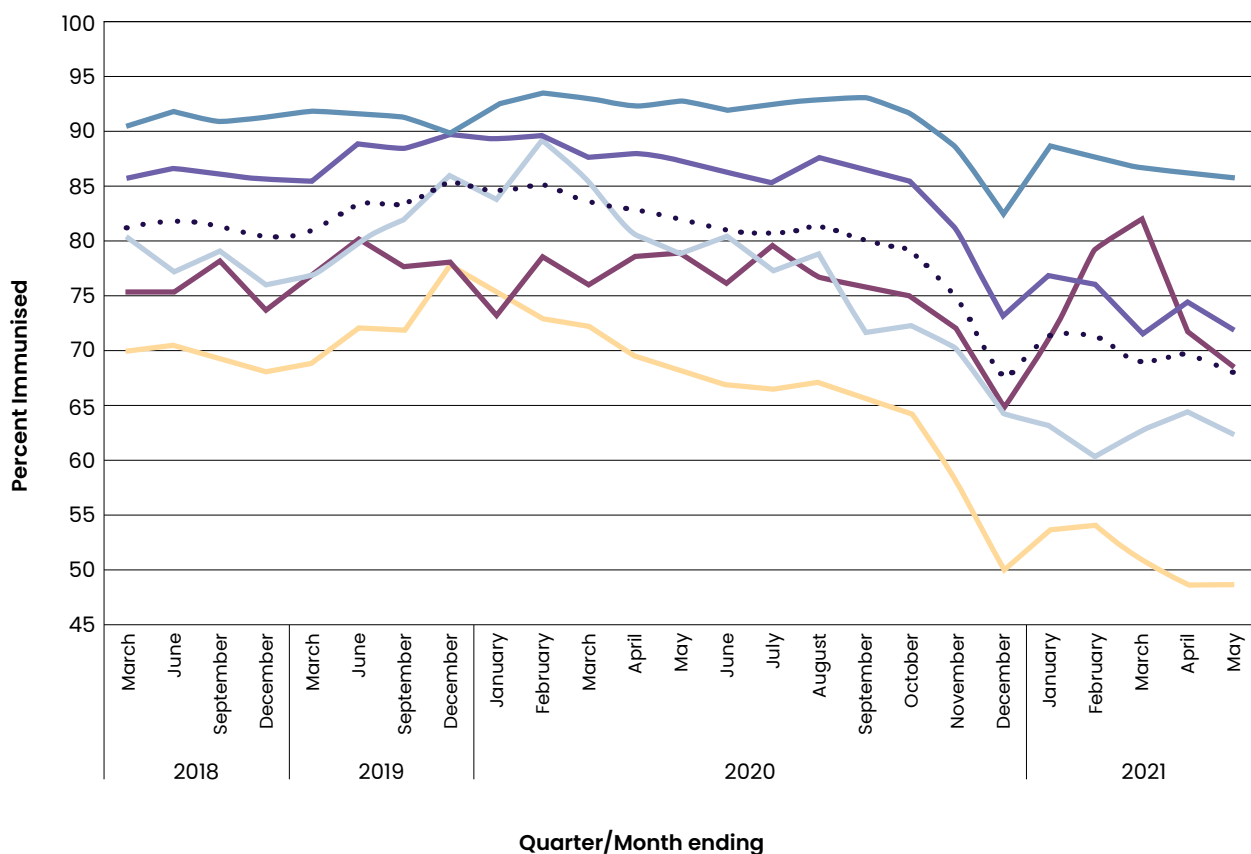
### 1. Health services

The health system performs worse for Māori at all levels of service delivery, from public health, primary, secondary and tertiary care, and in terms of any dimension of quality measured from accessibility, timeliness, safety and effectiveness. Various measures of health system performance, across health promotion/prevention, early detection, treatment, quality of care highlight priorities for action to address inequities created for Māori.

#### Prevention & early detection

Childhood immunisation can be seen as a proxy for access to preventative and well child services. It has always been less well delivered to Māori children, but since the beginning of COVID-19, the access to childhood immunisations has worsened markedly (Table 14), with less than half of Māori children now fully vaccinated at 18 months of age. Other routinely collected measures of access to prevention and early detection, such as cancer screening programmes demonstrate that Māori have poorer access to national screening programmes than non-Māori (13).

**Table 16 – Immunisation Coverage at 18 months of age, by ethnicity, up to May 2021**



Source: IMAC, 2021<sup>7</sup>

••• Total    — Māori    — Pacific    — Asian    — Other    — NZ European

### Primary care

The MoH reports on measures of unmet need for primary care, based on questions in the New Zealand Health Survey. In the most recent report, Māori adults (RR 1.37, CI 1.27–1.48) and children (RR 1.41, CI 1.21–1.65) were more likely than non-Māori to have experienced unmet need for primary health care in 2013/14 (26). Both Māori adults and children were also more than twice as likely as non-Māori to report not collecting prescriptions due to cost at any time in the last 12 months (26).

### Avoidable hospitalisations

Avoidable hospitalisations point towards those admissions which could have been prevented through better access to preventative or primary health care. The Ministry of Health defines Ambulatory Sensitive Hospitalisations (ASH) as hospitalisations of people less than 75 years old resulting from diseases sensitive to prophylactic or therapeutic interventions that are deliverable in a primary health care setting (Table 15).

Note that ASH rates are likely to be an underestimate as they hide lower access to secondary care for Māori. For example, Māori children are much less likely to be hospitalised with gastrointestinal disease than non-Māori children.

<sup>7</sup> IMAC. National Immunisation Coverage for New Zealand, up to May 2021 <https://www.immune.org.nz/national-immunisation-coverage-new-zealand-may-2021>



**Table 17 – Health system indicators, by gender, Māori and non-Māori, 0–74-year-olds**

Indicator	Māori			Non-Māori		
	Males	Females	Total	Males	Females	Total
Amendable mortality, 0–74 years, rate per 100,000, 2010–12	172.1 (164.6–179.8)	116.4 (110.6–122.4)	142.8 (138.1–147.7)	75.2 (73.5–76.8)	45.1 (43.8–46.3)	59.8 (58.8–60.9)
Ambulatory-sensitive hospitalisation, 0–74 years, rate per 100,000, 2012–14	3013.4 (2978.9–3048.2)	2987.7 (2954.3–3021.5)	3001.6 (2977.5–3025.8)	1874.7 (1863.1–1886.4)	1776.8 (1765.4–1788.2)	1824.8 (1813.9–1833.0)

Notes: Figures are age-standardised to the total Māori population as recorded in the 2001 Census. Prioritised ethnicity. Sources: Mortality Collection Data Set (MORT), Ministry of Health; National Minimum Data Set (NMDS), Ministry of Health

Source: Tatau Kahukura 2015

For Māori children, respiratory diseases make the greatest contribution to “excess” avoidable hospitalisations compared to non-Māori, with diseases of the ear, digestive system and skin, and injuries also being important (18).

### Racism in health care

Drawing upon data collected from the New Zealand Health Survey, Māori are 3.43 times more likely than non-Māori to experience unfair treatment by a health professional on the basis of ethnicity (26).

## 2. Exposure to health harming risk factors

### Tobacco, alcohol, obesogenic environments, diet and physical inactivity

The long-term conditions that form the leading causes of death and disability for Māori (in particular heart disease, diabetes, cancer, strokes, and chronic respiratory disease) share four priority risk factors. Data on the prevalence of tobacco, harmful use of alcohol, unhealthy diets and physical inactivity are all routinely collected through population surveys and reported by the Ministry of Health (Table 16, Table 17, Table 18, Table 19).

**Table 18 – Current smoking in people aged 15 and over, by sex, Māori and non-Māori, 2013/14**

Indicator	Māori			Non-Māori		
	Males	Females	Total	Males	Females	Total
Current smoking (self-reported), 15+ years, percent, 2013/14	41.1 (36.4–45.9)	42.7 (39.5–46.0)	42.0 (39.2–44.9)	17.9 (16.2–19.8)	13.2 (12.0–14.5)	15.5 (14.5–16.6)

Notes: Figures are age-standardised to the total Māori population as recorded in the 2001 Census. Prioritised ethnicity. ‘Current smoking’ refers to having smoked more than 100 cigarettes in a lifetime and currently smoking at least monthly. Source: 2013/14 New Zealand Survey, Ministry of Health.

Source: Tatau Kahukura 2015

**Table 19 – Alcohol use indicators, by sex, Māori and non-Māori, 2013/14**

Indicator	Māori			Non-Māori		
	Males	Females	Total	Males	Females	Total
Consumed alcohol in the past 12 months, 15+ years, percent, 2013/14	83.1 (80.2–85.6)	79.4 (76.9–81.7)	80.9 (79.0–82.7)	83.4 (81.8–85.0)	76.1 (74.5–77.7)	79.6 (78.5–80.7)
Drank alcohol 4 or more times a week in the past 12 months (among past year drinkers), 15+ years, percent, 2013/14	11.9 (9.1–15.3)	8.1 (6.0–10.8)	9.9 (8.1–12.2)	20.4 (18.8–22.1)	13.0 (11.7–14.4)	16.9 (15.7–18.1)
Drank large amounts of alcohol at least weekly in the past 12 months (among past year drinkers), 15+ years, percent, 2013/14	22.7 (19.3–26.5)	16.9 (14.7–19.4)	19.7 (17.5–22.0)	15.1 (13.3–17.1)	7.6 (6.4–8.9)	11.5 (10.4–12.6)

Notes: Figures are age-standardised to the total Māori population as recorded in the 2001 Census.

Prioritised ethnicity. 'A large amount of alcohol' is defined as more than six (for men) or four (for women) standard drinks on one drinking occasion. Source: 2013/14 New Zealand Health Survey, Ministry of Health

Source: Tatau Kahukura 2015

**Table 20 – Body size indicators, children aged 5–14 years, by gender, Māori and non-Māori, 2013/14**

Indicator	Māori			Non-Māori		
	Males	Females	Total	Males	Females	Total
Overweight, 5–14 years, percent, 2013/14	28.8 (24.0–34.1)	29.2 (24.6–34.3)	29.0 (25.3–33.0)	18.9 (16.1–22.1)	23.4 (19.7–27.5)	21.1 (18.7–23.7)
Obese, 5–14 years, percent, 2013/14	18.1 (14.0–23.1)	17.7 (13.1–23.4)	17.9 (14.5–21.9)	7.8 (5.8–10.4)	9.1 (7.0–11.7)	8.4 (6.8–10.4)
Mean BMI score, 5–14 years, 2013/14	19.5 (19.1–20.0)	19.3 (18.9–19.7)	19.4 (19.1–19.7)	18.3 (18.0–18.5)	18.4 (18.1–18.6)	18.3 (18.1–18.5)

Notes: Figures are age-standardised to the total Māori population as recorded in the 2001 Census.

Prioritised ethnicity. Source: 2013/14 New Zealand Health Survey, Ministry of Health

Source: Tatau Kahukura 2015

**Table 21 – Body size indicators, adults aged 15 and over, by gender, Māori and non-Māori, 2013/14**

Indicator	Māori			Non-Māori		
	Males	Females	Total	Males	Females	Total
Overweight, 15+ years, percent, 2013/14	33.4 (30.0–37.0)	27.6 (24.0–31.4)	30.4 (27.8–33.0)	39.2 (37.3–41.3)	28.2 (26.6–29.9)	33.6 (32.3–34.9)
Obese, 15+ years, percent, 2013/14	42.0 (38.2–45.8)	47.2 (43.8–50.6)	44.7 (42.1–47.3)	24.7 (22.8–26.6)	24.7 (23.0–26.6)	24.7 (23.6–25.9)
Mean BMI score, 15+ years, 2013/14	29.8 (29.2–30.3)	30.6 (30.1–31.1)	30.2 (29.8–30.6)	27.2 (27.0–27.5)	26.9 (26.6–27.2)	27.1 (26.9–27.2)
Mean waist measurement (cm), 15+ years, 2013/14	99.1 (97.7–100.5)	94.0 (92.7–95.4)	96.4 (95.4–97.4)	93.7 (93.0–94.4)	84.4 (83.7–85.0)	88.9 (88.5–89.4)

Notes: Figures are age-standardised to the total Māori population as recorded in the 2001 Census. Prioritised ethnicity.

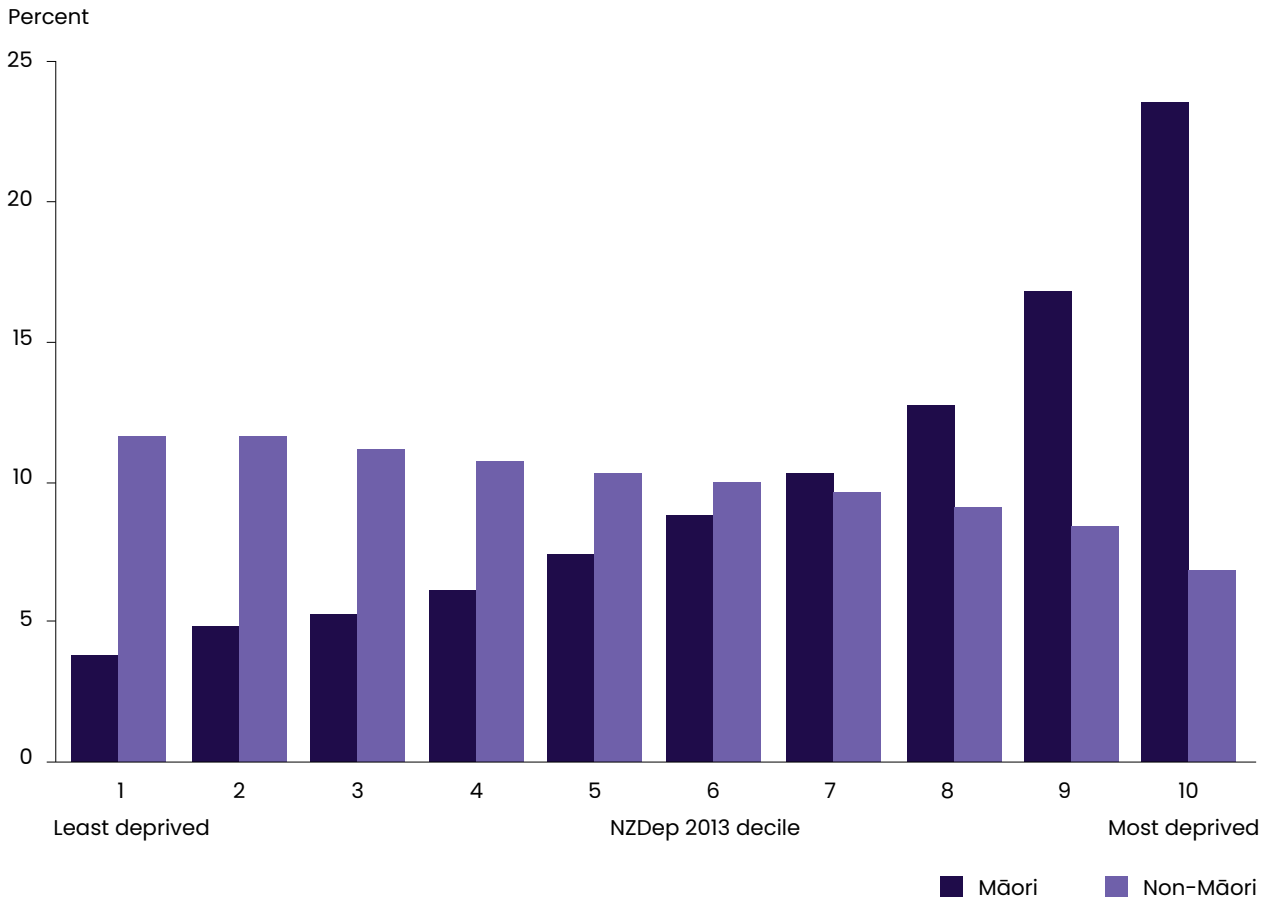
Source: 2013/14 New Zealand Health Survey, Ministry of Health

Source: Tatau Kahukura 2015

## Socioeconomic deprivation

The causative connection between poverty and ill health is well documented. Measurements of deprivation and poverty are critical not only in understanding the causes of Māori health outcomes but in identifying important opportunities for intervention. The overrepresentation of Māori in the most deprived socioeconomic deciles (Table 20) has been diligently reported by the government with no improvement since measurement began in 1991 (TKHM 2022 unpublished).

**Table 22 – Neighbourhood deprivation distribution (NZDep 2013), Māori and non-Māori, 2013**



Note: Crude rates and prioritised ethnicity have been used – see ‘Ngā tapuae me ngā raraunga: Methods and data sources’ for further information. From: Atkinson et al 2014

Source: Tatau Kahukura 2015

Nearly one in five Māori children (19.5%) live in material hardship (around 56,000 children), double the rate of all children<sup>8</sup>. In 2019/2020, 30% of Māori children were living in income poverty, on the related 50% measure (a primary poverty measure against which governments must set targets<sup>9</sup>. Additionally, 8.7 percent of Māori had moved home 5 or more times in the last 5 years<sup>10</sup>. In the 2018 census, 40% of Māori lived in damp or mouldy homes (twice the national average)<sup>11</sup>.

<sup>8</sup> CPAG <https://www.cpag.org.nz/the-latest/current-statistics/latest-child-poverty-figures/>

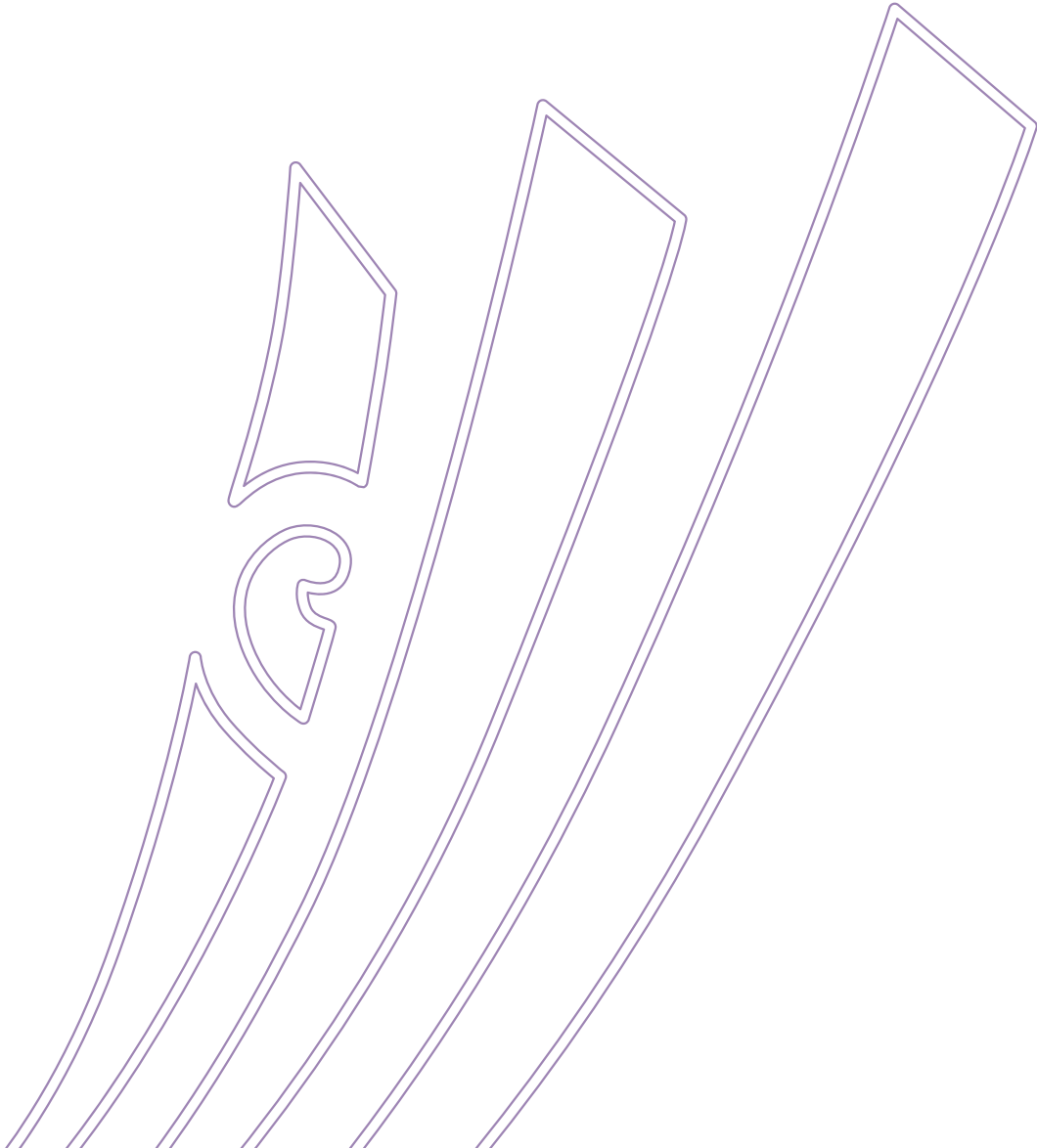
<sup>9</sup> CPAG <https://www.cpag.org.nz/the-latest/current-statistics/latest-child-poverty-figures/>

<sup>10</sup> 2018 General Social Survey (GSS)

<sup>11</sup> 2018 Census, <https://www.stats.govt.nz/reports/te-pa-harakeke- Māori-housing-and-wellbeing-2021>

### 3. Access to power and resources

All of the inequities in downstream health outcomes and risk factors stem from an unequal distribution of power, money and resources (39). This power imbalance was created at the time of colonisation and is perpetuated today, reflecting structural racism and colonialism. Measures of Māori governance, power and control of resources are important as these factors continue to drive the unequal distribution of health and wellbeing, and upholding te Tiriti o Waitangi requires that these fundamental injustices be remedied.



# References

1. Health and Disability System Review. Health and Disability System Review – Final Report – Pūrongo Whakamutunga. . Wellington: HDSR; 2020.
2. Williams DR, Mohammed SA. Racism and health I: Pathways and scientific evidence. *American behavioral scientist*. 2013;57(8):1152–73.
3. Robson B, Harris R, editors. Hauora: Māori Standards of Health IV. A study of the years 2000 – 2007. Wellington: Te Ropu Rangahau Hauora a Eru Pomare; 2007.
4. Jones CP. Invited commentary: “race,” racism, and the practice of epidemiology. *Am J Epidemiol*. 2001;154(4):299–304; discussion 5–6.
5. Ministry of Health. Saving Lives: Amenable mortality in New Zealand, 1996 – 2006. Wellington: Ministry of Health. . Wellington: Ministry of Health; 2010.
6. United Nations Declaration on the Rights of Indigenous Peoples: resolution /adopted by the General Assembly, 2 October 2007, A/RES/61/295, (2007).
7. Curtis E, Jones R, Tipene-Leach D, Walker C, Loring B, Paine S-J, et al. Why cultural safety rather than cultural competency is required to achieve health equity: a literature review and recommended definition. *International Journal for Equity in Health*. 2019;18(1):174.
8. DiAngelo R. White Fragility. *Counterpoints*. 2016;497:245–53.
9. Dyer O. Climate change is outpacing efforts to adapt, warns intergovernmental panel. *British Medical Journal Publishing Group*; 2022.
10. Ministry of Health. Health Loss in New Zealand: A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study, 2006–2016. Wellington: Ministry of Health. Wellington: Ministry of Health 2013.
11. Walsh M, Grey C. The contribution of avoidable mortality to the life expectancy gap in Māori and Pacific populations in New Zealand—a decomposition analysis. *N Z Med J*. 2019;132(1492):46–60.
12. Gurney J, Campbell S, Jackson C, Sarfati D. Equity by 2030: achieving equity in survival for Māori cancer patients. *N Z Med J*. 2019;132(1506):66–76.
13. Gurney JK, Robson B, Koea J, Scott N, Stanley J, Sarfati D. The most commonly diagnosed and most common causes of cancer death for Māori New Zealanders. *N Z Med J*. 2020;133(1521):77–96.
14. Te Aho o Te Kahu. Lung Cancer Quality Improvement Monitoring Report 2021. . Wellington: Cancer Control Agency; 2021.
15. Health Quality and Safety Commission. A window on the quality of Aotearoa New Zealand’s health care 2019 – a view on Māori health equity. Wellington: Health Quality & Safety Commission; 2019.
16. Moore TG, Arefadib, N., Deery, A., & West, S. The First Thousand Days: An Evidence Paper. . Parkville, Victoria.: Centre for Community Child Health, Murdoch Children’s Research Institute; 2017.
17. Perinatal and Maternal Mortality Review Committee. Fourteenth Annual Report of the Perinatal and Maternal Mortality Review Committee | Te Pūrongo ā-Tau Tekau mā Whā o te Komiti Arotake Mate Pēpi, Mate Whaea Hoki. Wellington: Health Quality & Safety Commission; 2021.
18. Mills C, Reid P, Vaithianathan R. The cost of child health inequalities in Aotearoa New Zealand: a preliminary scoping study. *BMC Public Health*. 2012;12:384.
19. Te Puni Kōkiri. Ngā Whānau me ngā Kāinga Māori Māori Families and Households. Factsheet 004:2011 [Internet]. 2011. Available from: <https://www.tpk.govt.nz/en/a-matou-mohiotanga/demographics/Māori-families-and-households/online/1>.
20. Metcalfe S, Beyene K, Urlich J, Jones R, Proffitt C, Harrison J, et al. Te Wero tonu—the challenge continues: Māori access to medicines 2006/07–2012/13 update. *The New Zealand Medical Journal (Online)*. 2018;131(1485):27–47.
21. McLeod M, King P, Stanley J, Lacey C, Cunningham R. Ethnic disparities in the use of seclusion for adult psychiatric inpatients in New Zealand. *N Z Med J*. 2017;130(1454):30–9.
22. Russell L. Te Oranga Hinengaro: Report on Māori Mental Wellbeing Results from the New Zealand Mental Health Monitor & Health and Lifestyles Survey. Wellington: Health Promotion Agency/Te Hiringa Hauora; 2018.
23. Waitangi Tribunal. Hauora: Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry. WAI2575. Waitangi Tribunal Report. Lower Hutt, New Zealand: Legislation Direct,; 2019.
24. Rodriguez L, George JR, McDonald B. An inconvenient truth: why evidence-based policies on obesity are failing Māori, Pasifika and the Anglo working class. *Kōtuitui: New Zealand Journal of Social Sciences Online*. 2017;12(2):192–204.

25. Talamaivao N, Harris R, Cormack D, Paine S-J, King P. Racism and health in Aotearoa New Zealand: a systematic review of quantitative studies. *The New Zealand Medical Journal (Online)*. 2020;133(1521):55-5.
26. Ministry of Health. *Tatau Kahukura: Māori health chart book 2015*. Wellington, NZ: Ministry of Health; 2015.
27. Walsh M, Wright K. Ethnic inequities in life expectancy attributable to smoking. *NZ Med J*. 2020;133(1509):28-38.
28. Government Inquiry into Mental Health and Addiction. *He Ara Oranga: Report of the Government Inquiry into Mental Health and Addiction*. Wellington: New Zealand Government; 2018.
29. Minister of Health. *New Zealand Health Strategy: Future direction*. Wellington, NZ: Ministry of Health.; 2016.
30. Ministry of Health. *He Korowai Oranga: Māori Health Strategy*. Wellington Ministry of Health 2002.
31. Ministry of Health. *Whānau Ora: Transforming our futures*. . Wellington: Ministry of Health; 2011.
32. Ministry of Health. *Wai 2575 Māori Health Trends Report*. Wellington: Ministry of Health.; 2019.
33. Cormack D, M. M. Improving and maintaining quality in ethnicity data collections in the health and disability sector. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare.; 2010.
34. Reid G, Bycroft C, Gleisner F. Comparison of ethnicity information in administrative data and the census. Wellington: Stats New Zealand; 2016.
35. Cleary L. Using ethnicity data in health statistics. Wellington.: Ministry of Health; 2021.
36. Ministry of Health. *HISO 10001:2017 Ethnicity Data Protocols*. Wellington: Ministry of Health; 2017 2017.
37. Dawson P, Jaye C, Gauld R, Hay-Smith J. Barriers to equitable maternal health in Aotearoa New Zealand: an integrative review. *International Journal for Equity in Health*. 2019;18(1):168.
38. Te Aho o Te Kahu.;. *Pūrongo Ārai Mate Pukupuku, Cancer Prevention Report*. . Wellington: Te Aho o Te Kahu, Cancer Control Agency.; 2022.
39. Commission on Social Determinants of Health. *Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health*. Geneva: World Health Organisation.;; 2008.

**Te Aka Whai Ora**  
Māori Health Authority

