Household crowding

This report presents an analysis of 2023 Census data of people living in crowded households in Aotearoa New Zealand. Household crowding increases the risk of infectious disease spreading.

Key facts

- In 2023, 12.2% of New Zealanders (560,637 people) lived in crowded households. This is an increase from 10.1% in 2013 and 11.2% in 2018. Among them, 4.5% (208,164 people) experienced severe household crowding, requiring two or more extra bedrooms.
- Household crowding rates were much higher among Pacific peoples (38.5%) and Māori (23.3%) in 2023.
- Children (0–14 years) experienced a high household crowding rate of 18.2%, with young adults (15–29 years) slightly higher at 18.5%.
- In 2023, Counties Manukau health district had the highest percentage of its population living in crowded households (22.7%).

Household crowding increases the risk of infectious diseases spread

Household crowding increases the risk of spreading infectious diseases, especially among children. It is linked to conditions such as lower respiratory tract infections (including pneumonia and RSV bronchiolitis), meningococcal disease , gastroenteritis, Haemophilus influenzae (Hib) disease, hepatitis A, Helicobacter pylori infection, and tuberculosis (Baker et al 2013; Shannon et al 2018, WHO. 2018). Evidence suggests that household crowding is a risk factor for upper respiratory tract infections and trachoma (eye infections).

Children are more at risk from these diseases, with certain groups being disproportionately affected. These include infants, Māori and Pacific children, and those living in the most socioeconomically deprived areas.

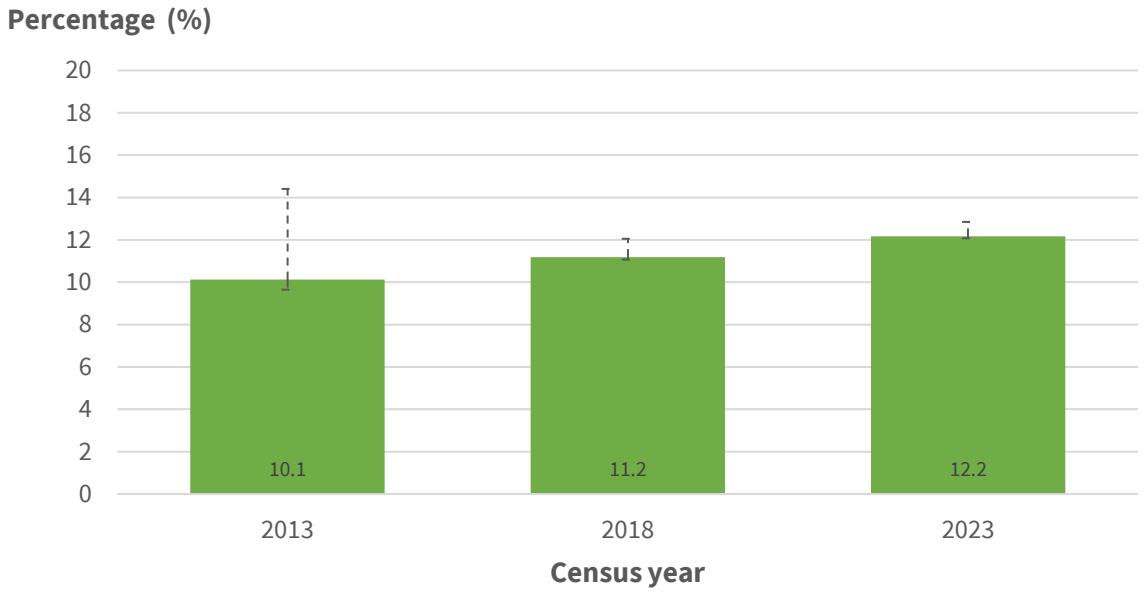
Living in crowded households can also make people more vulnerable to the impacts of floods, natural hazards, pandemics and climate change. Living in safe, secure and healthy housing is an important aspect of resilience (Wisner et al 2012; Mason et al 2021).

One in eight New Zealanders live in crowded conditions

In 2023, 12.2% (logical bound 12.1–12.8) of New Zealanders (560,637 people) lived in a crowded household, including 4.5% of people (208,164) living in households considered severely crowded (2 or more bedrooms needed).

The percentage of people living in crowded households has increased from previous census years, rising from 10.1% (9.6–14.4) in 2013 and 11.2% (11.1–12.1) in 2018 (Figure 1).

Figure 1: Percentage of people living in crowded households, total, by census year



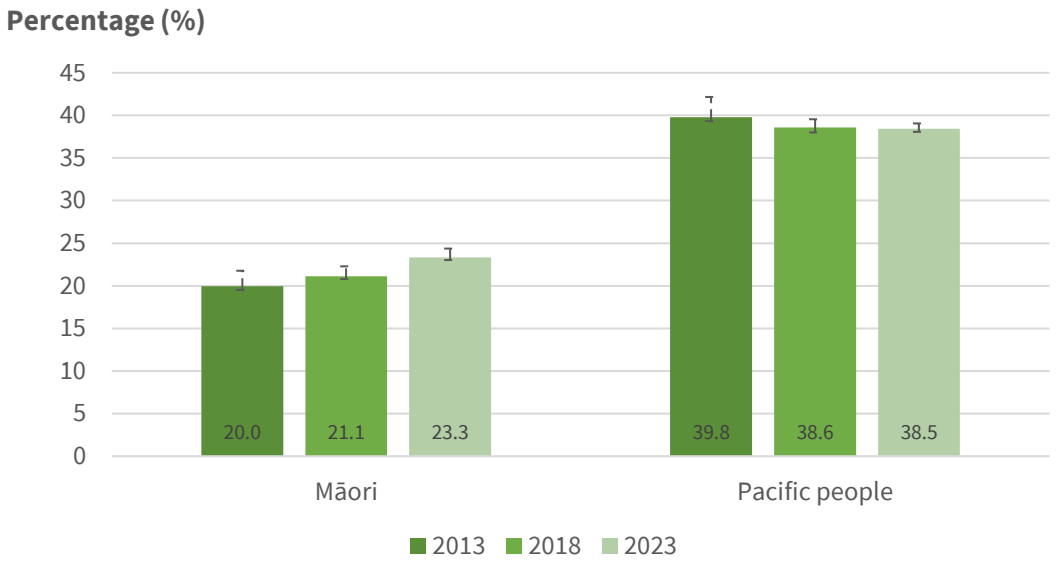
Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data from Census implementation issues. These ranges are displayed as vertical bars.
Source: Stats NZ 2023

Pacific and Māori populations experience higher rates of living in crowded households

Pacific peoples continue to experience the highest rates of household crowding among all ethnic groups. More than one in three (38.5%, 38.1–39.1) Pacific peoples lived in crowded households in 2023. The percentage remained relatively constant over the past decade, showing minimal change from 38.6% (38.0–39.6) in 2018 and 39.8% (38.2–42.2) in 2013 (Figure 2).

Māori have experienced a steady increase in household crowding over the same period. The percentage of Māori living in crowded households has risen from 20.0% (19.5–21.8) in 2013 to 21.1% (20.8–22.3) in 2018, and further to 23.3% (23.0–24.4) in 2023. This means that more than one in five Māori now live in crowded households (Figure 2).

Figure 2: Percentage of people living in crowded households, by ethnic group (total response), by census year



Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data from Census implementation issues. These ranges are displayed as vertical bars.
Source: Stats NZ 2023

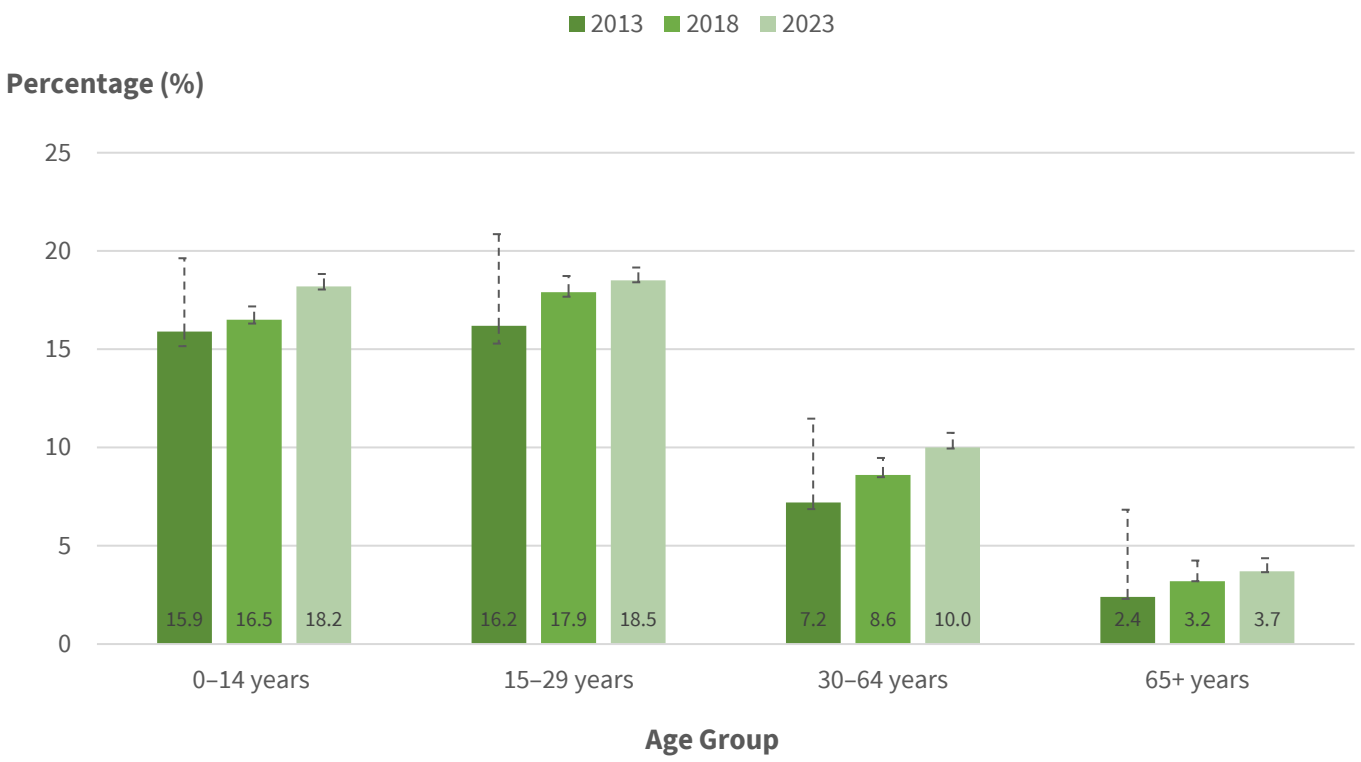
Children and young adults most affected by crowded households

Children and young adults experienced notably higher rates of living in crowded households.

Children aged 0–14 years had a high rate (18.2%) of living in crowded households in 2023. Children also experienced a sharp rise in household crowding rates over time, from 16.5% (16.3–17.2) in 2018, to 18.2% (18.0–18.8) in 2023, a 1.7 percentage point increase over five years.

The 15–29 years age group has the highest percentage of people living in crowded households, at 18.5% (18.4–19.2) in 2023, up by 0.6 percentage points from 2018 (17.9%, 17.7–18.7) (Figure 3). This shows a consistent trend of higher crowded living conditions among young adults.

Figure 3: Percentage of people living in crowded households by age group, by census year

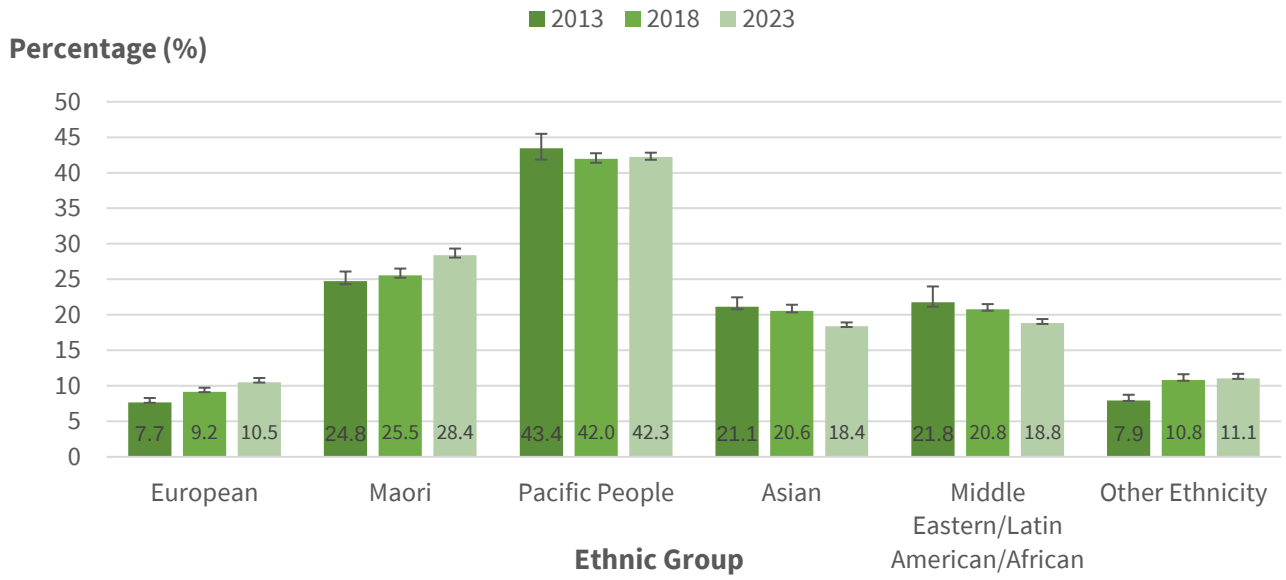


Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data from Census implementation issues. These ranges are displayed as vertical bars.
Source: Stats NZ 2023

Household crowding highest among Pacific peoples children; Māori children See rise

Households crowding among children aged 0–14 remains a substantial concern within Pacific peoples ethnic group, with the highest recorded rate of 42.3% (28.1–42.8) in 2023. While this percentage has remained relatively stable across census years, Māori children aged 0–14 shown steady increases. The percentage for Māori children reached to 28.4% (28.1–29.3) in 2023 (Figure 4).

Figure 4: Percentage of children 0–14 years living in crowded households by ethnic group, by census year



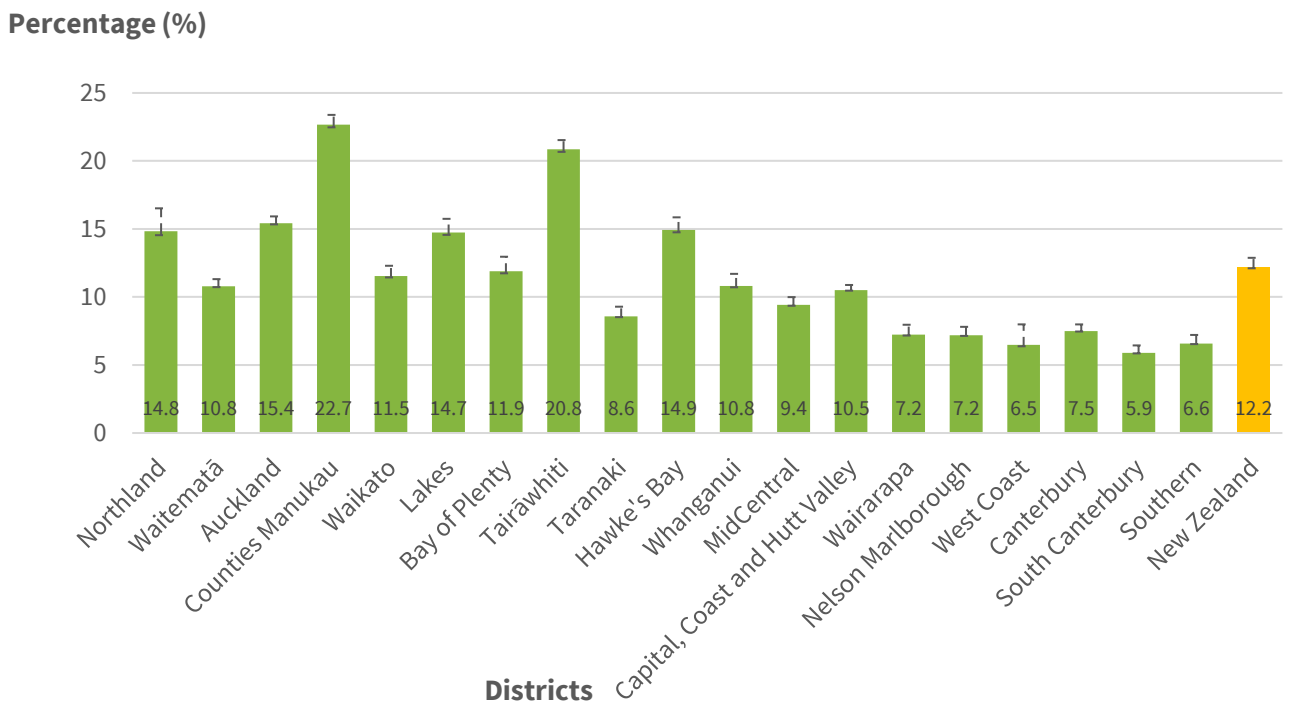
Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data from Census implementation issues. These ranges are displayed as vertical bars.
Source: Stats NZ 2023

Household crowding varies across health districts

In 2023, the Counties Manukau district (formerly district health board) had the highest percentage of its population living in crowded households (22.7%, 22.5–23.4), much higher than the national rate of 12.2% (12.1–12.8). This was followed by the Tairāwhiti district (20.8%, 20.7–21.5) (Figure 5).

The percentage of people living in crowded households in the North Island was 13.8% (13.7–14.5) in 2023. This is nearly double the household crowding rate of 7.1% (7.0–7.7) in the South Island.

Figure 5: Percentage of people living in crowded households, by district, 2023

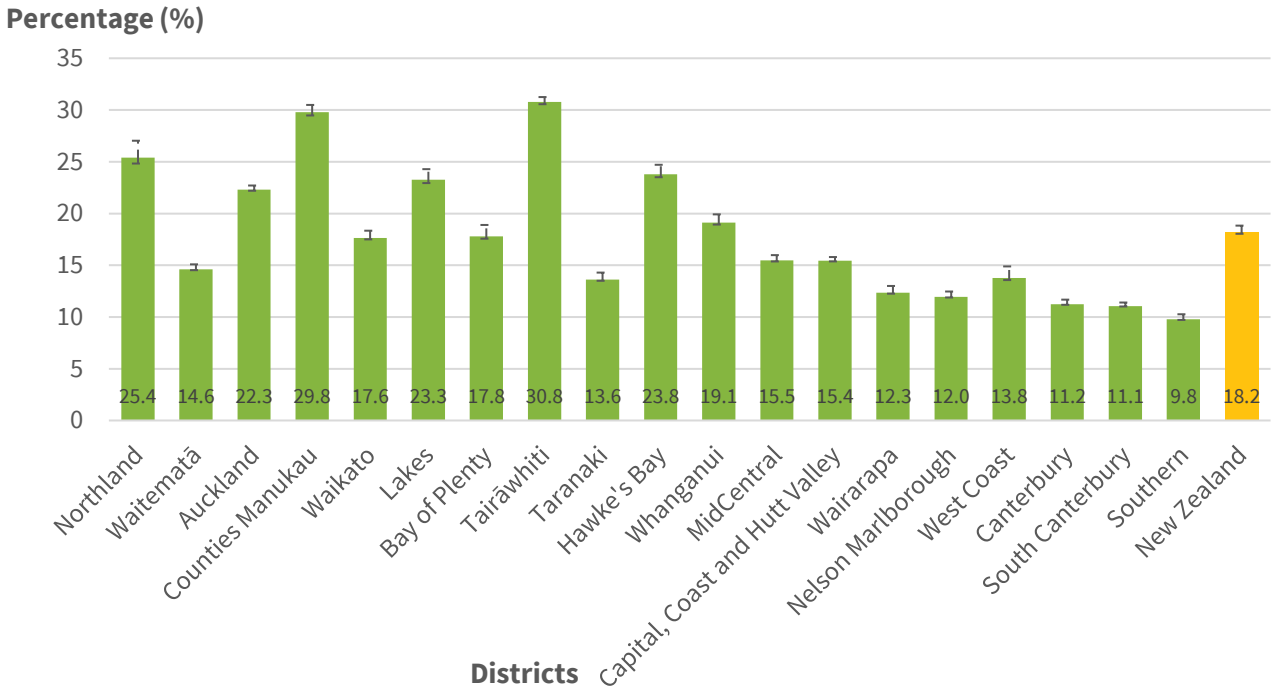


Note: Logical bounds indicate the range within which the actual percentage falls, accounting for missing data from Census implementation issues. These ranges are displayed as vertical bars.
Source: Stats NZ 2023

Where most affected children live in crowded households in New Zealand

In 2023, nearly one in three children aged 0–14 lived in crowded households in the Tairāwhiti (30.8%, 30.6–31.2) and Counties Manukau (29.8%, 29.5–30.5) districts. These rates, along with those in Northland, Hawke's Bay, Auckland, Lakes and Whanganui, were notably higher than the national rate of 18.2% (18.0–18.8) (Figure 6).

Figure 6: Percentage of children living in crowded households, by district, 2023



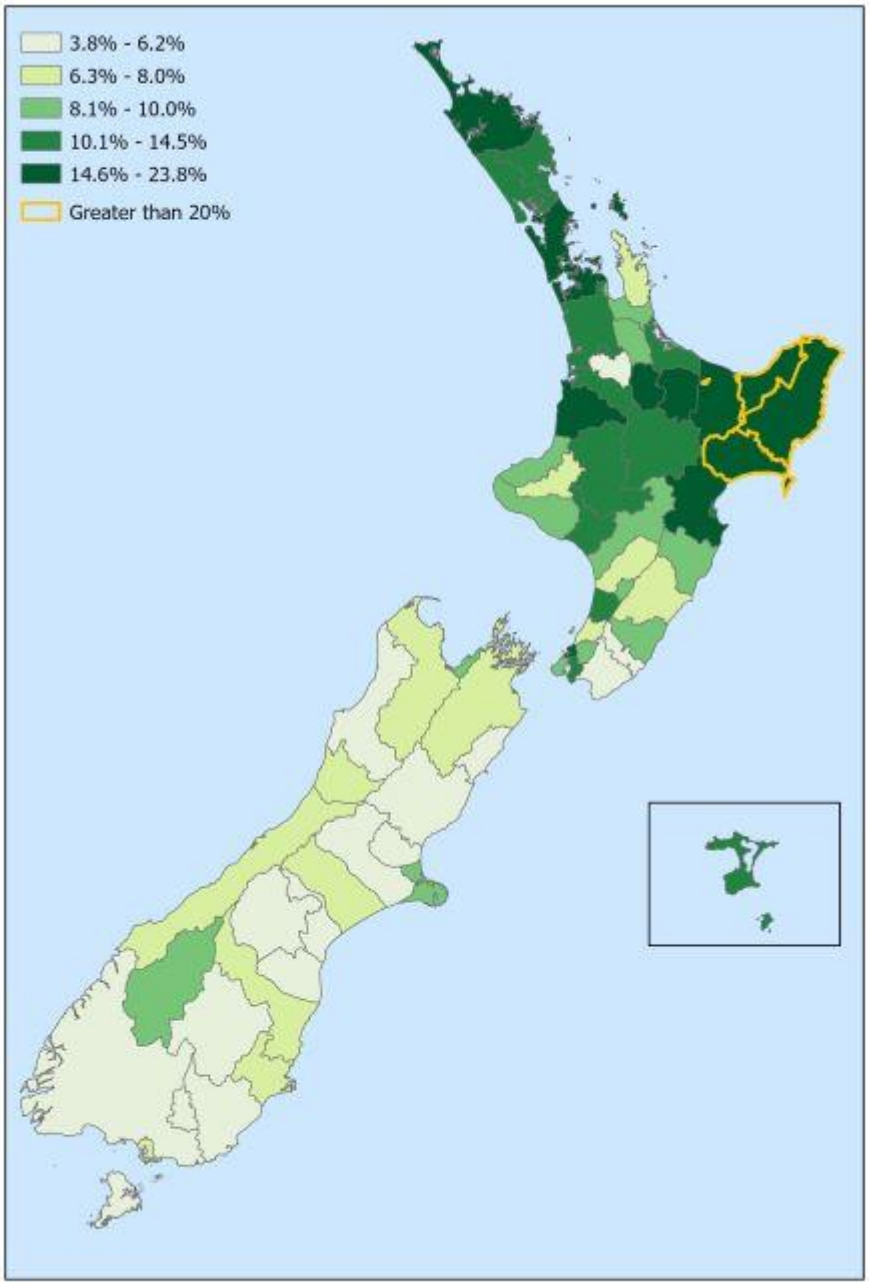
Higher rates of household crowding in the North Island

The North Island clearly shows a higher concentration of areas with a higher percentage of crowded households in 2023 (Figure 7).

Four territorial authorities (TAs) – Kawerau, Ōpōtiki, Gisborne, and Wairoa – had more than 20% of their population living in crowded households in 2023. Some of these areas were heavily impacted by Cyclone Gabrielle in February 2023, which may have had an impact on household crowding.

In 2023, only 3 out of 67 TAs (Kaikōura, Mackenzie, and Queenstown-Lakes) recorded a decrease in their proportion of people living in crowded households compared to 2018. Auckland City and Wellington City had similar household crowding rates as previous years (household crowding rates of 16.3% and 8.8% respectively in 2023).

Figure 7: Percentage of people living in crowded households, by territorial authority (TA), 2023



Source: Stats NZ 2023

Data for this indicator

Data for this indicator comes from the New Zealand 2023 Census of Population and Dwellings (Aotearoa

Data Explorer). Further information on the data quality of the 2023 Census is available on the 2023 Census page.

Household crowding is based on the Canadian National Occupancy Standard (CNOS), which provides an index to assess whether a household is overcrowded or not. This is based on the number of bedrooms needed for the specific household type and the number of bedrooms available in the dwelling. The number of bedrooms required is determined based on the household's demographic composition and is calculated using the following rules.

- There should be no more than two persons per bedroom
- Children aged less than five years may reasonably share a bedroom, irrespective of their gender (male, female, another)
- Children aged 5 to 17 years may reasonably share a bedroom only with the same gender (male only with another male, female only with female, and people of another gender only with someone else of another gender)
- Single adults 18 years and over and any additional children require a separate bedroom
- Household members 18 years or over should have a separate bedroom, as should parents or couples.

A household is generally considered overcrowded if at least one or more bedrooms is needed (Statistics New Zealand 2020):

- Household crowding: at least one more bedroom is needed
- Severe household crowding: at least two more bedrooms are needed

The 2023 census data for this variable includes some missing or invalid responses. To address this, logical bounds are used to show the possible range of values for the percentage, based on the available responses. However, it's important to note that the total population used in this calculation is lower than the actual census population, as it excludes individuals in non-private dwellings and those not captured in household data. Therefore, the bounds should be interpreted as indicative rather than comprehensive, as they account for some, not all, of the missing data. Further information is available on the Families and households in the 2023 Census: Data sources, methodology, and data quality document from Stats NZ.

For additional information, see the Metadata sheet.

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