Although the overall health of world populations is improving, several factors continue to impact significantly on our mental and physical health. Additionally, there is an unequal distribution of health across the population and sub-populations.

In acknowledgement, VicHealth aims to:
- improve the physical and mental health of those experiencing social, economic or geographic disadvantage
- contribute to closing the health gap between Indigenous and non-Indigenous Victorians.

(VicHealth 2009)

To meet these objectives, VicHealth focuses on the social and economic determinants of health, one of which is housing. This document summarises the latest published research examining the links between housing and health.

The full reports by Foster and colleagues (2011) and Mallett and colleagues (2011) can be accessed at www.vichealth.vic.gov.au/publications/health-inequalities

Introduction
Adequate housing is protective for physical and mental health. When housing is inadequate, or precarious, it is harmful to health.

Precarious housing and its health impacts are unevenly distributed in the Australian population:
- Lone parents and single people are much more likely than other household types to be living in precarious housing.
- Young people are more likely than people of other age groups to be living in unaffordable housing, private rental, overcrowded households, and to have recently experienced a forced move.
- Older (people older than 65 years) private renters are particularly vulnerable to unaffordable housing. Around half are living with housing affordability stress.
- Children of lone parents are much more vulnerable to precarious housing than those living with two parents. They are nine times more likely to live in unaffordable housing, three times more likely to be in poor-quality dwellings, three times more likely to have experienced a forced move, and 11 times more likely to be living in a rented house. They also have poorer access to services and transport.

(Mallett et al. 2011)

Adequate housing: a key component of health promotion
There is compelling evidence of a range of links between housing and health. People in precarious housing have worse health than people in adequate housing, and the more elements of precarious housing experienced simultaneously, the greater the health impact. Adequate housing or the prevention of precarious housing must be considered a key component of health promotion or disease prevention.
The right to housing is not merely ‘having a roof over one’s head’...rather it should be seen as the right to live somewhere in security, peace and dignity.

United Nations Centre for Human Settlements

Key concepts and definitions

Adequate housing is safe, secure and affordable shelter with access to suitable facilities for daily living (such as washing, cooking and heating), and sufficient living space. Housing location and neighbourhood quality are also important (Foster et al. 2011).

Precarious housing is inadequate housing. An individual’s housing is considered precarious if two or more of the following aspects are experienced concurrently:

• unsuitable housing (overcrowded and/or in poor condition and/or unsafe and/or poorly located)
• unaffordable housing (high rent or mortgage costs relative to income)
• insecure housing (insecure tenure and subject to forced moves).

Health refers to physical health as well as mental health and wellbeing, and not merely the absence of disease or infirmity (WHO 1946).

Housing hardware refers to the physical qualities of housing, such as shelter from the outdoor environment, access to cooking and washing facilities, heating and cooling devices, ventilation and plumbing (Foster et al. 2011).

Space refers to the amount of indoor and outdoor living space that housing provides to residents (Foster et al. 2011).

Place or location refers to the location of housing as well as neighbourhood quality (Foster et al. 2011).

Tenure refers to the legal and financial arrangements through which a person or household is entitled to occupy housing. Tenure is typically identified in three categories: home ownership, private rental and public rental. The term ‘tenure’ is also used to describe security of tenure, relating to the length of time and the conditions under which accommodation is held. Under this meaning, there is a scale of housing status from insecure to secure tenure, where homelessness or the lack of tenure is at one end of the continuum and home ownership is at the other (Foster et al. 2011).

Affordability refers to residents’ capacity to pay for housing (rent or mortgage payments) (Foster et al. 2011).

Neighbourhood quality refers to:

• neighbourhood hardware: street lighting, footpaths, roads, landscaping, parks and community recreation facilities
• human capital or opportunities: access to social networks, levels of socioeconomic advantage, employment and educational opportunities, drug use and dealing, crime rates and rates of resident mobility.

(Foster et al. 2011)
Housing and health: the links

The evidence suggests three elements of housing that have an impact on health:
- suitability (including housing hardware, housing space, and place or location of housing)
- affordability
- security of tenure.

(Foster et al. 2011; Mallett et al. 2011)

These elements have an impact on people’s identity, stability, safety, social support, sense of control and mastery over their lives, physical environments and living practices. Other contextual factors then influence the degree of impact these relationships have on health. These factors can include age, gender or culture, and personal circumstances such as having access to a car (Foster et al. 2011).

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<th>Elements of housing that have an impact on health</th>
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<td>Suitability (hardware, space and location or place)</td>
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<th>Aspects the elements impact</th>
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<td>Identity</td>
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<th>Contextual factors influencing the degree of impact</th>
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Neighbourhood qualities, personal characteristics and personal circumstances influence social connectedness, which affects mental health and wellbeing. Photo: ©Newspix/Richard Cisar-Wright

Lack of adequate space or control over space can affect mental health. Photo: ©iStockphoto.com/Christa Brunt
Public renters, lone parents, singles and Indigenous people are more likely to be living in poor-quality housing.

The following sections discuss each of the three elements of housing and its pathway to affecting health and wellbeing.

**Housing suitability and health**

**Housing hardware**

Housing hardware refers to physical features of housing such as heating and cooling hardware, ventilation, sound insulation, plumbing, and access to cooking and washing facilities. Housing hardware can influence physical and mental health by affecting the housing’s adequacy as shelter and its available amenity. Poor housing hardware is an aspect of precarious housing and a contributor to poorer health outcomes (Foster et al. 2011).

Housing hardware such as insulation and heating and cooling devices can moderate the indoor environment by affecting indoor temperatures and air quality, which can be associated with negative physical health outcomes, particularly respiratory conditions (Bornehag et al.; Howden-Chapman et al.; Chapman et al.; Bothwell et al.; Gemmell; Naughton et al., cited in Foster et al. 2011). Insulation also affects noise, which can be associated with poor mental health (Evans et al., cited in Foster et al. 2011).

Housing hardware such as housing design and home modifications can facilitate stability, safety, control and social connectedness, particularly for ageing and disabled populations. These factors are associated with positive physical and mental health outcomes (Jones et al.; Judd et al.; Quinn et al., cited in Foster et al. 2011).

The availability and quality of plumbing, ventilation and cooking facilities affects living practices, which are associated with physical health outcomes (Bailie & Runcie; Dedman et al.; Marsh et al.; Torzillo et al.; Bailie et al., cited in Foster et al. 2011).

In 2006, around four per cent of the Australian population lived in poor-quality housing. Public renters, lone parents, singles and Indigenous people were more likely to be living in poor-quality housing. People with the worst mental or physical health were more likely to be living in houses in poor condition (Mallett et al. 2011).

**Housing space**

Space is an important element of housing that affects people’s ability to control their environments and secure privacy. It also affects living practices. Lack of adequate space or control over space can affect mental health (Evans, Saltzman & Cooperman, cited in Foster et al. 2011), and can increase the transmission of some communicable diseases (Baker et al.; Clark, Ribena & Nowgesic, cited in Foster et al. 2011).

If space is limited, controlling use of that space is often more difficult. However, the research pertaining to overcrowding shows that culture strongly influences the relationship between space and health. This research (focused on Indigenous Australians) indicates that if household heads can control this space – who enters what space, where people sleep and behaviour norms – then overcrowding does not negatively affect mental or physical health. In some cases, high household occupancy levels are a protective factor for children against emotional and behavioural difficulties (Birdsall-Jones & Corunna; Zubrick et al., cited in Foster et al. 2011).

In 2006, around four per cent of the Australian population lived in overcrowded housing. Indigenous people and people born overseas were more likely than others to be living in overcrowded housing. Unemployed people and those with poor physical health were more likely than other people to be living in overcrowded housing (Mallett et al. 2011).

**Housing location**

There is a large body of research on the impact of place, or where people live, on their physical and mental health. Neighbourhood qualities can be thought of in two dimensions:

- **neighbourhood hardware**, including street lighting, footpaths, roads, landscaping and parks/community recreation facilities
- **human capital/opportunities**, or access to social networks, levels of socioeconomic (dis)advantage, employment and educational opportunities, drug use and dealing, crime rates, and rates of resident mobility.

(Foster et al. 2011)

Both dimensions affect health. For instance, street lighting, landscaping of shared spaces and crime rates affect real and perceived personal safety, which is strongly associated with mental health and wellbeing (Blackman & Harvey; Varady & Walker, cited in Foster et al. 2011).

Neighbourhood qualities such as levels of socioeconomic (dis)advantage interact with personal characteristics including gender, personal circumstances such as access to a car or having dependent children, and culture to influence social connectedness, which affects mental health and wellbeing (Fauth, Leventhal & Brooks-Gunn; Johnson, Gronda & Coutts; Rosenbaum, Reynolds & Deluca; Stanley, Ng & Mestan; Walker et al., cited in Foster et al. 2011).
Culture, personal characteristics and personal circumstances are moderating factors that, in many studies, appear to be more important than neighbourhood qualities in affecting health outcomes (Cutrona et al.; Pevalin, Taylor & Todd; Propper et al., cited in Foster et al. 2011).

For example, Victorian research has found that residents of disadvantaged Victorian neighbourhoods reported poorer health than residents of comparison areas (Feldman et al.; Warr et al., cited in Foster et al. 2011). However, the study could not determine whether the neighbourhood was a cause or consequence of poorer health.

It is possible that people with poorer health have less housing choice and tend to live in disadvantaged neighbourhoods. Residents of disadvantaged areas experienced greater exposure to social disorder, which may affect health through increased stress (Foster et al. 2011). Conversely, other studies have isolated a neighbourhood or contextual effect on obesity (Kling, Leibman & Katz 2007), walking (Frank et al. 2007) and rates of repeated or relapsed incarceration (Kirk 2009).

In 2006, 22 per cent of the Australian population reported difficulty accessing services, and around four per cent had difficulty accessing transport in their local neighbourhoods. Lone parents and singles were more likely than others to report such difficulties (Mallett et al. 2011).
Housing affordability and health

Housing affordability affects stability and people’s sense of control over their lives (Hulse & Saugeres, Nettleton & Burrows, cited in Foster et al. 2011). There is a causal relationship between losing the ability to pay for housing and a decline in mental health (Taylor, Pevalin & Todd, cited in Foster et al. 2011). The inability to afford adequate accommodation also results in limited choice of dwelling and location, which may be associated with a lack of privacy and perceived safety, also affecting health and wellbeing.

Housing affordability also affects living practices such as the ability to buy food. Housing affordability stress has been associated with a negative impact on the nutritional status of children in low-income families (Meyers et al., cited in Foster et al. 2011). Housing affordability stress is prevalent across tenures in Australia [Yates et al., cited in Foster et al. 2011]. In 2006, approximately 10 per cent of Australian households were living in unaffordable housing. Younger people and older people in private rental, lone-parent and single-person households, women, people born in a non-English speaking country, and unemployed people were groups most likely to be living in unaffordable housing. People with poor mental health in preceding years were also very likely to be in unaffordable housing (Mallett et al. 2011).

Housing tenure and health

A wide range of research has found better health outcomes for home owners compared to renters (e.g. Hiscock et al., cited in Foster et al. 2011). In the Australian context, people living in public rental have similar security of tenure to those who own their own homes (Mee, cited in Foster et al. 2011), leaving those in private rental the most insecure (and vulnerable to health consequences). Other studies have found that housing hardware, affordability, neighbourhood qualities and personal and household characteristics appear to have more impact than tenure on the wellbeing of people living in private or public rental, or in their own home. Tenure itself may not be a causal mechanism in health outcomes but it is strongly associated with other housing elements that affect health, such as living in a good area (place), having a warm, safe home (housing hardware), and affordability. Personal and household characteristics also strongly influence the association between tenure and health outcomes (Boyle; Hiscock et al.; Kearns et al., cited in Foster et al. 2011).

In 2006, around seven per cent of the Australian population were on low incomes and living in private rental. Lone parents, single people, Indigenous people and those born in a non-English speaking country were more likely than other household types to be living in private rental. Lone parents and single people were also more likely to have experienced forced moves (Mallett et al. 2011).
Lack of tenure or homelessness is strongly linked with poor health outcomes. Australian studies have demonstrated a higher prevalence of poor physical health (Curtis-Fawley; Kermode et al.; Kushel et al., cited in Foster et al. 2011) and mental illness (Taylor & Sharpe; Teesson, Hodder & Buhrich, cited in Foster et al. 2011) among people experiencing homelessness. Many people develop worsening health issues, including mental illness and increased or new substance abuse, during their experience of homelessness (Johnson & Chamberlain [a] & [b], cited in Foster et al. 2011). Homelessness affects stability and social connectedness, which affect health and wellbeing outcomes. The absence of housing also affects personal safety and people’s sense of control and mastery of their lives, influencing physical and mental health and wellbeing (Johnson, Gronda & Coutts; Murray; Tsilnenis, cited in Foster et al, 2011). Homelessness also affects living practices, such as the ability to access, store and prepare adequate food (Murray, cited in Foster et al. 2011).

Research gaps
In their review, Foster et al. (2011) identified some significant evidence gaps. These include:
- the effects of various lengths of time spent in precarious housing on health outcomes, if these effects are immediate or delayed, and time taken for health effects to manifest or become apparent
- the impact on health of high-density living or limited recreation space
- how some housing elements affect health more significantly or are more important for wellbeing than others. For example, Mallett et al. (2011) found young single mothers reported that location outweighed affordability, size and quality of housing. This hierarchy and how elements interact with each other is not well understood. Can we trade off physical housing quality to achieve affordability gains? What impact would this have on health?

Conclusion
There is compelling evidence of a range of links between housing and health. Precarious housing is inadequate housing, or a lack of housing conditions required for good health. Precarious housing may have inadequate hardware, restrict a household’s control over space, be located in a neighbourhood with high levels of social disorder, be unaffordable, and/or be of insecure tenure.

Precarious housing affects factors such as safety, social support and living practices, which in turn interact with personal characteristics including age, gender and culture to influence health. People in precarious housing have worse health than people in adequate housing, and the more elements of precarious housing experienced simultaneously, the greater the health impact.

Housing is a social determinant of health and wellbeing. Adequate housing or the prevention of precarious housing must be considered a key component of health promotion or disease prevention.
References


