



Household crowding (children aged 0-14 years)

HIGHLIGHTS:

- In 2013, almost 131,000 children aged 0–14 years (15.9%) were living in crowded households (needing 1+ bedrooms).
- The proportion of children living in crowded households has dropped from 17.4% in 1991 to 15.9% in 2013.
- In 2013, about 43% of Pacific children were living in crowded households, as well as 25% of Māori children and 21% of Asian children.
- In 2013, Counties Manukau District Health Board (DHB) had the highest rate of household crowding for children (31%), followed by Tairawhiti DHB (24%) and Auckland DHB (22%).



Relevance of household crowding to child health

Household crowding (needing one or more bedrooms for the number of people living at the house) increases the risk of infectious diseases, through increased exposure to pathogens. In particular, children living in crowded households have a higher risk of lower respiratory tract infections, meningococcal disease, *Haemophilus influenzae*, hepatitis A and gastroenteritis (Baker et al., 2013). Children living in crowded homes are at greater risk of developing infectious diseases than older household members (Goodyear et al., 2011).

Data for this indicator

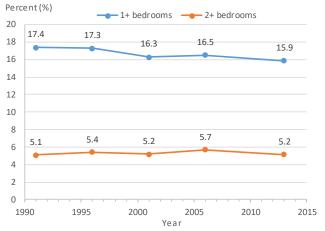
This indicator uses data from the New Zealand Census of Populations and Dwellings. Household crowding is measured with the Canadian Household Crowding standard. This indicator focuses mainly on crowded households needing 1+ bedroom, but also mentions severely crowded households (needing 2+ bedrooms). Data are presented for children aged 0–14 years.

Over 130,000 children living in crowded households in 2013

In 2013, about 131,000 children (15.9%) were living in crowded households. Of these, about 42,600 children (5.2%) were living in severely crowded households.

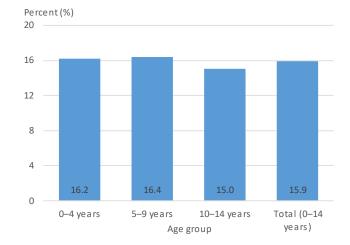
The percentage of children living in crowded households has decreased from 17.4% in 1991 to 15.9% in 2013 (Figure 1). The percentage of children living in severely crowded households increased from 5.1% in 1991, to 5.7% in 2006, then fell to 5.2% in 2013. In 2013, there were similar percentages of children living in crowded households by age group (Figure 2).

Figure 1 : Children aged 0–14 years living in crowded households (1+ bedrooms needed and 2+ bedrooms needed), 1991–2013 (percent)



 $\textbf{Source:} \ \ \textbf{New Zealand Census of Population and Dwellings; Baker et al. (2012)}.$

Figure 2: Children living in crowded households (1+ bedrooms needed), by age group, 2013 (percent)







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Two in five Pacific children were living in crowded households in 2013

In 2013, 43.4% of Pacific children were living in crowded households needing 1+ bedrooms (Figure 3). One in four Māori children (24.8%) and one in five Asian children (21.1%) and Middle Eastern/Latin American/African (MELAA) children (21.8%) were also living in crowded households. Since 1991, the percentage of children living in crowded households has decreased for Pacific (48.6% to 43.4%) and Māori (33.1% to 24.8%) (Figure 4).

Figure 3: Children aged 0–14 years living in crowded households, by ethnic group, 2013 (percent)

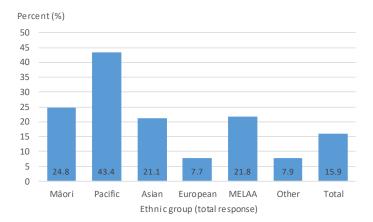
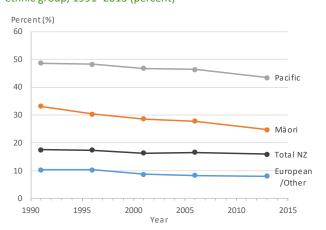


Figure 4: Children aged 0–14 years living in crowded households, by ethnic group, 1991–2013 (percent)



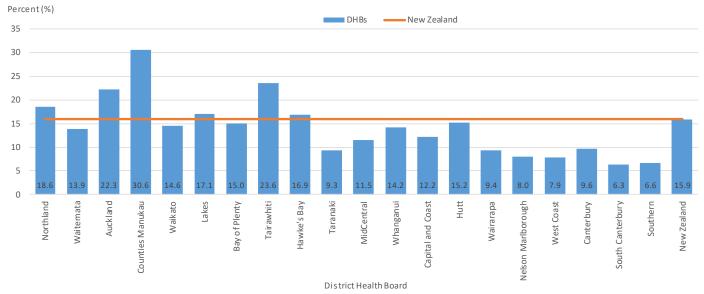
Notes: Household crowding is defined as needing one or more bedrooms. In Figure 4, European/Other includes European, MELAA and Other. Total response ethnicity has been used. Time trends for 1991–2006 were from Baker et al (2012), although no time trends for Asians were available in this document.

Source: New Zealand Census of Population and Dwellings; Baker et al. (2012).

Household crowding mainly affects children in the North Island

The majority of children living in crowded households in New Zealand are located in the North Island. About 18.0% of children in the North Island live in crowded households, compared with 8.3% of children in the South Island. In 2013, the District Health Boards (DHBs) with the highest percentage of children living in crowded households were Counties Manukau (30.6%), Tairawhiti (23.6%) and Auckland (22.3%) DHBs (Figure 5).

Figure 5: Children aged 0–14 years living in crowded households, by District Health Board, 2013 (percent)



Note: 'Crowded households' is defined as needing one or more bedrooms. **Source:** 2013 New Zealand Census of Population and Dwellings





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DATA SOURCES AND ANALYSIS

Data come from the Census of Populations and Dwellings from Statistics New Zealand, and from the report *The distribution of household crowding in New Zealand: An analysis based on 1991 to 2006 Census data* (Baker et al., 2012).

RELATED INDICATORS

Related environmental health indicators for the indoor environment are also available from the EHINZ website, including:

- Household crowding (all ages)
- Lower respiratory tract infection hospitalisations
- Meningococcal disease
- Asthma prevalence
- Asthma hospitalisations
- Sudden unexpected death in infancy (SUDI)
- Second-hand smoke exposure
- Maternal smoking at two weeks postnatal.

REFERENCES

Baker, M.G., Goodyear, R., Telfar Barnard, L., & Howden-Chapman, P. (2012). *The distribution of household crowding in New Zealand: An analysis based on 1991 to 2006 Census data*. Wellington: He Kainga Oranga/ Housing and Health Research Programme, University of Otago.

Baker M.G., McDonald A., Zhang J., & Howden-Chapman, P. (2013). *Infectious Diseases Attributable to Household Crowding in New Zealand: A systematic review and burden of disease estimate.* Wellington: He Kainga Oranga/Housing and Health Research Programme, University of Otago.

Goodyear, R.K., Fabian, A., & Hay, J. (2011). Finding the crowding index that works best for New Zealand. Applying different crowding indexers to Census of Population and Dwellings data for 1986-2006. Wellington: Statistics New Zealand.

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