



13 November 2018

### **Submission to STATS NZ on developing a definition and conceptual framework for housing quality**

The New Zealand College of Public Health Medicine thanks Stats NZ for the opportunity to make a submission on a definition and conceptual framework for housing quality.

The New Zealand College of Public Health Medicine (NZCPHM) is the professional body representing the medical specialty of public health medicine in New Zealand. We have 236 members, all of whom are medical doctors, including 183 fully qualified Public Health Medicine Specialists with the majority of the remainder being registrars training in the specialty of public health medicine.

Public Health Medicine is the branch of medicine concerned with the assessment of population health and health care needs, the development of policy and strategy, health promotion, the control and prevention of disease, and the organisation of services. The NZCPHM strives to achieve health gain and equity for our population, reducing inequalities across socioeconomic and cultural groups, and promoting environments in which everyone can be healthy.

#### **Background**

The 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 houses which are essential for health and wellbeing. New Zealand has 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. Māori and Pacific peoples are over-represented in low-income households in areas with poorer quality housing. Rental housing is in worse condition than owner-occupied housing.<sup>1</sup>

Evidence shows that the proportion of households renting is increasing, and that people are remaining in rental accommodation for longer.<sup>2</sup> This includes those most vulnerable: those on low incomes, families with small children, sick or disabled people and those most likely to already be bearing the brunt of the avoidable disease. The proportion of Māori and Pacific people living in private rentals has increased to 88% since 1986 and is likely to continue increasing.<sup>3</sup> This is of concern given existing health inequities for Māori.<sup>4</sup> In addition, forecasts suggest that the number and proportion of retired people renting will increase significantly over the next decade: the quality of the available rental stock will impact also on this group.<sup>5</sup>

NZCPHM recognises housing is a key determinant of health and an important mediating factor in health inequalities and poverty. Research undertaken in New Zealand has found that housing interventions such as retrofitting insulation and providing improved heat sources can result in improved health outcomes, including fewer exacerbations of respiratory illness, fewer general

practitioner visits, less time off work/school, improved self-rated health and a trend towards reduced hospitalisations for respiratory and coronary conditions achieved through.<sup>6-8</sup>

There is evidence linking:<sup>9-18</sup>

- Temperature extremes and air pollution with respiratory and coronary events.
- Damp and mould with respiratory illness (such as exacerbations of asthma).
- Unflued gas heaters with respiratory illness (such as exacerbations of asthma).
- Exposure to fuel-burning smoke and hazardous indoor gases with cancer.
- Stressors related to cold, damp and unaffordable housing with mental health.
- Housing type with the quality of interactions within neighbourhoods, social cohesion, trust and a sense of community.
- Overcrowding with communicable diseases such as meningococcal disease, acute rheumatic fever and tuberculosis.
- Home hazards and lack of safety devices with falls and injuries in both children and adults.

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.<sup>19</sup> The New Zealand Business Council for Sustainable Development has estimated that if New Zealand homes had the average thermal efficiency standard of those in other OECD countries, there would be 50 fewer hospital stays each day due to respiratory problems, saving \$54 million per year.<sup>20</sup> A cost benefit analysis of the Warm Up New Zealand Programme showed that subsidised retrofitted insulation and heating had a cost benefit ratio of 3.9.<sup>21</sup>

New Zealand houses are considerably colder than World Health Organization recommendations<sup>22,23</sup> and there is evidence that more than a third of New Zealanders live in houses with visible mould.<sup>24</sup> Substandard housing and overcrowding further contribute towards an unhealthy environment.<sup>25-27</sup>

The NZCPHM is concerned that unaffordable fuel and unsafe heating are also significant issues for many families. 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.<sup>28</sup> 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.<sup>29</sup>

The NZPHHM supports policies designed to improve the quality of housing and living environments and recognises these as cost-effective measures to improve population health and reduce avoidable hospital admissions.

## **Response to the consultation questions:**

1.1 The NZCPHM agrees with the proposed definition for housing quality.

1.2 We agree with the four elements proposed for the housing quality framework – housing habitability, housing functionality, environmental sustainability, and social and cultural sustainability.

2.1 We agree that the definition of housing habitability and its subcomponents in the consultation document adequately cover the meaning of each term.

2.2 Given the large impact on health of housing habitability, the NZCPHM believes that the definition could go further in specifying minimum requirements, in particular in the section relating to protection from cold, dampness and mould. We suggest that the definition should include that the insulation and heating source/s should be capable of maintaining the temperature throughout the house at the minimum level recommended by the World Health Organization (i.e. 18 degrees).<sup>30</sup> Please see the [NZCPHM Housing Policy statement](#) and the NZCPHM response to the Ministry of Housing and Urban Development: [Healthy Homes Standards consultation](#) for further information.

3.1 We agree that the definition of housing functionality and its subcomponents adequately cover the meaning of each term.

3.2 We do not have any suggestions regarding additional aspects of housing functionality to include in the definition.

4.1 We agree that the definition of environmental sustainability adequately covers the term.

4.2 We do not have any suggestions regarding other aspects of environmental sustainability to include in the definition.

5.1 We agree that the proposed definition of social and cultural sustainability adequately covers the meaning of the term.

5.2 We do not have any additional aspects of social and cultural sustainability to include in the definition.

The NZCPHM [Housing Policy Statement](#) and our response to the Ministry of Housing and Urban Development: [Healthy Homes Standards](#) consultation provide further background and evidence on the linkages between quality and health, and are attached for your information.

The NZCPHM is happy to provide further clarification on any matter covered in this submission.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'F Dumble', written in a cursive style.

Dr Felicity Dumble, President, NZCPHM

- 
1. White, V., Jones, M., Cowan, V., & Chun, S. B. House Condition Survey: Comparison of House Condition by Tenure. Study Report SR370. BRANZ Ltd. 2015  
([https://www.branz.co.nz/cms\\_show\\_download.php?id=a1efff0a2fd9885ecf878ce475631df7025cf3b8](https://www.branz.co.nz/cms_show_download.php?id=a1efff0a2fd9885ecf878ce475631df7025cf3b8))
  2. Auckland Regional Public Health Service. Submission to the Healthy Homes Guarantee Bill (No 2). Auckland: ARPHS, 2016  
(<http://www.arphs.govt.nz/Portals/0/Submission%20on%20the%20Healthy%20Homes%20Guarantee%20Bill%20No2.pdf>)
  3. Statistics New Zealand. Maori and Pacific Peoples' home-ownership falls over 25 percent in cities. Press release 2016. Retrieved from  
([http://m.stats.govt.nz/browse\\_for\\_stats/people\\_and\\_communities/housing/maori-and-pacific-mr](http://m.stats.govt.nz/browse_for_stats/people_and_communities/housing/maori-and-pacific-mr))
  4. New Zealand College of Public Health Medicine. NZCPHM Māori Health Policy Statement. Wellington: NZCPHM, 2015  
([https://www.nzcpm.org.nz/media/89786/2015\\_11\\_30\\_m\\_ori\\_health\\_policy\\_statement.pdf](https://www.nzcpm.org.nz/media/89786/2015_11_30_m_ori_health_policy_statement.pdf))
  5. Johnson, A. Homeless Baby Boomers – Housing poorer baby boomers in their retirement. The Salvation Army Social Policy and Parliamentary Unit. Auckland: The Salvation Army, 2015  
(<http://www.salvationarmy.org.nz/sites/default/files/uploads/20151201SPUSAHomelessbabyBoomersReportwebv1.pdf>)
  6. Howden-Chapman P, Matheson A, Crane J, Viggers H, Cunningham M, Blakely T, et al. Effect of insulating existing houses on health inequality: Cluster randomised study in the community. *BMJ*. 2007;334(7591):460-4.
  7. Howden-Chapman P, Pierse N, Nicholls S, Gillespie-Bennett J, Viggers H, Cunningham M, et al. Effects of improved home heating on asthma in community dwelling children: randomised controlled trial. *BMJ*. 2008;337.
  8. Thomson H, Thomas S, Sellstrom E, Petticrew M. The health impacts of housing improvement: A systematic review of intervention studies from 1887 to 2007. *Am J Public Health*. 2009;99(S3): S681-92.
  9. Braubach M, Jacobs D, Ormandy D (eds). WHO Environmental Burden of disease associated with inadequate housing. Bonn: World Health Organization European Office; 2011.
  10. Asher I, McNamara D, Davies C, Demetriou T, Fleming, T, Harwood, M, Hetaraka-Stevens L, Ingham T, Kristiansen J, Reid J, Rickard D, Ryan D. Asthma and Respiratory Foundation NZ child and adolescent asthma guidelines: a quick reference guide. *N Z Med J*. 2017; 130 (1466)  
(<https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2017/vol-130-no-1466-1-december-2017/7425>)
  11. Howden-Chapman PL, Chandola T, Stafford M, Marmot M. The effect of housing on the mental health of older people: The impact of lifetime housing history in Whitehall II. *BMC Public Health*. 2011;11.
  12. Baker M, Das D, Venugopal K, Howden-Chapman P. Tuberculosis associated with household crowding in a developed country. *J Epidemiol Community Health*. 2008;62(8):715-21.
  13. Baker M, McNicholas A, Garrett N, Jones N, Stewart J, Koberstein V, et al. Household crowding a major risk factor for epidemic meningococcal disease in Auckland children.. 2000;19(10):983-90.
  14. Jaine R, Baker M, Venugopal K. Acute rheumatic fever associated with household crowding in a developed country. *Pediatric Infectious Disease Journal*. 2011;30(4):315-9.
  15. Larabee K, Phipatanakul W. The Respiratory Health Effects of Nitrogen Dioxide in Children With Asthma. *Pediatrics*. 2012;130(S1):S10.
  16. Gillespie-Bennett J, Pierse N, Wickens K, Crane J, Howden-Chapman P, Heating atH, et al. The respiratory health effects of nitrogen dioxide in children with asthma. *European Respiratory Journal*. 2011;38(2):303-9.
  17. Keall M, Baker M, Howden-Chapman P, Cunningham M, Cunningham C. Home injury hazards and home injury in New Zealand. *Injury Prevention*. 2012;18(S1):A48.
  18. Stafford M, Marmot M. Neighbourhood deprivation and health: does it affect us all equally? *International Journal of Epidemiology*. 2003;32(3):357-66.
  19. Jackson G, Thornley S, Woolston J, Papa D, Bernacchi A, Moore T. Reduced acute hospitalisation with the healthy housing programme. *Journal of Epidemiology and Community Health*. 2011;65(7):588-93.
  20. New Zealand Business Council for Sustainable Development. Better performing homes for New Zealanders: Making it Happen. New Zealand Business Council for Sustainable Development: Auckland, 2008.

[https://www.sbc.org.nz/\\_data/assets/pdf\\_file/0008/99422/Better-Performing-homes-for-New-Zealanders.pdf](https://www.sbc.org.nz/_data/assets/pdf_file/0008/99422/Better-Performing-homes-for-New-Zealanders.pdf)

21. Grimes A, Denne T, Howden-Chapman P, Arnold R, Telfar-Barnard L, Preval N, & Young C. et al. Cost benefit analysis of the Warm Up New Zealand: Heat Smart Programme. Wellington: Motu, Covec, He Kainga Oranga/Housing and Health Research Programme, University of Otago, Department of Mathematics, and Victoria University for the Ministry of the Environment;2012.  
(<http://www.motu.org.nz/assets/Documents/our-work/urban-and-regional/housing/Cost-Benefit-Analysis-of-the-Warm-Up-New-Zealand-Heat-Smart-Programme.pdf>)
22. Ormandy D, Health and thermal comfort: From WHO guidance to housing strategies. Energy Policy. 2012;49:116-21.
23. Healthy Return from Investing in Insulation (2004). Staley. H., Howden-Chapman. P., Presentation to Government officials, Wellington, 25 February 2004
24. Howden-Chapman P, Saville-Smith K, Crane J, Wilson N. Risk factors for mould in housing: A national survey. Indoor Air. 2005;15:469-76.
25. Baker M, Howden-Chapman P. Time to invest in better housing for New Zealand children. New Zealand Medical Journal. 2012;125:6-10.
26. Baker M, Telfar Barnard L, Kvalsvig A, Verrall A, Zhang J, Keall M, et al. Increasing incidence of serious infectious diseases and inequalities in New Zealand: A national epidemiological study. The Lancet. 2012;379:1112-9.
27. Asthma and Respiratory Foundation of New Zealand. Te Hā Ora (The breath of Life): National Respiratory Strategy. Wellington: The Asthma Foundation; 2015 (<https://s3-ap-southeast-2.amazonaws.com/assets.asthmafoundation.org.nz/images/National-Respiratory-Strategy-online-version.pdf>)
28. Bentley R, Baker E, Mason K, Subramanian SV, Kavanagh AM. Association between housing affordability and mental health: A longitudinal analysis of a nationally representative household survey in Australia. Am J Epidemiol. 2011;174(7):753-60.
29. Green G. Housing, energy, health and poverty. In: Price C, Tsouros A, editors. Our Cities, Our Future. Copenhagen: World Health Organization Healthy Cities Project Office; 1996.
30. World Health Organisation. Health Impact of Low Indoor Temperatures: Report on a WHO meeting Copenhagen 11-14 November 1985. Copenhagen: WHO, 1987