

# HOUSEHOLD OVERCROWDING

## What is this?

**New Zealand uses the Canadian National Occupancy Standard (CNOS) definition of household overcrowding.<sup>1</sup> This standard determines the number of bedrooms a dwelling should have based on the number, age, sex and interrelationships of the household members.**

## Why is it important?

Freedom from crowding is one of the six dimensions of housing adequacy adopted by Statistics New Zealand<sup>2</sup>. Limits on how many people can safely occupy a home (including bedrooms) are not considered to be common knowledge amongst the community at large including health professionals.

National and international studies show an association between the prevalence of certain infectious diseases (see below) and crowding,<sup>3</sup> between crowding and hospitalisation rates,<sup>4</sup> between crowding and poor educational attainment, and between residential crowding and psychological distress.<sup>5</sup> It is also believed to be a risk factor for injuries, and specific infectious diseases including meningococcal disease, rheumatic fever, tuberculosis, influenza, and other respiratory and skin infections.

## Data

In 2006, 389,600 people, or 10 percent of the New Zealand resident population, lived in households requiring one or more additional bedrooms to adequately accommodate household members. This is based on Canadian Crowding Index criteria. Figure 1 overleaf shows that there are significant differences at a national level between rates of overcrowding amongst different ethnic groups, with Pacific households being much more likely to be overcrowded than New Zealand households as a whole.



<sup>1</sup> Statistics New Zealand. Undated. Indicator 2b: Canadian National Occupancy Standard. [http://www2.stats.govt.nz/domino/external/web/prod\\_serv.nsf/0/5fc1e29f9dda2bc0cc256dd5006e47d3?OpenDocument](http://www2.stats.govt.nz/domino/external/web/prod_serv.nsf/0/5fc1e29f9dda2bc0cc256dd5006e47d3?OpenDocument) Accessed 17.09.12.

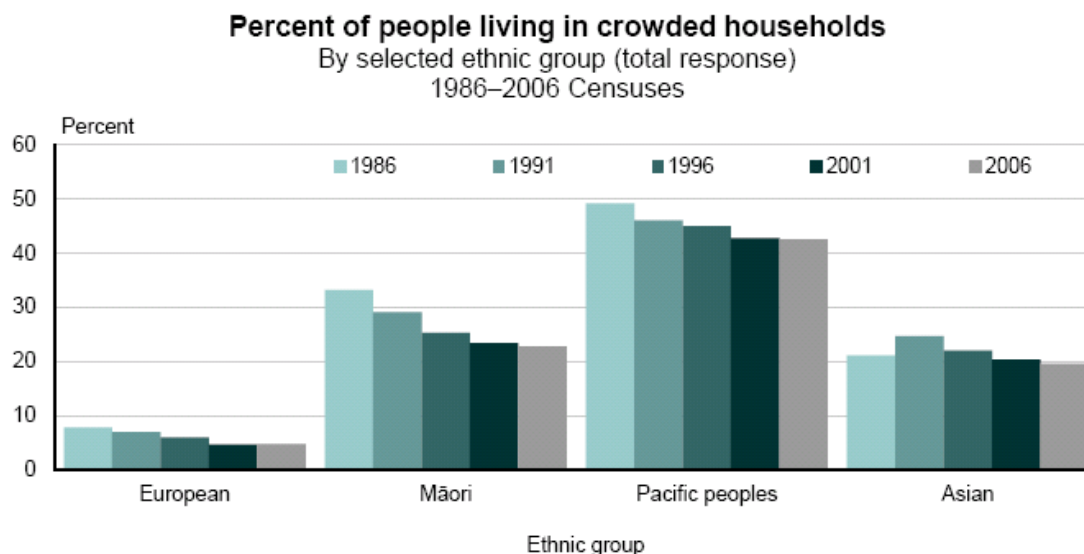
<sup>2</sup> The others are suitability, habitability, tenure security, affordability and freedom from discrimination.

<sup>3</sup> Baker, M., McNicholas, A., Garrett, N., Jones, N., Stewart, J., Koberstein, V. and Lennon, D. 2000. Household Crowding: A Major Risk Factor for Epidemic Meningococcal Disease in Auckland Children. *Paediatric Infectious Disease Journal*, Volume 19 No 10, pp 983–990.

<sup>4</sup> Information in this section, unless otherwise stated, is derived from: Baker, M., Zhang, J., Howden-Chapman, P., Blakely, T., Saville-Smith, K., Crane, J. 2006. Housing, crowding and health study: characteristics of cohort members and their hospitalisations. Interim report. Wellington: He Kainga Oranga/Housing and Health Research Programme. <http://www.healthyhousing.org.nz/wp-content/uploads/2010/01/Housing-Crowding-and-Health-Characterisations-of-Cohort-Members-and-their-Hospitalisations1.pdf> Accessed 17.09.12.

<sup>5</sup> Evans, G.W. 2003. "The Built Environment and Mental Health" *Journal of Urban Health: Bulletin of the New York Academy of Medicine* Volume 80 No 4, <http://cmbi.bjmu.edu.cn/news/report/2004/Urban/view/31.pdf> Accessed 17.09.12.

**Figure 1** Proportion of the New Zealand population living in households requiring at least one additional bedroom, by ethnic group, 1986–2006 (Statistics New Zealand)



The Ministry of Social Development regularly publishes reports on statistical indicators (including demographics, income, health, education and recreation) which provide a picture of progress towards better social outcomes for New Zealanders. The Regional Indicators 2010 report provides some information on overcrowding<sup>6</sup> at a regional level. In 2006, 5.6 percent of the Canterbury population lived in households requiring at least one additional bedroom.

The latest detailed information available for Christchurch City is based on Statistics New Zealand's 2006 Census.<sup>7</sup> Table 1 provides numbers of people in households which require additional bedrooms. Note that a person who may belong to more than one ethnic group is counted once in each applicable category in this table.

**Table 1** Christchurch population requiring additional bedrooms (2006 Census Data).

	Usually Resident Population (Total Response)	Short one bedroom	Short two or more bedrooms	People who are Short by Two Bedrooms or more as a % of their Total Ethnic Group Population
NZ European	240,410	8,720	1,840	4.4
Māori	24,200	2,610	1,020	15.3
Pacific Island	9,080	1,820	1,130	33.8
Asian	25,635	2,943	1,020	15.8
Other	9,210	1,500	340	4.1

In 2006, 1.6 percent of people living in Christchurch were living in crowded households (two or more bedrooms short) compared to 3.4% for New Zealand. These figures have both increased from 2001 when 1% of people in Christchurch were living in crowded households and 3% for New Zealand.<sup>8</sup>

<sup>6</sup> Regional Indicators. 2010. <http://socialreport.msd.govt.nz/regional/economic-standard-living/household-crowding.html> Accessed 17.09.12.

<sup>7</sup> Statistics New Zealand. Undated. Indicator 3a-3f: Canadian National Occupancy Standard. [http://www.statistics.govt.nz/browse\\_for\\_stats/people\\_and\\_communities/housing/subnational-crowding-tables-1991-2006.aspx](http://www.statistics.govt.nz/browse_for_stats/people_and_communities/housing/subnational-crowding-tables-1991-2006.aspx) Accessed 01.04.13.

<sup>8</sup> AC Nielsen. 2007. Quality of Life Project: Quality of Life in Twelve of New Zealand's Cities 2007. [http://www.bigcities.govt.nz/pdfs/2007/Quality\\_of\\_Life\\_2007\\_Housing.pdf](http://www.bigcities.govt.nz/pdfs/2007/Quality_of_Life_2007_Housing.pdf) Accessed 17.09.12.

### *Impact on inequalities*

Crowding remains an ongoing risk and a burden on households who have limited options to afford more space for the occupants.

The He Kainga Oranga study by investigators from the University of Otago, Wellington has been able to demonstrate some effects of household crowding levels on health status and hospitalisation rates in a large cohort of Housing New Zealand applicants and tenants.<sup>9</sup> Data was gathered between 2003 and 2005 from over 9,000 households with more than 26,000 individuals resident in all area divisions of Housing New Zealand.

The study found that both housing applicants and tenants had a significantly higher rate of contact with the hospital system, equivalent to 399/1000 for housing applicants and 348/100 for housing tenants, compared with 218/1000 for the other New Zealand population. Housing applicants had larger households and higher levels of crowding (46.1%) than housing tenants (23.6%) and both groups had higher crowding than the total New Zealand population (5.1%). Housing applicants who were living with other families had the highest level of overcrowding at 79.8%. Most households had low incomes and/or were receiving a benefit. The study described the applicant and tenant population as “highly vulnerable”.

A subgroup of applicants who became tenants of Housing New Zealand during the course of the He Kainga Oranga study was followed to examine if there were improvements to the group members’ health status and hospitalisation rates thought the change in their housing and therefore reduced overcrowding. Although there appeared to be no immediate effect within the first year, a decline in hospitalisation rates over the subsequent three years, was noted, reaching a plateau at four years of tenancy. Mental health conditions, intentional self harm, assault and poisonings showed a marked decline in hospitalisation rates associated with longer duration of tenancy. The study concluded that medium term social housing tenancy has a protective effect on health and provided some validation for Housing New Zealand’s social allocation scheme on the basis of need, and its continuing efforts to reduce household crowding in its properties

Households that suffered from overcrowding were more likely to be of Māori or Pacific ethnicity, and half the household members in the study were under 20 years of age. Smoking rates were higher than for New Zealand as a whole – about 44.5% of study households had one or more smokers compared to about 25% of the New Zealand population at that time.

People from crowded households were more likely to suffer from infectious diseases, skin infections, respiratory diseases, especially acute bronchiolitis, acute myocardial infarction, and heart failure. Potentially avoidable hospitalisations were almost twice as high in the study population when compared to the other New Zealand population, with injuries and poisonings about 35% higher. Hospitalisations were disproportionately high among people located in urban areas compared with rural areas, or satellite urban areas, and followed a seasonal pattern with higher rates in winter, particularly for housing applicants.

### *Solutions*

Presently, health and welfare workers are not expected to routinely enquire about problematic household crowding. New policies may need to be developed to provide guidance and support for those working in this area around providing clear advice to families at risk including how to manage limited space in a way that will minimise cross infection from communicable disease. This however does not address the social risks of lack of privacy or quiet areas for family members to study or

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<sup>9</sup> Information in this section, unless otherwise stated, is derived from: Baker, M., Zhang, J., Howden-Chapman, P., Blakely, T., Saville-Smith, K., Crane, J. 2006. Housing, crowding and health study: characteristics of cohort members and their hospitalisations. Interim report. Wellington: He Kainga Oranga/Housing and Health Research Programme. <http://www.healthyhousing.org.nz/wp-content/uploads/2010/01/Housing-Crowding-and-Health-Characterisations-of-Cohort-Members-and-their-Hospitalisations1.pdf> Accessed 17.09.12.

have solitude when they need it. A good example of rules around the management of sleeping facilities can be found in the regulations around early childhood centres where the sleeping facilities and management are clearly specified and monitored by the Public Health Unit.

In Christchurch the Council provides social housing for people on low incomes and Housing New Zealand's Welcome Home loan programme also gives assistance to low income families to help them buy their first home. More details of these schemes are given in the Housing affordability issue paper.

### *Data limitations*

He Kainga Oranga studied a cohort from across all areas of New Zealand, including participants from Christchurch. There is some data for Christchurch (as provided above), however there is likely to be many changes due to the impacts of the earthquakes. With the 2011 Census being delayed due to the earthquakes, recent data for New Zealand as a whole and Christchurch City on crowding by ethnicity will not be available until late 2013.

While there has been concern in with possible overcrowding in Christchurch since the earthquakes there is no current data source to track this.

### *Connections with other issues*

Asthma, Employment, Food Security, Fuel Poverty and Home Heating, Housing Affordability, Immunisation, Income, Smoking.

### *Impact of the earthquakes*

*As time passes and these papers are updated the initial sections on the impact of the earthquake are going to be kept as an archive. Updates are provided where possible.*

#### **As at March 2013**

The Ministry of Business, Innovation and Employment has estimated that 7000 people (44% of those displaced from the earthquake due to the shortage of housing stock) are currently living in crowded conditions.<sup>10</sup>

The Council permitted temporary accommodation for displaced people and businesses that would otherwise not comply with the City and District Plans. These temporary accommodation villages have been established to help meet the increasing demand for short term rental housing.<sup>11</sup> Permits for this accommodation will last until 18 April 2016. The Canterbury Earthquake Temporary Accommodation Service (CETAS) has been created to assist people find temporary accommodation while their home is being repaired, and to provide financial assistance to those households affected by the quakes who may need to supplement their accommodation costs. CETAS have reported that occupancy rates were at 88% in the temporary accommodation villages and there are 224 people on the waiting lists (many of these are waiting for confirmation of repair dates). They will soon be expanding the number of private homes listed with them as temporary accommodation.<sup>12</sup>

Since the earthquakes, there has been a 19% decrease in the number of rentals, and this decrease is more pronounced for rentals with 2-3 bedrooms.<sup>13</sup> Rental prices have increased in Christchurch due

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<sup>10</sup> Ministry of Business, Innovation and Employment. 2013. *Housing Pressures in Christchurch: A summary of the evidence 2013*. <http://www.dbh.govt.nz/UserFiles/File/Publications/Sector/pdf/christchurch-housing-report.pdf>. Accessed 08.04.13.

<sup>11</sup> See Temporary Housing. Christchurch City Council.

<http://www.ccc.govt.nz/homeliving/civildefence/chcheearthquake/temporaryhousing.aspx> Accessed 17.09.12.

<sup>12</sup> Ministry of Business, Innovation and Employment. 2013. *Housing Pressures in Christchurch: A summary of the evidence 2013*. <http://www.dbh.govt.nz/UserFiles/File/Publications/Sector/pdf/christchurch-housing-report.pdf>. Accessed 08.04.13.

<sup>13</sup> Ibid

to earthquakes and the slow speed of the recovery<sup>14</sup> and this is likely to lead to greater overcrowding but this is not able to be measured.

The Christchurch City Mission has reported that the average length of stay for homeless people since the earthquakes has increased by 34%. It has now opened a night shelter with 10 beds for single homeless women. Between August 2012 and February 2013, HNZA has received 102 household applications from people living in cars, caravans and garages.<sup>15</sup>

#### **As at November 2011**

In the immediate aftermath of the earthquake in February 2011, lack of water, sewerage and power, and damage to housing had an impact on household composition in Christchurch with many families moving in with friends or relatives. The June 2011 earthquake is likely to have worsened this situation, with more houses now uninhabitable. It is not yet clear what the long term impact has been but it is reasonable to assume that overcrowding has increased.

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<sup>14</sup> Housing Indicators. June 2012. <http://www.dbh.govt.nz/UserFiles/File/Sector%20info/key-indicator-reports/kir-housing-market.pdf>

<sup>15</sup> Ministry of Business, Innovation and Employment. 2013. *Housing Pressures in Christchurch: A summary of the evidence 2013*. <http://www.dbh.govt.nz/UserFiles/File/Publications/Sector/pdf/christchurch-housing-report.pdf>. Accessed 08.04.13.