The link between housing and health

New Zealand housing tends to be old, poorly constructed and, by international standards, inadequately insulated and large.

Those cold facts are at the centre of HRC-funded research by Associate Professor Philippa Howden-Chapman and her team from the Department of Public Health at the Wellington School of Medicine and Health Sciences.

There is increasingly robust evidence of the role of housing as a determinant of health and research has highlighted the disproportionate number of people on lower incomes living in older housing stock.

“They are often uninsulated and although we are in a temperate country we have a higher winter mortality of older people than they do in northern European countries where the housing tends to be better constructed and better heated,” Associate Professor Howden Chapman says.

“We know that a lot of New Zealand housing is actually colder than is recommended by the World Health Organisation, which is 18 degrees. A lot of New Zealand houses are at 12 or 13 degrees in winter and at that level it is a health risk, particularly for infants and older people.”

When a house is cold older people run the risk of hypothermia. Because their cardiovascular system has to work a lot harder for them to stay warm they run a greater risk of a coronary event, she says.

Other research areas include the relationship between the domestic environment and respiratory disease, for example asthma, and also the association between overcrowding and communicable disease epidemics, such as meningococcal meningitis, tuberculosis and childhood pneumonia.

Associate Professor Howden-Chapman and her colleagues are also working on three HRC-funded intervention studies. One is to gauge the impact of retrofitting houses with insulation. The second is a follow-up on case control studies which show a ten-fold risk of getting meningococcal meningitis in overcrowded housing.

The third involves collaborating with the Tokelau community and the Victoria University School of Architecture and Design to develop two housing prototypes - a new house and a refurbished Housing New Zealand Unit - which offer sustainable, affordable and attractive housing that is flexible enough for extended family living.

Associate Professor Howden-Chapman points out that many of the social and economic determinants of health operate at a national or local government level, while housing is something that district health boards, primary health organisations and local community trusts can do something about.

“I think that’s really important for public health to have solid social and economic evidence so it can provide direction for policy, and when decisions about allocation are being made around the cabinet table.”

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