



Housing

New Zealand College of Public Health Medicine Policy Statement

Policy statement

The New Zealand College of Public Health Medicine (NZCPHM) recognises housing as a key determinant of health and of equity. We are concerned that many people living in Aotearoa New Zealand do not have access to adequate, secure, accessible, culturally appropriate housing that is affordable and sustainable. Healthy housing contributes to healthy homes, which are essential for health and wellbeing.

Key messages

The NZCPHM recognises that housing and housing quality have a significant impact on health and wellbeing through complex social, environmental and economic factors.

NZCPHM calls for action to improve equitable access to adequate, affordable, sustainable and appropriate housing to support all New Zealanders to achieve good health and wellbeing.

- Prioritise housing by developing a cross-party, long-term and cohesive plan that focuses on healthy housing and urban development.
- Urgently develop cross-party policy to address the long-term sustainability of housing and the impacts of climate change on housing-related health, as well as the impacts of housing itself on climate change.
- Implement legislative approaches that support security of tenure, housing affordability, and reduce inequities in wealth accumulation through housing.
- Adopt a Health in All Policies approach across sectors, including those involved in urban planning, transport and climate change, as well as housing and health sectors.
- Use legislation and develop policy to actively address current inequitable housing-sensitive health outcomes for Māori, and honour Crown obligations under te Tiriti o Waitangi.
- Ensure robust monitoring, evaluation and review of national housing-related strategies and legislation.
- Strengthen monitoring of and compliance with legislated housing standards.

The NZCPHM also supports the World Health Organization's Housing and health guidelines,¹ and the statement of the Royal Australasian College of Physicians, Make health equity the norm: Healthy housing.²

This statement updates and replaces the NZCPHM's Housing policy statement of 2013.

Background

Public health is the art and science of preventing disease, prolonging life and promoting health through the organised efforts of society.³

Public health has historically been the biggest driver of improved health for people.⁴ Advancements in public health in the last 100 years, such as vaccination, control of infectious diseases through clean water and improved sanitation, and the recognition of tobacco use as a health hazard, have led to improvements in health and wellbeing, and a substantial increase in life expectancy.⁵

The NZCPHM represents the medical speciality of public health medicine in Aotearoa New Zealand. Public health medicine is defined as the branch of medicine concerned with the epidemiological analysis of the health and health care of populations and population groups. It involves assessing population health and health care needs, developing policy and strategy, undertaking health promotion activities, controlling and preventing disease, and organising services. Public health medicine specialists use the tools of epidemiology, and other frameworks such as health promoting environments, Health in All Policies, Te Pae Mahutonga and the Ottawa Charter to inform partnerships and structure public services to support thriving communities. These approaches are grounded in the societal,ⁱ economic and environmental determinants of health.⁶⁻¹⁴

Doctors in general have a professional responsibility to act as advocates for health for everyone in society.¹⁵ Public health medicine specialists have a particular focus on preventing disease and supporting good health, achieving health equity across ethnic, socioeconomic, age, ability and cultural groups, and promoting environments in which everyone can be healthy.¹⁶

In Aotearoa New Zealand there is a specific responsibility to act in ways that ensure that best health outcomes for Māori are achieved. Māori are signatories, with the Crown, to te Tiriti o Waitangi. For this reason, the NZCPHM advocates for and supports evidence-informed,¹⁷ equity-enhancing¹⁸ policy on housing for health and wellbeing that accords with te Tiriti o Waitangi, and with the United Nations (UN) Sustainable Development Goals.⁷

Housing and health

The following summary is based on the more detailed description of housing and health provided in the Appendix.

Healthy houses

The World Health Organization (WHO) defines seven criteria for 'adequate' housing: security of tenure; availability of services, materials and infrastructure; affordability; habitability; accessibility; location; and cultural adequacy.¹ A healthy house should meet these criteria and provide: a shelter that is structurally sound, warm, dry and well ventilated; has sufficient space for those living in it; has heating systems that are efficient and affordable; and is designed and maintained to minimise injury hazards. Housing can provide a sense of belonging and community.¹ As the impacts of climate change increase, houses should protect people from extreme weather and natural events as far as possible. In these ways, healthy houses contribute to the wellbeing of individuals and their communities.¹

ⁱ Societal determinants of health include commercial, political, governance, economic, cultural and even religious determinants. Together these societal structures help create the conditions for health and disease. Each of them eventually impacts on a person's health in a positive or negative way.

Housing as a determinant of health

Housing is a significant determinant of health through complex interactive pathways (see Figure 1).^{1,19} It is also an important mediating factor in health inequities.¹⁹

On average, New Zealanders spend around 70 percent of their daily time indoors at home; this percentage is higher for children and the elderly, who are particularly vulnerable to housing-sensitive health outcomes.^{20,21} Significant societal and economic costs have been attributed to housing-related morbidity and mortality.^{19,22}

Housing as a health determinant is mediated by factors that include:^{1,19,22}

- heating, ventilation and moisture control;
- crowding;ⁱⁱ
- falls and injuries;
- accessibility including by applying universal design principles;
- security of tenure; and
- other factors such as the presence of toxins, spatial planning and impacts of climate change.

Mediating factors do not occur in isolation.¹ Poorer health and reduced employment opportunities lead to increased poverty and an increased likelihood of living in a poorer-quality home. Yet in Aotearoa New Zealand, poorer-quality homes are more likely to be rentals, crowded and of insecure tenure.¹⁹

Housing in Aotearoa New Zealand

Aotearoa New Zealand has housing stock that is generally old and of poor quality, and this is especially so for rental properties.¹⁹ Housing affordability (that is, the costs of housing relative to gross household income) is low for both home ownership and renting.^{23,24} Property is also a significant contributor to wealth accumulation for individuals, with intergenerational economic benefits for homeowners compounding the inequity in housing-sensitive health outcomes. While this is recognised as a concern, it has not yet been explicitly addressed in policy.

For Māori and Pacific populations, housing quality, affordability and broad health outcomes demonstrate significant inequities.^{23,25,26} Māori are four times as likely than New Zealand Europeans to have severe housing deprivationⁱⁱⁱ and only 31 percent own their own home compared with 58 percent of New Zealand Europeans.^{25,27} Pacific peoples are six times as likely to have severe housing deprivation compared with New Zealand Europeans, and only 21 percent own their own home.^{iv,26,27}

Interventions such as retrofitting insulation have been demonstrated to improve health outcomes, and provide significant economic benefits.¹⁹ The Healthy Homes Guarantee Act 2017 has mandated minimum standards for tenanted properties, defined in detail in the Residential Tenancies (Healthy Homes Standards) Regulations 2019.^{28,29} To date, compliance with and regulation of these legislated standards have been limited.

ⁱⁱ There is no New Zealand-specific tool for measuring household crowding. Stats NZ uses the Canadian National Occupancy Standard. It calculates the number of bedrooms needed based on the demographic composition of the household and is considered one of the most useful tools in the New Zealand context.

ⁱⁱⁱ Severe housing deprivation is considered synonymous with 'homelessness'. Housing that lacks at least two of the three core dimensions of housing adequacy – habitability, security of tenure, and privacy and control – is deemed severely inadequate.²⁸

^{iv} In 2018, 35% of the Pacific population lived in an owner-occupied dwelling, and 21% owned the dwelling they live in.²⁶

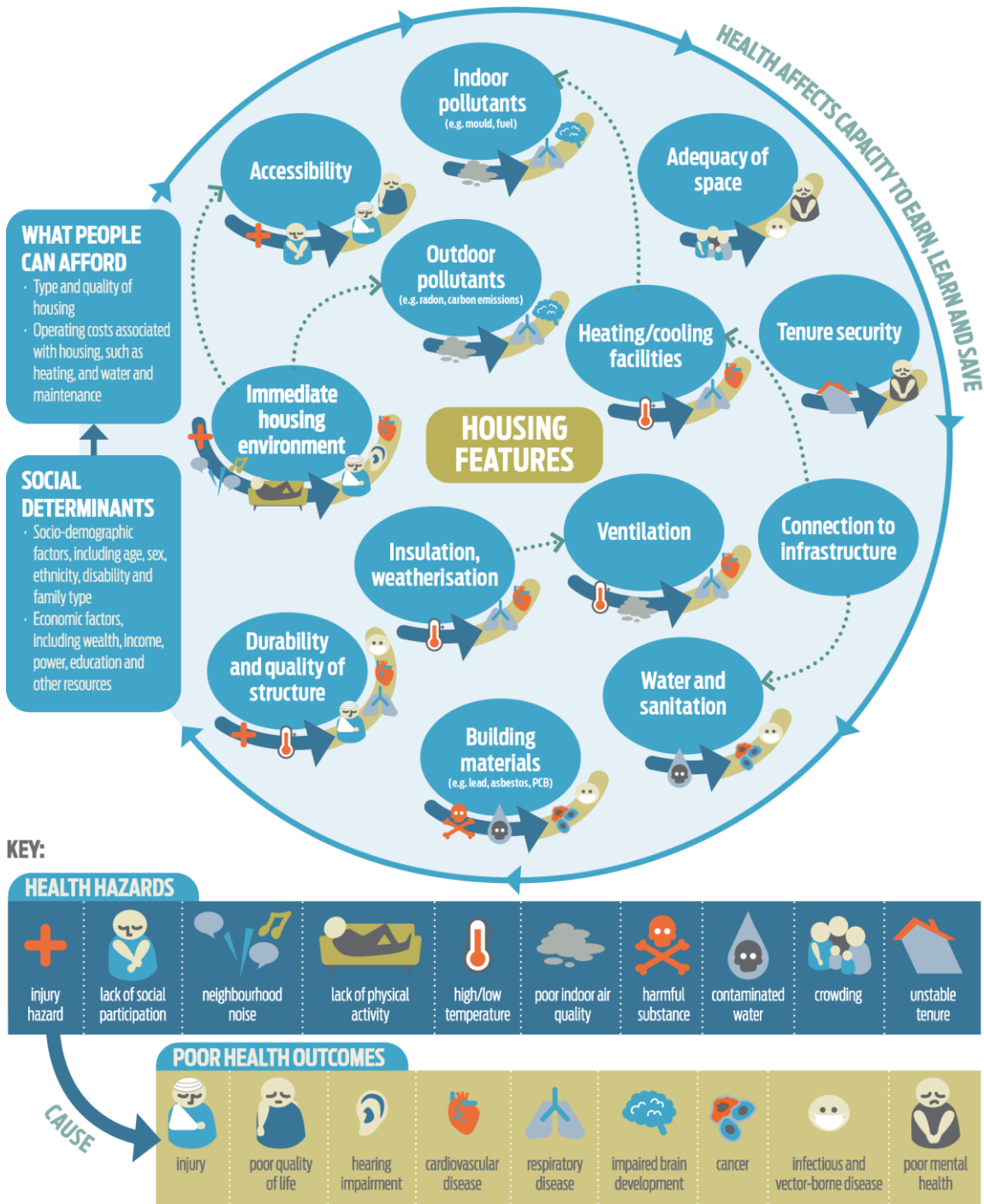


Figure 1. Housing as a complex determinant of health.

Source: Pierse N, Howden-Chapman P. Interventions and policies for healthy homes. Build 181. 2020;December,44–47. With thanks to Dr Pierse, Build magazine and BRANZ for permission to use.

Housing and Māori

Māori have strong spiritual and cultural connections to place. Homes are considered a place of belonging and of connection.^{25,30} Dwellings need to allow cultural expression and to adequately allow Māori to live comfortably in wider whānau households.^{25,30}

Current housing inequities for Māori have been driven by colonisation from the early 1800s onwards. Colonisation resulted in large-scale loss of land and mass urban migration. Policy from the 1950s supported Māori home ownership and provided successful state housing but economic reforms of the 1990s had an inequitable impact on Māori, who were more reliant on state-owned mortgages and state housing than non-Māori.

The Crown has obligations under te Tiriti o Waitangi to protect Māori and address inequities, to advance partnerships that allow obligations to be met, and to support Māori to exercise tino rangatiratanga.⁵¹ Housing is a key determinant influencing inequitable health outcomes for Māori, and it will be imperative for the Crown to meet its obligations under te Tiriti if these are to be effectively addressed.³¹

In 2020, the Government announced a partnership with Māori using a kaupapa Māori approach to improve Māori housing outcomes through Te MAIHI o te Whare Māori – the Māori and Iwi Housing Innovation Framework for Action (MAIHI) and the MAIHI Ka Ora Strategy (the National Māori Housing Strategy).³⁴⁻³⁶

The Waitangi Tribunal (the Tribunal) is currently reviewing claims of Māori grievances concerning housing and policy through the WAI2750 – Housing Policy and Services Inquiry initiated in 2019. A preliminary Stage One report (the Report) was released in May 2023, focusing on Māori homelessness from 2009. While limited in breadth, as the Tribunal continues to examine housing in detail, the Report welcomed the development of MAIHI and its associated policy but found the Crown had breached its obligations under te Tiriti in several areas.

Housing and Pacific Peoples

The home is the centre for Pacific families and extended families to gather, pray, eat, rest, play, learn and share knowledge, language, customs and traditions. Indeed the role of the home as central to health and wellbeing is reflected in the Fonofale Model of Health, which incorporates the structure of a Samoan house (Fale) composed of the foundation (family), roof (cultural values and beliefs) and four pou which represent the spiritual, physical, mental and other aspects of wellbeing.³⁷

Pacific peoples aspire for home ownership valuing the security, privacy and opportunity to adapt homes to suit their lifestyle, build intergenerational wealth, and achieve equitable health and wellbeing.^{38,39,40} Unfortunately, home ownership rates for Pacific peoples continue to decline, now at 21% compared to 52% for the total population.^{26,41}

Pacific families require larger homes but there are few such homes available to rent or buy. Only 4% of rented dwellings have five or more bedrooms.⁴² The situation is exacerbated further as most Pacific communities are based in larger urban areas where house prices are higher than average. Evidence suggests Kāinga Ora is increasingly moving towards building smaller homes that are not fit for purpose for Pacific peoples. <https://www.mpp.govt.nz/programmes/pacific-housing-strategy/>

Many Pacific families live in overcrowded and poor-quality housing. Almost half of Pacific peoples are exposed to adverse housing conditions (46%) compared to 24% of the total New Zealand population, and Pacific peoples have higher rates of potentially avoidable housing-related hospitalisations as well as infectious diseases such as acute rheumatic fever and skin infections. Among those living in dwellings

with at least one major problem, 29% had poor overall mental wellbeing on the WHO-5 index, compared with 13% of Pacific peoples without major housing problems⁴²

In comparison to the total New Zealand population, Pacific peoples live in homes that are more crowded (40% vs 11%), require major repairs (10% vs 4%) and are always or often cold (41% vs 21%).⁴²

Pacific peoples' desire more affordable and suitable housing, and this can be achieved through implementing the vision outlined in *Fale mo Aiga the Pacific Housing Strategy 2030*, which is for Pacific peoples to own and live in affordable, quality, fit-for-purpose, healthy homes that enhance their wellbeing.⁴³

Housing and climate change

The impacts of climate change will have an increasing influence on housing and housing-sensitive health outcomes, with the risk of increasing housing inequity. Conversely, how housing affects climate change through greenhouse emissions will need to be actively considered and mitigations established. Conversely, housing also contributes significantly to current greenhouse gas emissions.^{44,45}

A whole-of-government approach using a range of legislative and policy mechanisms has been developed to address climate change, such as the Climate Change Response (Zero Carbon) Amendment Act 2019 and the National Adaptation Plan. The Building for Change programme was established in 2020 to guide the construction industry on reducing emissions and improving climate resilience. Housing planning and design will need to consider carbon emissions including lifespan contributions, while also explicitly considering unintended consequences on health.^{44,46-48}

Improving housing quality

The World Health Organization (WHO) has produced guidelines on housing and health, as well as a review of policy, regulations and legislation for healthy housing.^{1,49} It suggests housing interventions can represent a major opportunity to promote 'primary prevention through intersectoral action' and that health must be recognised as a core element in housing policies.¹ Public health is skilled in providing advocacy and leadership.^{50,51} It has significant expertise in a Health in All Policies approach to cross-sectoral working and is well placed to support prioritisation and coordination across sectors.^{50,51} Public health can further support policy development through appropriate research to provide a robust evidence base.^{50,51}

In Aotearoa New Zealand, mechanisms such as legislation and policy have been introduced to address housing. The Healthy Homes Guarantee Act 2017 and the Residential Tenancies (Healthy Housing Standards) Regulations 2019 have been outlined above. For housing and urban development more broadly, the Kāinga Ora – Homes and Communities Act 2019 established Kāinga Ora – Homes and Communities as the Crown's public housing and urban development agency.⁵² The Act also mandates a government policy statement on housing and urban development (GPS-HUD).⁵² The GPS-HUD was published in September 2021 to sit alongside the MAIHI Ka Ora Strategy in setting the direction for housing and urban development.^{36,53} Its vision is to ensure everyone in Aotearoa New Zealand lives in a home and community that meets their needs and aspirations and it is intended as a multi-decade system strategy.⁵³ The GPS-HUD recognises the need for a systems-wide, multi-sector approach using a broad range of mechanisms. Despite the WHO's emphasis on considering health as a core element in housing policies, this is not explicit in several key national-level policies and position statements including the GPS-HUD.⁵³

Sustained cross-party agreement will be required for these broad mechanisms to achieve their aims, recognising the complexity of housing in Aotearoa New Zealand and the need to take a long-term view.

Key recommendations

The NZCPHM calls for action for equitable access to adequate housing that is affordable, secure, accessible, sustainable and culturally appropriate. It advocates for a range of actions across a broad range of sectors at national, regional and local levels.

- Prioritise housing, by developing a cross-party, long-term and cohesive plan focused on healthy housing and urban development. This action will lead to improved health and wellbeing, and provide economic benefits for all.
- Urgently develop cross-party policy to address the long-term sustainability of housing and the impacts of climate change on housing-related health, as well as the impacts of housing itself on climate change.
- Implement legislative approaches that support security of tenure and housing affordability, and that reduce inequities in wealth accumulation through housing.
- Adopt a Health in All Policies approach across sectors, including those involved in areas such as urban planning, transport and climate change, as well as housing and health.
- Use legislation and develop policy to actively address current inequitable housing-sensitive health outcomes for Māori, and honour Crown obligations under te Tiriti o Waitangi. Use the findings of the WAI2750 – Housing Policy and Services Inquiry to strongly inform and guide this process.
- Ensure robust monitoring, evaluation and review of national housing-related strategies and legislation.
- Strengthen monitoring and compliance with legislated housing standards.

Links with other NZCPHM policies

Climate Change

Rheumatic Fever

Health Equity

Sustainability

Māori Health

Pacific Peoples' Health

The First 1000 Days of Life

Child Poverty and Health

Transport

Physical Activity and Health

Acknowledgement

This policy statement was developed by the NZCPHM Policy Committee, NZCPHM members and staff. Authorship or review is recorded in the list of policy statement main authors on the College's Policy Statements webpage at <https://nzcphm.org.nz/Policy-Statements/10944/>

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Appendix: Supporting information and evidence

Healthy houses

The World Health Organization (WHO) defines seven criteria for ‘adequate’ housing: security of tenure; availability of services, materials and infrastructure; affordability; habitability; accessibility; location; and cultural adequacy.¹ The New Zealand College of Public Health Medicine (NZCPHM) believes a healthy house should meet these criteria while also providing a shelter that is structurally sound, warm, dry and well ventilated, has sufficient space for those living within it, has heating systems that are efficient and affordable and is designed and maintained to minimise injury hazards. Healthy housing should be integrated with the surrounding neighbourhood such that it allows easy access to work, schools and services in a healthy and sustainable environment.¹ Healthy houses should be designed to mitigate the impacts of climate change, particularly extreme weather events and increasing rising temperatures in urban environments.¹⁸ In these ways, healthy houses become healthy homes that foster a sense of belonging and contribute to the wellbeing of individuals and their communities.¹

Housing as a determinant of health

On average, New Zealanders spend around 70 percent of their daily time indoors at home; this percentage is higher for children and the elderly, who are particularly vulnerable to housing-sensitive health outcomes.^{20,21} For each year between 2010 and 2017, an estimated 6,300 hospital admissions and 230 deaths in Aotearoa New Zealand were attributable to poor quality housing. Societal costs associated with these deaths alone were estimated at around \$1 billion.^{19,22}

Housing is a health determinant mediated by many factors through complex interactive pathways. The following are some of those factors.^{1,19,22}

- Temperature, ventilation and moisture control
 - Damp and mouldy housing conditions cause significant health issues such as asthma and bronchiolitis.
 - Cold internal temperatures contribute to formation of dampness and mould. They also have a direct impact: in each year between 2010 and 2017, an estimated 624 hospitalisations were attributable to cold.²²
 - Fuel poverty – defined here as the inability to afford to adequately heat a home^v – contributes to cold internal temperatures. It can result in functional crowding – that is, sharing of spaces in part to limit energy costs.⁵⁴
 - Conversely, having an internal temperature that is too high can negatively impact cardiovascular health. The inability to appropriately cool indoor temperatures is likely to be an increasing concern as the impacts of climate change on Aotearoa New Zealand become more apparent.
 - Poor ventilation can affect internal air temperature and moisture levels, compounding health impacts. It can also contribute to higher rates of infectious disease, as was evident during the COVID-19 pandemic.^{55,56}

^v Aotearoa New Zealand does not have a consistent definition of household fuel poverty. The definition most widely adopted is having to spend more than 10 percent of total household income on household energy costs, but other definitions exist such as self-reported fuel deprivation because of an inability to afford it. The populations for different definitions do not appear to be the same.⁴⁸

- Crowding (insufficient living space for the number of household members)^{vi}
 - Crowding contributes to high rates of infectious diseases. For example, it has a strong causal link with rheumatic fever.⁵⁷
 - It increases psychological distress and reduces wellbeing.
 - Crowding is linked to reduced educational attainment for children. The reduced employment opportunities and lower income that follows can lead to intergenerational effects.
- Falls and injuries
 - Unintentional injuries at home are the main cause of payments from the Accident Compensation Corporation (ACC).¹⁹ Annual costs have been estimated at \$102 million covering 115,555 ACC claims.
 - The risk of injury at home is highest in those 60 years of age or older.^{19,22}
 - Remediating existing properties has been demonstrated to substantially reduce related injuries and to be cost-effective.^{58,59} These remediations are often simple and low-cost, such as installing hand and grab rails, outside lighting and slip-resistant surfacing.^{58,59}
 - Evidence suggests health benefits from remediations are higher for Māori for a range of reasons, such as larger household size.⁵⁹
- Accessibility

Accessibility refers to the ability of individuals with disabilities to live independently within a house. It includes accessibility from outside but also design of features within the property such as modified furniture and fittings. Poorly accessible homes contribute to a sense of isolation and influence injury risk, particularly for the elderly and those with disabilities.¹⁹ Universal design principles could allow people with a range of disabilities, and older people to remain in their homes.

- Security of tenure
 - Available evidence suggests that tenure security parallels housing quality, in that those in poorer-quality housing have the least security.¹⁹
 - Children are particularly impacted by high residential mobility: behavioural difficulties increase and reduced educational attainment decreases.¹⁹
 - Frequent moves increase economic pressure on households, further contributing to the cycle of poverty and poor health.¹⁹
- Other impacts include:
 - the presence of toxins, such as lead and asbestos;¹
 - spatial planning, with the location of housing influencing physical activity; access to employment, health care and other services, green spaces, and public transport; and¹
 - climate change (see section on Housing and Climate Change below)

^{vi} There is no New Zealand-specific tool for measuring household crowding. Stats NZ uses the Canadian National Occupancy Standard. This standard calculates the number of bedrooms needed based on the demographic composition of the household and is considered one of the most useful tools in the New Zealand context.

Mediating factors do not occur in isolation.¹ For example, damp houses are often cold and poorly ventilated, leading to crowding. In turn, crowding can increase injury hazards and risk of infectious disease. Poorer health and reduced employment opportunities lead to increased poverty and an increased likelihood of living in a poorer-quality home. In Aotearoa New Zealand, these poorer-quality homes are more likely to be rentals and to have less secure tenure.¹⁹ In countries such as Germany, Austria and France, policy and legislative decisions have resulted in rental stock that is of higher quality and with much greater security of tenure.

Housing in Aotearoa New Zealand

Aotearoa New Zealand has housing stock that is generally old and of poor quality; this is especially so for rental properties.¹⁹ Average daytime temperatures inside homes during the winter are low – average winter temperatures have been found to be 18 degrees Celsius.¹⁹ About 25 percent of the total 2018 Census respondents report they could not afford to adequately heat their homes.²³

Housing affordability in Aotearoa New Zealand (that is, the costs of housing relative to gross household income) is low for both home ownership and renting.^{23,24} In 2020, Aotearoa New Zealand had the highest housing cost to disposable income ratio in the Organisation for Economic Co-operation and Development (OECD).²⁴ House prices have steadily increased over the last decade.²⁴ Although inflation has resulted in a fall in prices from the end of 2021, they remain high and it is anticipated that they will increase again from 2025 onwards.⁶⁰ House prices have increased at a significantly greater rate than rents and incomes. Although the purchase cost is high, owner-occupied houses are generally newer, of better quality and have lower housing-associated costs relative to income compared with rentals.^{24,19}

For Māori and Pacific populations, housing quality and affordability and broad health outcomes demonstrate significant inequities (Table 1).^{23,25,26} Māori make up around 17 percent of the total population but about 50 percent of those on the housing register (those eligible but waiting for public housing) and 37 percent of public housing tenants.^{23,25} They are four times as likely than New Zealand Europeans to experience severe housing deprivation^{vii} and only 31 percent own their own home compared with 58 percent of New Zealand Europeans.^{25,27} Pacific peoples are six times as likely than New Zealand Europeans to have severe housing deprivation, and only 21 percent own their own home.^{26,27} In the 2018 Census, 24 percent of total respondents reported dampness in their homes, but this was 40 percent for Māori and 46 percent for Pacific respondents.

Table 1. Māori and Pacific peoples as a proportion of total population, and specific housing indicators

Population group	Proportion of total population	Proportion of all those on housing register	Likelihood of severe housing deprivation compared with NZ European	Proportion of homeowners by ethnicity	Proportion by ethnicity reporting housing dampness (Census 2018)
Māori	17%	50%	4 times more likely	31%	40%
Pacific	8%	15%	6 times more likely	21%	46%

Wealth accumulation for homeowners has been recognised as a major contributor to wealth inequity. In Aotearoa New Zealand, property is a significant contributor to wealth accumulation for individuals, with

^{vii} Severe housing deprivation is considered synonymous with ‘homelessness’. Housing that lacks at least two of the three core dimensions of housing adequacy – habitability, security of tenure, and privacy and control – is deemed severely inadequate.²⁴

intergenerational economic benefits for homeowners. These benefits further compound the inequity in housing-sensitive health outcomes.^{1,19,61} Tax reforms in Aotearoa New Zealand in the 1980s favoured homeowners and contributed to a substantial increase in house prices over the subsequent decades.⁶¹⁻⁶³ Home ownership has become significantly harder to achieve for current renters and younger generations.^{62,63} Compared with most other OECD countries, Aotearoa New Zealand continues to have a greater tax advantage for residential property relative to other assets.⁶¹ Tax reforms including a capital gains tax have been suggested to try to address these concerns, although there is debate around the impact such reform may now have on housing affordability and wealth inequality.⁶² However, a capital gains tax would produce significant revenue that could then be used to address income inequalities through other means.⁶² The introduction of such a tax is likely to involve significant complexities, including political appetite – nevertheless, as one means of improving housing-sensitive outcomes and existing inequities, such mechanisms should be explored further.^{62,63}

Innovative research into housing and health has been undertaken in Aotearoa New Zealand. One example is the series of community randomised controlled trials undertaken by He Kāinga Oranga – Housing and Health Research Programme.^{viii} This research has found housing interventions such as retrofitting insulation and providing improved heat sources result in improved health outcomes, while also providing significant economic benefits through a reduction in housing-related hospitalisations and societal costs more broadly.¹⁹

The Healthy Homes Initiative (HHI) was developed with the aim of reducing housing-sensitive paediatric hospital admissions by remediating the homes of children considered at risk.⁶⁴ Insulation, heating and draught-stopping interventions are provided, as well as advice to households on healthy housing behaviours and energy efficiency.⁶⁴ A three-year evaluation of the HHI has demonstrated that an estimated 9,744 hospitalisations have been prevented within the HHI cohort per year, and those hospitalised have less severe illness.^{19,64} The evaluation has demonstrated the cost-effectiveness of this programme in terms of both reduced hospitalisation costs and reduced societal costs more broadly, such as fewer days off work, fewer student-days absent from school, and reduced reliance on benefit income.^{19,64} Importantly, more recent research suggests that home insulation interventions were associated with reduced hospital admissions, particularly for Pacific peoples.²⁸ While the HHI was initially intended to support the Rheumatic Fever Prevention Programme and was restricted to regions with higher rates of rheumatic fever, in 2022 it began to be rolled out nationally.⁶⁴ The HHI has defined eligibility criteria and is currently available for households with the most at-risk children up to five years of age and for households with pregnant women.

The findings from housing research in this country have also contributed to policy developments such as the Healthy Homes Guarantee Act 2017, which mandated minimum standards for insulation, heating, ventilation, moisture ingress and drainage, and draught stopping.²⁹ These standards are defined in detail in the Residential Tenancies (Healthy Homes Standards) Regulations 2019 and apply to those tenancies covered by the Act.⁶⁵ Landlords must issue a compliance statement with all new or renewed tenancy agreements. Final dates for compliance with the standards have been extended because of the impact of the COVID-19 pandemic on the construction industry workforce and supply. The Crown's public housing provider, Kāinga Ora, and community housing providers now have until July 2024 to comply, and private landlords have until July 2025.⁶⁵

A weakness of the current system is that compliance with the standards is determined by the landlord and there is no requirement for any independent assessment of the property. Some landlords will

^{viii} He Kāinga Oranga – Housing and Health Research Programme is an interdisciplinary research centre based at the University of Otago Wellington. It investigates the impact of the indoor environment and of housing interventions on residents' health and wellbeing. www.healthyhousing.org.nz

contract out to an independent assessor but there are no formal training, qualifications or registration for assessors and no quality control for assessments. Landlords may choose to self-assess but evidence suggests homeowners, including landlords, can overestimate the quality of their property.^{66,67}

The onus is on tenants to report concerns around compliance once a compliance certificate has been issued. A Tenancy Compliance and Investigations Team (TCIT) exists within the Ministry of Business, Innovation and Employment but much of its work appears to be reactive following compliance breaches reported by tenants.⁶⁸ TCIT does not intervene in every case and for most tenants, the only other redress is through the Tenancy Tribunal.⁶⁸ Many will be reluctant to do so because of concerns this may impact their tenancy.^{66,67}

To date, there has been limited national-level formal monitoring of the standards and no mandated registration process for compliance. The Ministry of Housing and Urban Development has undertaken three monitoring surveys: a baseline survey in 2020, and two further surveys in 2021 and 2022. These have focused on private tenancies only and included both tenants and landlords.^{69,70,32} All three have included around 1,600 adult tenants and 1,000 landlords (different individuals in each survey) – representing only a small proportion of the estimated 930,000 adult tenants and 120,300 landlords in the private rental sector.⁷¹ He Kāinga Oranga researchers have developed a broader Rental Warrant of Fitness as a quality checklist for minimum requirements for the health and safety of rental occupants.^{66,33} However, given current regulations are weakly monitored and enforced, the focus for now should remain on strengthening compliance with legislative requirements.

Housing and Māori

For Māori, a home is more than just the building, the house. Homes are considered a place of belonging and a place to connect to individuals, communities and whakapapa.^{25,30} While it is important that Māori have access to affordable, good-quality, warm and dry housing, homes also need to provide for this social connection, to enable and support whakawhanaungatanga.³⁰ Housing design should encompass not only single person and nuclear families as well as intergenerational living and larger families. Accessible communal or shared facilities that enable appropriate cultural expression of manaakitanga are important.³⁰ Household crowding is often driven by economic necessity, but it is also true that homes in Aotearoa New Zealand are predominantly designed around single-family households, which do not necessarily meet the needs of Māori.^{25,30}

Current housing inequities for Māori have been driven by aggressive colonisation policies from the early 1800s onwards. This resulted in large-scale loss of land, and mass urban migration of rural Māori. From the 1950s, cross-party policies supported Māori home ownership and provided state housing support but economic reforms of the 1990s resulted in the removal of income-related rents and the sale of state-owned mortgages to private banks. This had an inequitable impact on Māori, who were more reliant on state-owned mortgages and state housing than non-Māori.

The Crown has obligations under te Tiriti o Waitangi to protect Māori and to address inequities, to advance partnerships that allow obligations to be met, as well as to support Māori to exercise tino rangatiratanga.³¹ Housing is a key determinant of health outcomes for Māori across a range of measures, and it will be imperative that Crown meets its obligations under te Tiriti if this is to be effectively addressed.³¹

In 2020, the Government announced a partnership with Māori using a kaupapa Māori approach to improve Māori housing outcomes through Te MAIHI o te Whare Māori – the Māori and Iwi Housing Innovation Framework for Action (MAIHI).^{34,35} The MAIHI Ka Ora Strategy (the National Māori Housing Strategy) has been developed around this framework.³⁶ This strategy is intended to cover a 30-year

timeframe. Its vision is that “All whānau have safe, healthy, affordable homes with secure tenure, across the Māori housing continuum.”³⁶

The MAIHI Ka Ora Strategy states that it has been co-designed with Māori and requires a genuine partnership between Crown and Māori. It is underpinned by the articles of te Tiriti and “considers whānau and kāinga (homes) rather than houses”.³⁶

Analysis of Census 2018 data estimated severe housing deprivation in Aotearoa New Zealand affected over 41,000 individuals, or just under 1 percent of the total population.²⁷ Of these, almost 50 percent were under 25 years of age, and around 50 percent were female.²⁷ Māori were four times more likely than New Zealand Europeans to experience severe housing deprivation, and Pacific peoples six times more likely.²⁷ It is likely that these figures are underestimates of actual figures, particularly for Māori and Pacific populations, and it is important to note that they are based on data from before the COVID-19 pandemic.

MAIHI has identified homelessness as a priority for urgent action. In February 2020, the national Homelessness Action Plan was released to sit alongside MAIHI. The focus of these initiatives together is to reduce homelessness and drive deeper system changes to improve housing for Māori. The Homelessness Action Plan has a commitment to partner with Māori and with providers, local authorities and those experiencing homelessness.

The Waitangi Tribunal (the Tribunal) is currently reviewing claims of Māori grievances concerning housing policy and services through the WAI2750 – Housing Policy and Services Inquiry (the Inquiry) initiated in 2019. The Crown’s response to the findings of the Inquiry will be led by the Ministry of Housing and Urban Development via the MAIHI Framework.^{72,73}

In May 2023, the Tribunal published a preliminary Stage One report, Kāinga Kore (the Report), which examined homelessness for Māori from 2009 onwards. The Report was limited in breadth and recognised that homelessness sits within a much broader view of housing, which the Inquiry continues to examine in detail. The Report found the Crown had breached its obligations under te Tiriti in a number of areas. These include the definition of homelessness for Māori, inadequate data collection, a failure to provide an adequate response to homelessness and a failure to address housing issues more broadly.

The Report welcomed the development of MAIHI and the Homelessness Action Plan, both of which it felt were overdue. Yet it also found that the Crown had breached its te Tiriti obligations further by making consultation for both too narrow. The Report identified that consultation for MAIHI had been predominantly with the Iwi Chairs Forum and Te Matapihi (the national peak body for Māori housing) and did not extend to Māori more broadly.

Housing and Pacific Peoples

The home is the centre for Pacific families and extended families to gather, pray, eat, rest, play, learn and share knowledge, language, customs and traditions. Pacific Peoples have unique needs that are not well understood by government agencies or mainstream housing providers. As a result Aotearoa New Zealand’s housing policies have failed to adopt housing designs that consider the Pacific way of living.³⁹

Due to inappropriate housing design, 40% of Pacific households experience overcrowding which potentially can have negative impacts on their health and well-being.⁴¹

To live well, Pacific families require larger homes but there are few such homes available to rent or buy. Data from Statistics New Zealand notes that only 4% of rented dwellings have five or more bedrooms.⁴²

The situation is exacerbated further as most Pacific communities are based in larger urban areas where house prices are higher than average. Evidence suggests Kāinga Ora is increasingly moving towards building smaller homes that are not fit for purpose for Pacific peoples.³⁹

Many Pacific families are renters rather than homeowners. In the past three decades, Pacific peoples' home ownership rates have fallen and now only 21% of Pacific people are homeowners compared with 70% of Europeans.⁴¹

A quarter of Pacific peoples live in houses provided by the state or the community. But much of this accommodation is of poor quality and lacks the basic amenities.⁴²

Solutions are being developed that may address the short coming in the rental market. Penina Trust, a Pacific housing provider in Auckland, is working with Kāinga Ora to build state homes that consider the specific needs of Pacific families e.g. three to six bedroom homes will be designed by Pacific architects that are suitable for multi-generational living.³⁹

Fale mo Aiga Strategy notes that 75% of the land owned by Pacific families is not developed and if it could be used, appropriate houses could be built. Raising a mortgage to build houses can be an obstacle therefore financial packages should be developed especially tailored to encourage Pacific home ownership.³⁹

This approach is supported in a report addressing the current Pacific housing crisis, that calls for innovation in the housing sector including an establish of a Pasifika Housing Unit, ensure there is stronger Pacific voice within Kainga Ora and addressing the financial capability of Pacific communities e.g. developing financial mentoring and budgeting for Pacific families.⁷⁴

Housing and climate change

The impacts of climate change are increasing. Extreme events such as wildfires, significant flooding, landslips, storm surges and droughts will become more frequent. Sea levels will rise. High temperatures will occur more often.^{75,76} All of these trends in turn will impact on housing and homes.⁷⁶

Impacts of extreme events on housing may include increased moisture with associated damp and mould from flooding and groundwater level rise; structural damage with potential loss of property from flooding, landslips, erosion and wildfires, and increased internal temperatures requiring improved cooling and ventilation mechanisms.⁷⁶ Disruption to transport, infrastructure and essential services may also occur.⁷⁶

Around 72,000 people and just under 50,000 buildings are at risk from coastal flooding and inundation, and about 675,000 people and just over 410,000 buildings from inland flooding.⁷⁵ Temporary or permanent relocation may be required, and managed retreat may be necessary for some regions. Coastal properties are also at risk from groundwater and sea-level rise.⁷⁵

Global displacement of populations due to climate change, including among Aotearoa New Zealand's Pacific neighbours, is likely to result in increased immigration. This will place further pressure on housing stock and housing affordability.⁷⁵

The health outcomes resulting from these conditions may include:

- increased risk of respiratory, cardiovascular and infectious diseases;
- significant psychosocial impacts on individuals and disruption to communities and long-term social cohesion; and
- a cycle of poverty and poor health, worsened through the economic costs involved with relocation, repairs, increased insurance premiums and replacement of goods.⁷⁵

It is likely that these effects will be inequitable, with Māori particularly impacted.^{75,76} Disproportionately more Māori live in higher-risk, older, poorer-quality dwellings, and Māori have higher rates of co-morbidities, increasing the impact of additional health risks.^{75,76} While many Māori live in urban centres, strong spiritual and cultural connections to coastal lands remain, with significant risk of additional psychosocial distress and loss of social cohesion if these are lost.^{75,76}

Aotearoa New Zealand has mandated a target of zero greenhouse gas emissions (other than those from animals and plants) by 2050.^{44,77} The housing sector contributes significantly to current greenhouse gas emissions. These emissions are from construction materials, methods, wastage and end-of-life disposal, as well as from ongoing operational household activities (for example, heating and use of appliances).⁴⁴ Emission totals vary depending on calculation methods but emissions for the expected average life span of a house is an estimated 9.4 percent of total emissions.⁴⁴ This figure is relatively low compared with other high-income countries, but it must be considered in the context of total emissions in Aotearoa New Zealand in which 50 percent are from the agriculture sector.⁴⁵

New Zealand research suggests that new-build houses currently far exceed their 'carbon budget' if the 2050 target is to be achieved.^{46,47} This research included 'energy-efficient' houses, some of which were not 'low-carbon' despite their higher energy performance. Current estimates of greenhouse gas contributions from housing suggest most of the contribution is from operational energy use, but this is when considering a lifespan of around 90 years for a house. If the estimate focuses on the 30 years to 2050, the contribution of materials increases significantly to around 50 percent.^{46,47} This has importance for design and materials for construction.^{46,47}

Many houses, particularly those of older stock, are highly energy-inefficient, compounding both the impact of housing on climate change and housing-sensitive health outcomes. From a lifetime emissions perspective, retrofitting older houses may have lower emission costs than a new build.⁴⁷ Retrofitting is likely to have high up-front costs and it will be important to consider the impact on equity when developing policy. Improved heating efficiency can require modifications that are not affordable to those on lower incomes and yet these can reduce ongoing energy costs to the household.^{44,47} This can then increase inequities despite improving the carbon footprint of housing stock overall.⁴⁸

The Climate Change Response (Zero Carbon) Amendment Act 2019, the national Emissions Reduction Plan, the first National Climate Change Risk Assessment and the National Adaptation Plan outline a whole of Government approach to climate change.^{44,75,77,78} These have informed the Building for Change programme, established in 2020 by the Ministry of Business, Innovation and Employment. This programme aims to enable "the building and construction sector to reduce emissions and improve climate resilience". It has committed to improving the operational efficiency of buildings, to reducing the lifetime emissions of buildings and to improving the ability of buildings to withstand climate change events. It intends to set targets for the sector and to encourage innovation.

Ensuring unintended consequences are considered in planning and policies will be important. A modelling study undertaken in the United Kingdom looked at a range of multi-sectoral actions to reduce climate emissions. The greatest contribution to health was found to be from improving home energy efficiency by retrofitting wall, ceiling and floor insulation. However, this assumed the presence of appropriate ventilation. Where ventilation was inadequate, improving home energy efficiency alone led to higher levels of indoor pollution, with resulting negative impacts on health.⁴⁸

Improving housing quality

The WHO has produced guidelines on housing and health, as well as a review of policy, regulations and legislation for healthy housing with summary recommendations.^{1,49} It suggests housing interventions can represent a major opportunity to promote 'primary prevention through intersectoral action' and

that health must be recognised as a core element in housing policies.¹ WHO posits that without this recognition “the right to adequate housing cannot be fulfilled”.¹ Public health is skilled in providing advocacy and leadership.^{50,51} It has significant expertise in a Health in All Policies approach to cross-sectoral working and is well placed to support prioritisation and coordination across sectors.^{50,51} Public health can further support policy development through appropriate research to provide a robust evidence base.^{50,51}

As an example of the role of public health at regional and local levels, Te Mana Ora – Community and Public Health worked with Environment Canterbury to undertake a Health Impact Assessment (HIA)^{ix} of the potential health impacts of proposed changes to improve external air quality.⁷⁹ As part of a review of its air quality plan, the regional council was proposing restrictions on the use of household wood burners to reduce particulate matter in line with national standards. The HIA demonstrated that restricting use of household wood burners could have a negative impact on health through reduced fuel affordability and colder homes. This evidence was used to inform the final plan.^{79,80}

Housing sits within a complex system. A systems-wide, multi-sector approach will be required to improve housing-sensitive health outcomes and housing-related inequities.⁴⁹ While public health policy will be important, policy interventions addressing areas as broad as construction, urban planning, education, employment, transport, child care, immigration and the economy should strongly consider implications for housing.¹ Housing-related policies need to be considered at national, regional and local levels involving partnerships between the public sector, private sector and civil society.¹ Ongoing monitoring and evaluation are important and can identify co-benefits and unintended consequences, including impacts on equity.

In Aotearoa New Zealand, there have been attempts to address housing issues through a systems-wide approach. The Healthy Homes Guarantee Act 2017 and the Residential Tenancies (Healthy Housing Standards) Regulations 2019 have been outlined above. For housing and urban development more broadly, the Kāinga Ora – Homes and Communities Act 2019 established Kāinga Ora – Homes and Communities as the Crown’s public housing and urban development agency. In 2018, the KiwiBuild scheme was introduced by the Government as a policy lever to address housing supply and affordability. For a variety of reasons (such as build locations being in areas of lower demand), KiwiBuild is set to fail to deliver on its original aims of providing 100,000 high-quality, affordable homes within 10 years.⁸¹ Ministry functions for KiwiBuild were transferred to Kāinga Ora through the Kāinga Ora – Homes and Communities Act.⁵² The scheme remains within Kāinga Ora and aims to enable provision of more affordable housing for first-time buyers.

The Kāinga Ora – Homes and Communities Act also mandated the development of a government policy statement on housing and urban development (GPS-HUD).⁵² The GPS-HUD was published in September 2021 to sit alongside the MAIHI Ka Ora Strategy in setting the direction for housing and urban development.^{36,53} The vision of the GPS-HUD is to ensure everyone in Aotearoa New Zealand lives in a home and community that meets their needs and aspirations. Towards this vision, it sets out four key aims: thriving and resilient communities; wellbeing through housing; Māori housing through partnership; and an adaptive, responsive system.⁵³

The GPS-HUD is intended as a multi-decade system strategy.⁵³ It recognises the need for all government agencies to work towards its implementation and requires these agencies to align their policies in support of its aims. The GPS-HUD recognises that different communities and locations will have different needs.⁵³ It will consider housing directly along with longer-term investment and planning of

^{ix} A Health Impact Assessment is a formal process that recognises and assesses the impact of decisions made in sectors outside of health on population health and wellbeing.

places, with housing viewed as a home, not just a financial asset.⁵³ The MAIHI Ka Ora Strategy also takes a holistic view within a Tiriti framework, incorporating Māori worldviews.³⁶

The GPS-HUD recognises the need for integrated investment across systems and a broad range of mechanisms such as legislation, policy and funding. It outlines several of these mechanisms such as the National Policy Statement for Urban Development (NPS-UD), the Government Policy Statement on Land Transport and the resource management reforms.⁵³ The NPS-UD has potential to have significant impact on housing. It is designed to remove overly restrictive planning rules for local authorities and encourage urban densification as one part of the Urban Growth Agenda, a government-wide programme to improve housing affordability.

An initial implementation plan for the GPS-HUD was established towards the end of 2022.⁸² This plan outlined actions for short- to medium-term priorities.⁸² In parallel, a set of indicators was developed to monitor progress for the GPS-HUD with a separate set for the MAIHI Ka Ora Strategy.⁸³ These will be used to provide information on progress over the next five to ten years.⁸³

The WHO emphasises that health must be recognised as a core element in housing policies, but it is not explicitly considered in the NPS-UD or the GPS-HUD. The NPS-UD includes ‘health and safety’ for all within its main objectives, and the GPS-HUD aims for ‘wellbeing through housing’. The GP-HUD specifies its main partners and outlines roles for other government agencies – health is not among these.⁵³

For these broad mechanisms to achieve their aims, it will be imperative to achieve sustained cross-party agreement in developing a long-term, cohesive vision that recognises the complexity of housing in Aotearoa New Zealand.

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