

Living in mouldy dwellings

This report presents statistics about people living in mouldy dwellings in Aotearoa New Zealand, from the 2023 Census. Exposure to mould in homes increases the risk of respiratory illness and has negative impacts on overall health and wellbeing.

Key facts

- In 2023, 16.5% of New Zealanders (693,894 people) lived in houses with a presence of mould (always or sometimes) larger than an A4 sheet of paper, a decrease from 19.6% in 2018.
- Over one in five of children (0–14 years) (21.1%) and young adults (15–29 years) (21.0%) lived in houses affected by mould larger than a sheet of A4-paper, whether always or sometimes present.
- In 2023, the rate of people living in mouldy houses was higher among Pacific peoples (35.5%) and Māori (28.3%).
- The Tairāwhiti health district had the highest percentage of its population living in mouldy houses in 2023, at 28.5%.

The health impact of mouldy dwellings

Mouldy living conditions have an adverse effect on health, particularly among children (Platt et al 1989, Tischer et al 2011). Exposure to mould is clinically linked to respiratory symptoms and infection, allergies, and <u>asthma</u> (Clark et al 2023, WHO 2009). Early life exposure to residential mould is associated with a small to moderate increase in respiratory tract infections (Ingham et al 2019, Groot et al 2023). Evidence suggests that the presence of mould in homes is associated with poor mental health outcomes (Gatto et al 2024).

Dampness provides ideal conditions for mould growth in dwellings (Du et al 2021). Quantitative studies have found association between living in damp or mouldy dwellings and psychological outcomes such stress, depression, anxiety, and poor overall mental wellbeing (Brooks et al 2025). Several international reports have highlighted the connection between inadequate heating, damp, cold, and mouldy dwellings and poor health outcomes (Leardini et al 2010).

The Healthy Housing Initiative (2009), along with the Healthy Homes Standards regulations (2019), has provided practical interventions— such as heating, insulation, and education for families at risk of housing-related illness—that improve the warmth and dryness of homes, reduce respiratory illness, and support better mental health (Chisholm et al 2024). These standards may have contributed to improve housing quality, as census data shows a decline in the number of people living in damp and mould dwellings in 2023 compared to 2018.

Surveillance reports on living in damp dwellings and home heating also offer valuable information on the relationship between dwelling conditions and health outcomes.

Nearly one in six New Zealanders lived in mouldy dwellings

In 2023, 16.5% (logical bound 15.2–23.3) of New Zealanders (693,894 people) lived in houses affected by mould larger than a sheet of A4-paper, whether always or sometimes present. This represents a 3.1 percentage points drop from 2018, when 19.6% (18.3–25.3) of the population lived in similar conditions (Figure 1).

In 2023, 4.3% of the population (180,453 people) lived in houses where such mould was always present.

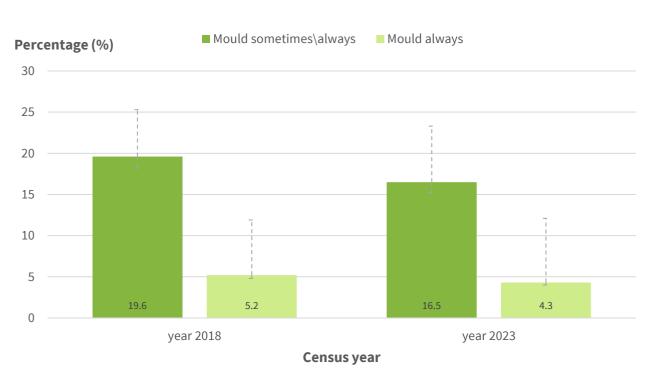


Figure 1: Percentage of people living in dwellings with mould, total, by census year

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

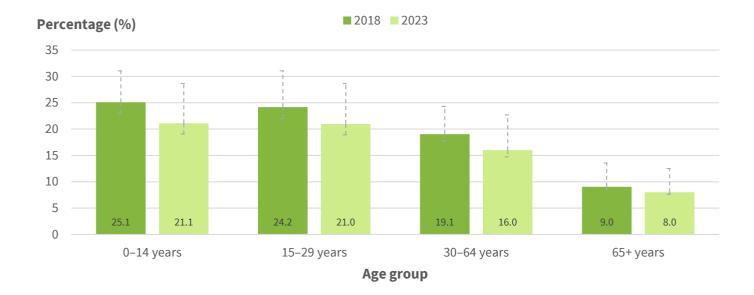
Children and young adults remain most exposed to mould in New Zealand homes in 2023

Children aged 0–14 years and young adults continue to experience higher rates of exposure to mould in their homes (Figure 2).

In 2023, 21.1% (19.1–28.7) of children aged 0–14 years lived in dwellings where mould larger than a sheet of A4-paper was always or sometimes present. This represents a decline of 4 percentage points from 25.1% (21.1–31.1) in 2018.

Similarly, the percentage of young adults (aged 15–29 years) living in dwellings affected by mould dropped by 3.2 percentage points, from 24.2% (21.0–31.0) in 2018 to 21.0% (18.9–28.6) in 2023.





Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data. These ranges are displayed as vertical bars.

Source: Stats NZ 2023

Pacific and Māori populations continue to face high rates of mould exposure in dwellings

In 2023, Pacific peoples and Māori experienced relatively high rates of mould exposure in their homes. Over one-third (35.5%, 29.9–45.7) of Pacific peoples lived in dwellings where mould larger than a sheet of A4-paper was always or sometimes present. This represents a 6.6 percentage points decline from 42.1% (34.8–52.0) in 2018 (Figure 3).

Among Māori, 28.3% (24.2–38.8) lived in homes affected by mould in 2023, down 4.8 percentage points from 33.1% (29.3–40.8) in 2018 (Figure 3).

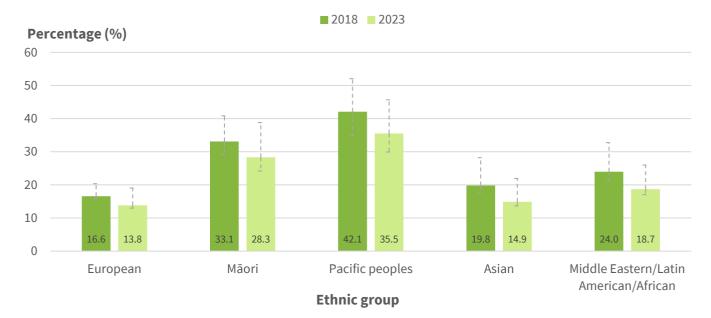
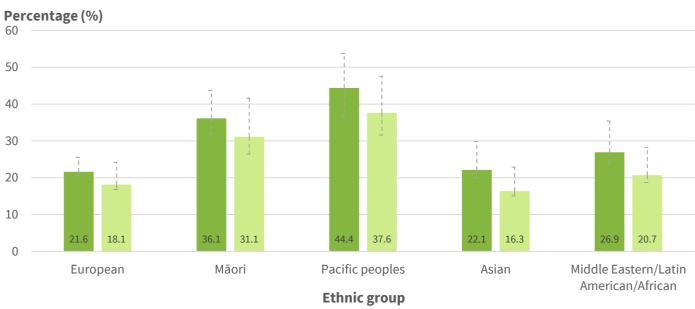


Figure 3: Percentage of people living in mouldy dwellings, by ethnic group (total response), by census year

Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data. These ranges are displayed as vertical bars. Total response ethnic groups have been used, so each ethnic group includes everyone who identified as that ethnic group. This means ethnic groups may overlap, and should not be directly compared. Source: Stats NZ 2023

Among children aged 0–14 years, Māori and Pacific children had notably high rates of living in dwellings where mould was always or sometimes present. In 2023, 37.6% (31.6–47.5) of Pacific children and 31.1% (26.4–41.6) of Māori children lived in houses affected by mould. These figures represent a decline from 2018, when 44.4% (36.9–53.7) of Pacific children and 36.1% (31.9–43.7) of Māori children lived in mould-affected houses (Figure 4).

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



2018 2023

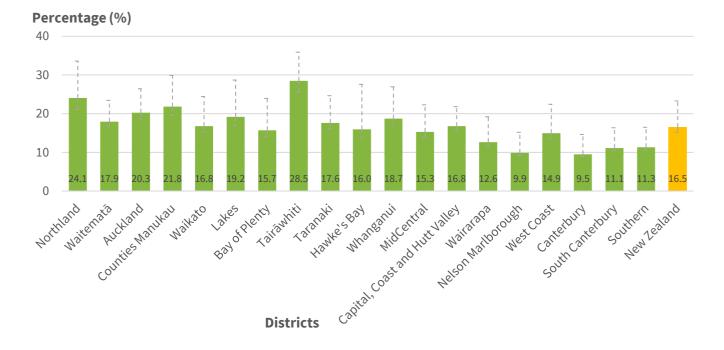
Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data. These ranges are displayed as vertical bars. Total response ethnic groups have been used, so each ethnic group includes everyone who identified as that ethnic group. This means ethnic groups may overlap, and should not be directly compared. Source: Stats NZ 2023

Variation in mouldy dwellings across health districts

In 2023, Tairāwhiti district (formerly district health board) recorded the highest percentage (28.5%, 25.5– 35.9) of its population living in dwellings where mould larger than a sheet of A4-paper was always or sometimes present. This indicates that nearly one in three people in the district lived in mould-affected houses. The rate is notably higher than the national rate of 16.5% (15.2–23.3) (Figure 5).

Following Tairāwhiti, Northland (24.1%, 21.0–33.6), Counties Manukau (21.8%, 19.6–29.9) and Aukland (20.3%, 18.7–26.4) also had more than one in five residents living in homes where mould was always or sometimes present.



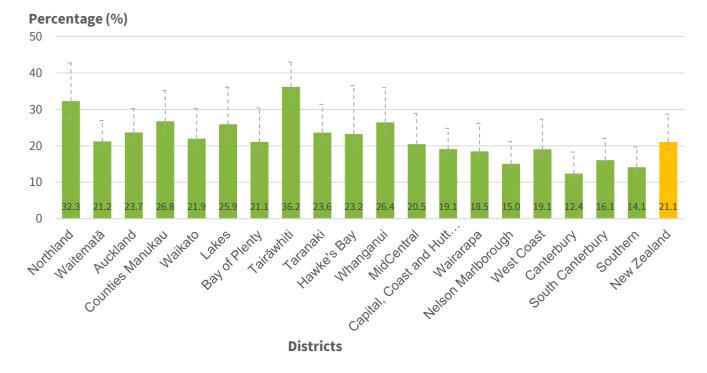


Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data. These ranges are displayed as vertical bars. Source: Stats NZ 2023

Among children aged 0–14 years, more than one in three in Tairāwhiti district (36.2%, 32.3–43.0) and Northland district (32.3%, 27.3–42.8) lived in homes where mould larger than a sheet of A4-paper was always or sometimes present (Figure 6).

Counties Manukau (26.8%, 23.7–35.2), Whanganui (26.4%, 23.0–36.0) and Lakes (26.8%, 23.7–35.2) districts also had more than one in four people living in homes affected by mould.

Figure 6: Percentage of children aged 0–14 years living in mouldy dwellings, by district, 2023



Note: Logical bounds indicate the range within which the actual percentage falls, accounting for some missing data. These ranges are displayed as vertical bars.

Source: Stats NZ 2023

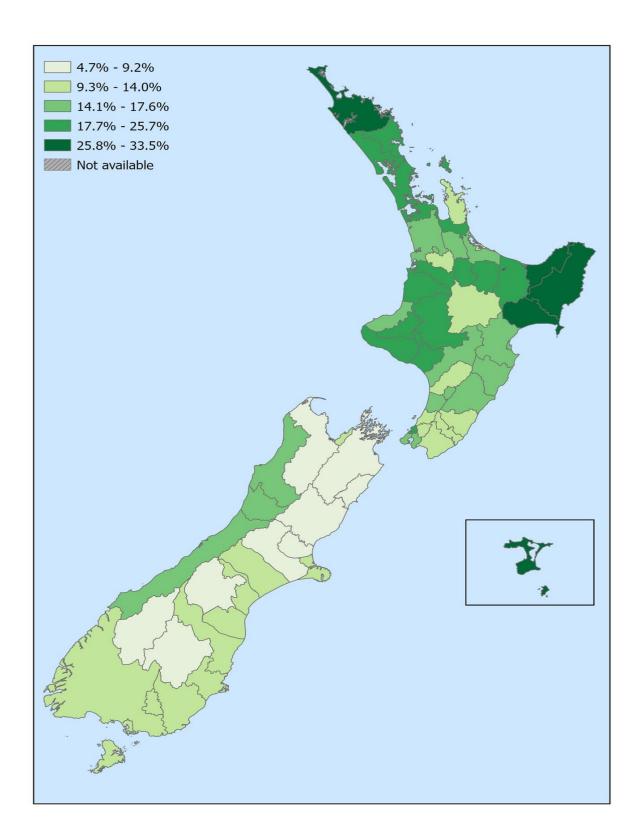
Higher rates of people living in dwellings with mould in the North Island

In 2023, the North Island clearly had a noticeably higher number of areas where people lived in dwellings whit mould larger than a sheet of A4-paper, either always or sometimes present (Figure 7).

Six territorial authorities (TAs) – Far North, Kawerau, Ōpōtiki, Gisborne, Wairoa, and Chatham Islands– had more than 28% of their population living in dwellings affected by mould in 2023.

In contrast, Central Otago and Queenstown-Lakes territorial authorities had the lowest rates, with only one in twenty people (about 5%) living in houses where large mould was present.

Figure 7: Percentage of people living in mouldy dwellings, 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 <u>2023</u> <u>Census</u> page.

Dwelling mould measures the total amount of visible mould inside occupied private dwellings. It indicates whether mould is present (always or sometimes) that has a total area larger than an A4 sheet of paper. It excludes any mould that is not visible, for example, mould inside walls.

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 <u>Families and households in the 2023 Census: Data sources, methodology, and data quality</u> document from Stats NZ.

It is worth mentioning that a few weeks before 2023 census data collection, Cyclone Gabrielle impacted several regions in New Zealand. This may have affected the level of dampness and mould in some dwellings within the affected areas.

Similar information can be found in living in damp dwellings surveillance report.

For additional information, see the Metadata sheet.

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