Policy statement
The New Zealand College of Public Health Medicine (NZCPHM) recognises housing as a key determinant of health. The NZCPHM is concerned that many New Zealanders do not have access to the adequate, safe, warm, dry, affordable houses which are essential for health and wellbeing. The NZCPHM calls for action to improve housing quality and heating as well as access to affordable housing. The NZCPHM recognises these initiatives as cost-effective measures to improve population health and reduce avoidable hospital admissions.

Background
Shelter is a fundamental need. In New Zealand we have too few houses, many poor quality houses and issues with housing affordability. A disproportionate number of people on low incomes live in older housing stock, with Māori and Pacific peoples over-represented in low-income households in areas with poorer quality housing.\(^1\) Many New Zealand families share accommodation with other families to save money because they cannot afford adequate housing, which leads to overcrowding. The most recent statistics indicate that 10% of New Zealand households are overcrowded; with overcrowding being more common for Māori (23%) and Pacific people (43%).\(^2\) Overcrowding is associated with an increased risk of crowding-related serious infectious diseases, and this is contributing to the relatively poor health of New Zealand children.\(^3\), \(^4\)

Unaffordable fuel and unsafe heating are also significant issues for many families. These factors contribute to families living in substandard housing and to overcrowding. New Zealand houses are considerably colder than the World Health Organization recommends (houses should be maintained above 18 degrees)\(^5\) and there is evidence that more than a third of New Zealanders live in houses with visible mould.\(^6\) The cost of heating poor quality housing falls unequally on low-income households, contributing to the increasingly recognised issues of fuel poverty and housing affordability.\(^7\) Fuel poverty arises from a combination of three factors: household income, fuel or energy costs and the energy efficiency of the house. This means that many people are unable to heat their house, or only able to heat a small portion of it. It has been estimated that in New Zealand 34% of households use unflued gas heaters, and 5% use them as the sole heating source.\(^8\) Unflued gas heaters add moisture and by-products of combustion such as nitrogen dioxide and carbon monoxide to the indoor environment. This can affect health.

Housing and health
Housing is a key determinant of health and an important mediating factor in health inequalities and poverty. The health consequences of inadequate housing are substantial and the complex causal pathways between housing and health are becoming better understood and documented.
There is evidence linking:\textsuperscript{9-17}
\begin{itemize}
\item Overcrowding with communicable diseases such as meningococcal disease, acute rheumatic fever and tuberculosis.
\item Home hazards and lack of safety devices with falls and injuries in both children and adults.
\item Temperature extremes and air pollution with respiratory and coronary events.
\item Damp and mould with respiratory illness (such as exacerbations of asthma).
\item Unflued gas heaters with respiratory illness (such as exacerbations of asthma).
\item Exposure to fuel-burning smoke and hazardous indoor gases with cancer.
\item Stressors related to cold, damp and unaffordable housing with mental health.
\item Housing type with the quality of interactions within neighbourhoods, social cohesion, trust and a sense of community.
\end{itemize}

### Housing interventions to improve health

World-leading research undertaken in New Zealand has found that improved health outcomes can be achieved through housing interventions such as retrofitting insulation and providing improved heat sources.\textsuperscript{18} These improved health outcomes have included:\textsuperscript{19, 20}
\begin{itemize}
\item Fewer exacerbations of respiratory illness (less wheeze for those with asthma).
\item Fewer general practitioner visits.
\item Less time off work/school.
\item Improved self-rated health.
\item A trend towards reduced hospitalisations for respiratory and coronary conditions.
\item Reduced energy use.
\end{itemize}

An economic evaluation of the Warm Up New Zealand: Heat Smart Programme (providing subsidies for retrofitting insulation and heating pre-2000 New Zealand homes) demonstrated a benefit-cost ratio of 3.9, which means that the benefits are 3.9 times higher than the costs.\textsuperscript{21}

Housing improvement intervention programmes such as the Healthy Housing Programme (a collaboration between Housing New Zealand Corporation and District Health Boards) have also demonstrated that housing interventions can reduce potentially avoidable hospital admissions.\textsuperscript{22}
Health and energy co-benefits of housing interventions

A schematic diagram indicating the mechanisms for health and energy co-benefits from these housing interventions is shown in Figure 1.

A variety of housing related policy measures are shown in Figure 2. Many of these measures have energy co-benefits.

**Figure 1. Housing interventions and health improvement**

- **Improve energy efficiency of homes**
  1. Retrofitting insulation
  2. Converting to clean, efficient housing

- Reduce energy production
- Reduce air pollution
- Reduce fuel poverty
- Reduce poverty
- Improve local environment
- Conserve global resources and mitigate climate change
- Improve warmth and reduce damp and mould

**Health Improvement**
Figure 2. Housing policies and health co-benefits

How housing-related policies generate co-benefits for health

Housing-related policy measures

- Information provision

Regulation and planning:
- Housing regulation
- Land use planning, urban design

Subsidies:
- for insulation
- for residential heating
- of rents
- for relocating

Housing provision by national/local govt

Policy outcomes

- Housing affordability and security
- Energy use & fuel poverty
- Reduced emissions
- Access, physical activity

Health co-benefits:
- Well-being
- Respiratory health
- Cardiovascular health
- Injuries
- Fitness
- Obesity
- Social inclusion

Better integration of housing institutions with other institutions of governance
Summary and recommendations

People need adequate, warm, dry, affordable housing as a prerequisite for health. In New Zealand housing inadequacy is contributing to the poor health of families and children. Almost one quarter of Māori and half of Pacific peoples live in overcrowded housing, and one third of New Zealand homes have visible mould on walls. Unflued gas heaters are present in almost one third of New Zealand homes. This is state of affairs is preventable and unfair; as a nation we can do much better. Housing interventions have been demonstrated to improve health, reduce inequities in health, and reduce the health and financial costs on households, the healthcare system and society more broadly. Housing interventions also have energy efficiency co-benefits.

The NZCPHM calls for all New Zealand families to have access to adequate, safe, affordable housing that occupants are able to heat sufficiently, by:

- Making adequate housing affordable for low-income New Zealanders.
- Improving housing quality through regulated minimum standards for all New Zealand houses (for example the Housing Warrant of Fitness) backed by an evidence-based assessment tool (for example the Healthy Housing Index).
- Ongoing investment in the evidence-based housing interventions such as Healthy Housing programmes, retrofitting insulation and providing safe heating options. These interventions are evidence based and cost-effective.
- Housing and energy policies having broader objectives of sustainability, urban policy, housing affordability and social inclusion.

Links with other NZCPHM policies
Climate Change
Rheumatic Fever
Health Equity
Sustainability (forthcoming)
Māori Health (forthcoming)
The first 1000 days of life (forthcoming)

References and further information


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