



Housing that Lacks Basic Amenities in Aotearoa New Zealand, 2018

A supplement to the 2018 Census Estimate of Severe Housing
Deprivation

Helen Viggers, Dr Kate Amore,
Professor Philippa Howden-Chapman
He Kainga Oranga, Housing and Health Research Programme
University of Otago, Wellington

www.healthyhousing.org.nz

May 2021

Disclaimer

Access to the data used in this study was provided by Stats NZ under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975.

The results presented in this study are the work of the authors, not Stats NZ or individual data suppliers.

The views and interpretations in this report are those of the researchers and not the official position of Te Tūāpapa Kura Kāinga – Ministry of Housing and Urban Development.

Acknowledgements

We would like to warmly acknowledge the expert assistance from our colleagues Miranda Devlin, Dr Rosemary Goodyear, June Atkinson, Nick Garrett, Angela Fabian and Keriata Stuart.

Table of Contents

Table of Tables	5
Key Results	8
Dwellings lacking basic amenities	8
Severely deprived dwellings which lack basic amenities and the residents have low income	9
People in dwellings lacking basic amenities.....	9
People in Severe Housing Deprivation caused by lack of amenities.....	9
Introduction.....	11
Caveats.....	13
Housing Lacking Basic Amenities.....	17
Characteristics of dwellings that lack basic amenities.....	17
Characteristics of the occupants of housing lacking basic amenities	23
Sex.....	23
Age.....	23
Ethnicity.....	25
Housing lacking basic amenities and the definition of homelessness	31
Technical Points.....	31
Interaction of those considered homeless under the first three parts of the definition with housing lacking basic amenities.....	32
Uninhabitable housing—Person level.....	35
Uninhabitable housing - Dwelling level	41
Appendix 1: Housing which lacks access to basic amenities - Method	44
Background: Legal requirements for housing in New Zealand/Aotearoa	44
New Zealand Definition of Severe Housing Deprivation.....	44
2018 Census data	45
Amenities	47
Possible Definitions	48
Appendix 2: Additional tables	52
Further tables by sex	52
Further tables by age group.....	53
Further tables by ethnicity	56
Further Tables	60
Geography.....	61
Region.....	61

Auckland Local Board	66
Housing lacking basic amenities definition	69
Definition - Geography—Regional Council.....	71
Definition - Geography—Auckland local board.....	73
Appendix Three – An example with thresholds	75
References.....	77

Table of Tables

Table 1: Quality ratings of 2018 Census variables rated Moderate, Poor or Very Poor used in this report	14
Table 2: Absence of relevant basic amenities (number and percentage of dwellings).....	17
Table 3: Dwellings lacking basic amenities, by dwelling typology (number and percentage of dwellings).....	17
Table 4: Type and tenure of dwellings, by access to basic amenities (percentage of dwellings)	18
Table 5: Dwelling room and occupancy characteristics, by access to basic amenities (percentage of dwellings).....	19
Table 6: Percentage of households below income poverty threshold by number of basic amenities (percentage of dwellings)	20
Table 7: Equivalized household income percentiles, by access to basic amenities (dwelling level, \$)	20
Table 8: Availability of communication, heating and refrigerator amenities in dwellings, by access to basic amenities (percentage of dwellings).....	21
Table 9: Dwelling mould and damp levels, by access to basic amenities (percentage of dwellings).....	21
Table 10: Region and rurality, by access to basic amenities (percentage of dwellings)	22
Table 11: Percentage of people living in dwellings lacking basic amenities, by age group and dwelling type (percentage of people).....	25
Table 12: Percentage of people living in dwellings lacking basic amenities, by disability and ethnic group (percentage of people)	26
Table 13: Tenure, and crowding for people living in dwellings lacking basic amenities, by ethnic group (percentage of people)	27
Table 14: Address change, years living in New Zealand and birthplace of people living in dwellings lacking basic amenities, by ethnic group (percentage of people).....	28
Table 15: Percentage of people living in housing lacking basic amenities, by regional council and ethnic group (percentage of people).....	29
Table 16: Auckland local board and ethnicity groupings exposure to housing lacking basic amenities (percentage of people)	30
Table 17: Number of basic amenities available by dwelling type (number of people)	33
Table 18: Number of basic amenities available for people classified as Severely Housing Deprived under the initial three categories by Dwelling type and number of basic amenities (number of people)'	33
Table 19: Percentage of residents classified as Severely Housing Deprived under the initial three categories by Dwelling type and number of basic amenities (% , person level)	33
Table 20: Uninhabitable housing and Sharing accommodation categories of severe housing deprivation (number and percentage of people)	34
Table 21: Severe housing deprivation, by sex (number and percentage of people)	35
Table 22: Severe housing deprivation, by ethnic group (number and percentage of people)	35
Table 23: Severe housing deprivation, by age group (number and percentage of people).....	36
Table 24: Severe housing deprivation, by disability (number and percentage of people).....	37
Table 25: Severe housing deprivation, by address change (number and percentage of people)	37
Table 26: Severe housing deprivation, by birthplace (number and percentage of people).....	38

Table 27: Severe housing deprivation, by years in New Zealand (number and percentage of people).....	38
Table 28: Severe Housing Deprivation, by tenure (number and percentage of people).....	39
Table 29: Severe housing deprivation, by number of basic amenities (number and percentage of people)	40
Table 30: Severe housing deprivation, by rurality (number and percentage of people).....	40
Table 31: Severe housing deprivation, by types of missing basic amenities (number and percentage of dwellings)	41
Table 32: Severe housing deprivation, by number of basic amenities (number and percentage of dwellings)	42
Table 33: Severe housing deprivation, by rurality (number and percentage of dwellings).....	42
Table 34: Severe housing deprivation, by region (number and percentage of dwellings)	43
Table 35: Census 2018 housing quality or amenity variables potentially useful in understanding inadequate housing	46
Table 36: Percentage of data available for analysis if answers to census questions required .	47
Table 37: Relationship between absence of individual amenities (percentage of dwellings) .	48
Table 38: Number and percentage of dwellings lacking basic amenities under different definitions	49
Table 39: Definition of required basic amenities by dwelling tenure (percentage of dwellings in that ownership category).....	50
Table 40: Definition of required basic amenities by rurality (percentage of dwellings of that rurality)	50
Table 41: Definition of required basic amenities, by heating use and refrigerator presence (percentage of dwellings with that level of heating/refrigeration).....	51
Table 42: Definition of required basic amenities, by reported levels of damp and mould (percentage of dwellings with that level of mould/damp)	51
Table 43: Percentage of people living in dwellings lacking basic amenities, by sex, by age group, rurality, ethnic group, address change, and dwelling typology (percentage of people)	52
Table 44: Percentage of people living in dwellings lacking each individual basic amenity by sex (percentage of people)	53
Table 45: Percentage of people living in dwellings with the number of amenities available, by sex (percentage of people)	53
Table 46: Percentage of people living in dwellings lacking basic amenities, by age group, by rurality, ethnic group, and address change (percentage of people).....	53
Table 47: Percentage of people living in dwellings lacking each individual basic amenity by age group (percentage of people).....	54
Table 48: Percentage of people living in dwellings with the number of amenities available, by age group (percentage of people).....	54
Table 49: Percentage of people living in dwellings lacking basic amenities, by age group, ethnic group and rurality (percentage of people).....	55
Table 50: Number of people living in dwellings lacking basic amenities, by age group and ethnic group (number of people).....	55
Table 51: Number of people NOT living in dwellings lacking basic amenities, age group and ethnic group (number of people).....	56

Table 52: Percentage of people living in dwellings lacking each individual basic amenity by ethnic group (percentage of people)	56
Table 53: Living in dwellings lacking basic amenities, by Territorial Authority and ethnic group (percentage of people)	57
Table 54: Number of people living in dwellings lacking basic amenities, by tenure and ethnic group (number of people)	59
Table 55: Number of people NOT living in dwellings lacking basic amenities, by tenure and ethnic group (number of people).....	59
Table 56: Percentage of dwellings, by dwelling typology and number of amenities available (percentage of dwellings).....	60
Table 57: Number and percentage of dwellings, by number of amenities available (number and percentage of dwellings)	60
Table 58: Absence of individual amenities by region (Number of dwellings).....	61
Table 59: Absence of individual amenities by region (Percentage of dwellings)	62
Table 60: Distribution of the presence of the six basic amenities (cooking facilities, bath or shower, toilet, electricity, kitchen sink and safe drinking water) by region (number and percentage of dwellings).....	63
Table 61: Percentage of dwellings that are lacking basic amenities by tenure and region (percentage of dwellings).....	64
Table 62: Severe housing deprivation by region (number and percentage of dwellings)	65
Table 63: Percentage of dwellings with missing amenities, by Auckland local board (percentage of dwellings).....	66
Table 64: Number of dwellings with missing amenities, by Auckland local board (number of dwellings).....	67
Table 65: Distribution of presence of six basic amenities (cooking facilities, bath or shower, toilet, electricity, kitchen sink and safe drinking water) under, by Auckland local board area (number and percentage of dwellings).....	68
Table 66: Housing lacking basic amenity definition, by tenure type (number of dwellings).	69
Table 67: Housing lacking basic amenity definition, by rurality (number of dwellings).....	70
Table 68: Housing lacking basic amenities definition, by heating (number of dwellings)	70
Table 69: Housing lacking basic amenity definition by Mould (number of dwellings).....	70
Table 70: Housing lacking basic amenity definition, by Dampness (number of dwellings)...	71
Table 71: Distribution of the presence of five amenities (cooking facilities, bath or shower, toilet, electricity and kitchen sink) initially under consideration as the “basic” amenities, by region (number and percentage of dwellings)	71
Table 72: Distribution of the presence of seven amenities (cooking facilities, bath or shower, toilet, electricity, kitchen sink, safe drinking water, and a refrigerator) initially under consideration as the “basic” amenities by region (number and percentage of dwellings).....	72
Table 73: Distribution of the presence of five amenities (cooking facilities, bath or shower, toilet, electricity and kitchen sink) initially under consideration as the “basic” amenities,, by Auckland local board area (number and percentage of dwellings).....	73
Table 74: Distribution of presence of seven amenities (cooking facilities, bath or shower, toilet, electricity, kitchen sink, safe drinking water, and a refrigerator) initially under consideration as the “basic” amenities by Auckland local board (number and percentage of dwellings).....	74

Key Results

In this section we present a brief overview of the key results of this report. We have defined dwellings lacking basic amenities as lacking at least one of the following six amenities: drinkable tap-water; a kitchen sink; cooking facilities; electricity; a toilet; a bath or shower (for further details on how this definition was chosen see Appendix 1).

In this report we focus on two categories: dwellings lacking basic amenities, and people living in amenity-related severe housing deprivation. Most people living in housing lacking basic amenities are not severely housing deprived, which is a term reserved for people living in conditions that they lack the resources to change. ‘Severely Housing Deprived-amenity’ (SHD-amenity) refers to dwellings that lack at least one basic amenity *and* in which the residents are on low incomes and therefore lack the resources to change their circumstances. This corresponds to the category of ‘Uninhabitable Housing’ in the official New Zealand definition of homelessness.

We also consider how the definitions in the New Zealand definition of homelessness for uninhabitable housing (SHD-amenity) and crowded shared accommodation (SHD-sharing) interact and overlap.

Dwellings lacking basic amenities

- In the 2018 Census, 5.2 percent of private residential dwellings (78,900) lacked access to at least one of six basic amenities. Of these six basic amenities the amenity reported absent most often was drinkable tap-water (3.2 percent of dwellings) followed by electricity (1.7 percent of dwellings). Three-quarters of dwellings lacking a basic amenity were missing only one basic amenity.
- Half of dwellings lacking basic amenities were owned by the residents either directly, or through a family trust; half the dwellings were rented either privately or publicly.
- Many dwellings lacking basic amenities were small, and/or occupied by only one person.
- Three-quarters of dwellings lacking at least one basic amenity were houses.
- The poorest households in dwellings lacking basic amenities had lower equivalised incomes than those in dwellings with all basic amenities.
- Dwellings lacking basic amenities were disproportionately found in rural areas.
- Households in dwellings lacking basic amenities reported having used no heat source at three times the rates of households in dwellings that did not lack basic amenities (10.9 percent vs 3.6 percent). Households in dwellings lacking basic amenities also reported greater amounts of mould, and greater dampness in their dwellings.
- Most dwellings had a mobile phone, internet, or telephone, although the rate of those that did not have any of these was higher at 5.8 percent in dwellings lacking basic amenities, than the 0.8 percent in dwellings with all basic amenities.

Severely deprived dwellings which lack basic amenities and the residents have low income

- Overall, 22,647 dwellings contained people living in amenity-related severe housing deprivation, this is 29 percent of the dwellings lacking basic amenities. Drinkable tap-water and electricity were the basic amenities most often missing from these dwellings. Nearly 70 percent of these uninhabitable dwellings were lacking only one basic amenity.
- Dwellings in urban and rural areas had similar rates of amenity-related severe housing deprivation.

People in dwellings lacking basic amenities

- Overall, 5.2 percent (207,969 people) of the population that data was available for were usually resident in housing lacking basic amenities. 3.3 percent of people were lacking access to drinkable tap-water, and 1.8 percent of people were lacking access to electricity.
- There were strong differences by ethnic group for people living in housing lacking basic amenities: 11.3 percent of Pacific peoples, 9.2 percent of Asian people, 8.6 percent of MELAA (Middle Eastern, Latin American, and African) people, 6.9 percent of Māori, but only 4.4 percent of Other and 3.4 percent of European ethnic groups.
- Pacific, Asian, and MELAA people, who had been overseas a year prior to the census, had high rates of living in housing lacking basic amenities (about 1 in 9). In contrast, rates for Māori and European people, who had been overseas a year prior, were only slightly higher than for those who were living at the same address a year prior.
- The rates of exposure to housing lacking basic amenities were highest for the youngest age groups (6.2 percent of people aged under 5 years). The age group with the second-highest proportion was 25 to 34 year olds (5.8 percent), with decreasing proportions with increasing age from there (4.0 percent for those aged 75 and older).
- Exposure to lack of basic amenities for young children was high: 4.2% of children under the age of 5 were living in dwellings without drinkable tap-water; and 2.3% of children under the age of 5 were living in dwellings without electricity. While drinkable tap-water was the basic amenity most absent in every age-group, the high rate of the lack of drinkable tap-water for households with young children is particularly concerning.
- There was little difference by sex.
- People with a disability were more likely to report living in housing lacking basic amenities (7.8 percent) than those without a disability (4.6 percent).
- People in rural areas were more exposed to housing lacking basic amenities than those in urban areas. Young, working-age adults (25-34 years old) were particularly affected (7.2% in rural areas, 5.7% in urban areas).

People in Severe Housing Deprivation caused by lack of amenities

- Overall, 62,019 people were classified as living in severe housing deprivation through uninhabitable housing, this is 30 percent of those living in dwellings lacking basic

amenities. 1,629 of those people were also classified as being in severe housing deprivation through crowding.

- Overall, more people were classified as living in severe housing deprivation through uninhabitable housing than were living in severe housing deprivation through shared crowded accommodation. This remained true for most of the demographic divisions we considered.
- People of Pacific ethnicity had the highest rates of amenity-related severe housing deprivation (4.4 percent), followed by MELAA (3.8 percent), and Māori and Asian people (both 2.6 percent). This ordering was somewhat different to the rankings for exposure to housing lacking basic amenities, where Asian people had the second greatest rates.
- People in urban areas had slightly higher rates of uninhabitable housing (1.5 percent) than those in rural areas (1.2 percent).
- People born overseas had higher rates of severe housing deprivation through both uninhabitable housing and crowding than those born in New Zealand. Although crowding was the most common form of severe housing deprivation among people who had spent less than one year in New Zealand, for those who had spent two to 29 years in New Zealand uninhabitable housing was the more common form of severe housing deprivation. Rates of crowding related severe housing deprivation became similar to the New Zealand born after about five years, but rates of severe housing deprivation through uninhabitable housing remained higher than the New Zealand born for up to 29 years
- People in the youngest age-groups had the most exposure to amenity-related severe housing deprivation. Those under the age of 5 experienced over twice the rates of those aged over 75.
- About 10 percent of the amenity-related severe housing deprivation population lived with disability, double the rate for both the general population and those living in crowding-related severe housing deprivation.
- People living in rental housing, both public and private, had greater rates of amenity-related severe housing deprivation than those in owner-occupied housing (7.08 percent and 2.16 percent and 0.63 percent respectively).
- About 40 percent of those lacking two or more basic amenities were in uninhabitable housing, and just over a quarter of those lacking one basic amenity were in uninhabitable housing.

Introduction

This report is a supplement to prior reports on severe housing deprivation (homelessness) in Aotearoa New Zealand (NZ) (Amore, 2019; Amore et al., 2013; Amore et al., 2020). This report uses data, available for the first time from the Aotearoa New Zealand 2018 Census, to explore the demographics of those who live in dwellings lacking basic amenities. There is limited information about this issue in Aotearoa, although we know that many dwellings are of poor quality (Howden-Chapman, 2015; White et al., 2017). As such, the purpose of this report is to broaden the information available about poor-quality housing and demographics of those who live in such housing. Housing is a human right (United Nations, 1948), and everyone should live in a dwelling that has basic, necessary, amenities.

In this report dwellings or housing lacking basic amenities refers to dwellings in which the residents lack access to at least one of these amenities: drinkable tap-water; a kitchen sink; a bath or shower; a toilet; cooking facilities; and electricity. Lack of access to refrigerators, although also available, was not included in the definition as a basic amenity, this was due to refrigerators: not being an intrinsic attribute of a dwelling, not being specifically listed in the habitability requirements for dwellings under the New Zealand definition of homelessness, and not being specifically required in a dwelling under the 1947 Housing improvement regulations. For further details on how the definition was chosen see Appendix 1.

The NZ definition of homelessness has several categories (Statistics New Zealand, 2015): without shelter; temporary accommodation; sharing accommodation with a household; and living in uninhabitable housing. Up until now the only category that has been evaluated that includes people in permanent private dwellings has been sharing accommodation. Sharing accommodation is estimated by counting non-tenure holders i.e., the number of people staying in someone else's dwelling, rented, owned, or otherwise, that is severely crowded, and who lack enough income to change their circumstances. Uninhabitable housing also applies to private dwellings, so it is possible for a person to be severely housing deprived under both of these categories.

Dwellings defined as uninhabitable are a subset of all dwellings lacking basic amenities. The defining feature that categorises the residents as experiencing homelessness, or severe housing deprivation, is that they lack the resources to change their circumstances. For the purposes of measurement this is determined using equivalised household income.

This report uses Census 2018 data to describe the conditions inside dwellings lacking basic amenities and then examines some of the characteristics of people living inside these dwellings. It then considers the more restrictive category of uninhabitable housing, describing both the characteristics of dwellings and the people who live in them.

Most of this report focuses on only the usual residents of housing, and their usual address as described on census night.

There are limitations associated with using the 2018 Census to measure housing lacking basic amenities, most obviously that it was a census administered primarily over the internet making it problematic for any household which did not have access to the electricity to answer. Therefore, there is potential for undercounting of dwellings that lack amenities. Equally, the census question on amenities required the householders to positively affirm that they had each of the queried amenities; people who skipped part of the question have been

recorded as missing amenities —although anyone who skipped the entire question has had their dwelling recorded as ‘not stated’. The percentage estimates reported in this document exclude the “not-stated” dwellings and those who live in them from both numerator and denominator, giving a best estimate for the population as a whole. The absolute numbers reported however include only those specifically identified as being without basic amenities, we have not adjusted those figures for the “unstated” dwellings.

Given the clear limitations of this data these results are presented with the caution that they reflect the circumstances for dwellings, and the occupants that is available. As with previous reports on severe housing deprivation, these results are therefore considered underestimates. While acknowledging that this is not a full and complete picture, we present the data available to inform the conversation, policy and investment in supporting people into healthier housing, with the caution that the data presented probably both underestimate the numbers and do not describe the lived experience in these dwellings.

Caveats

The 2018 New Zealand Census presents the first opportunity to estimate the national prevalence of housing lacking basic amenities and uninhabitable housing.

However, there are a number of caveats to interpreting and using the results presented in this report. Many of these caveats have previously been described (Amore et al., 2020), however we recap those relevant to this report.

The 2018 severe housing deprivation estimate, like previous estimates, underestimated the true level of severe housing deprivation. Scope changes, census operational difficulties, and quality limitations inherent in surveying people experiencing homelessness or housing lacking basic amenities mean comparisons over time are impossible or inappropriate. Here, we detail a range of factors that are likely to have influenced the 2018 estimates.

As a vulnerable and hard-to-find population, we expect the severely housing deprived population to be undercounted in national censuses (and most data collections). However, we also recognise that a national census of population and dwellings is one of the best sources of information on severe housing deprivation at a national level. In preparation for the 2018 Census, Stats NZ developed a targeted strategy designed to better reach remote areas and homeless people (Stats NZ, 2019b). This included these approaches:

- Pre-engagement with community organisations;
- Data collection over several nights (4 to 8 March 2018);
- Assisted completion events – e.g. barbeques held with community organisations with Census staff on hand to help people complete forms;
- Field-assisted response on an *ad hoc* basis, to help people complete their forms where they live;
- Specific engagement with non-private dwellings such as night shelters;
- Pre-census visits to homes in rural or remote areas;
- Recruiting local residents on remote islands to assist with census coverage.

The move to an online-first approach for the 2018 Census contributed to an undercount of severely housing deprived people living in private dwellings, probably due to both the limited availability of online access and variations in computer literacy. The online-first approach also meant there were fewer staff ‘on the ground’ than for previous censuses, so fewer people living in situations classified as severely inadequate housing, such as cars, would have been identified and encouraged to participate.

Extensive work has been undertaken on the 2018 Census to fill data gaps using historic data (for example, using ethnicity records from the 2013 census for people who did not answer the ethnicity question), administrative (for example, using data from Inland Revenue on personal income) and imputed data (for example, using the religion of the person in the same household closest in age to a person who did not answer the religion question)(Stats NZ, 2019a). The final 2018 Census coverage rate was 97.4 percent, this means 2.6 percent of people in New Zealand on Census night who should have been counted were not (Stats NZ, 2020b). This is similar to previous censuses with a 2.4 percent undercount in 2013 and 2.0 percent in 2006.

There was substantial variation in response rates by ethnicity for the 2018 Census, with Māori and Pacific people particularly affected. Ethnicity data came from census forms for only 71 percent of Māori and 68 percent of Pacific people (2018 Census External Data Quality Panel, 2020), compared with 89 percent of people of European ethnicities. There was also considerable variation in coverage for different areas. However, through the new methods used to supplement the 2018 Census with other data sources, an ethnic group is available for every usual resident in New Zealand at the time.

However, for variables where there were no alternative sources of data (e.g. basic housing amenities), the proportion of missing data will be greater for Māori and Pacific peoples. The main impact on the severe housing deprivation estimate is that around 330,000 people could be allocated to a small area (meshblock) but not to a household, and thus could not be included in the severe housing deprivation analysis, because household and dwelling variables are integral to determining if a person is severely housing deprived. These 330,000 ‘missing’ records are likely to particularly affect the ‘sharing accommodation’ and ‘uninhabitable housing’ categories of severe housing deprivation among Māori and Pacific peoples (Stats NZ, 2020). Māori and Pacific peoples make up almost half of the 330,000 people missing from households and they are more likely to share with family or friends when they cannot access a place of their own.

A group of experts undertook to review the quality of the 2018 Census variables. This was done by assessing: the data sources and coverage – for the overall population, ethnic groups and regions; the consistency and coherence – in using a classification, and across the paper and online collection methods; comparability – with other data collections and across time periods; data quality and contemporaneity – the timeliness of the data sources used. The assessments have been aggregated into a five point scale: Very High, High, Moderate, Poor, Very Poor (2018 Census External Data Quality Panel, 2020). In particular, the amenities data were of only moderate quality (Table 1).

Table 1: Quality ratings of 2018 Census variables rated Moderate, Poor or Very Poor used in this report

2018 Census Variable	2018 Census External Data Quality Panel rating	Stats NZ quality rating	Note from External Data Quality Panel report
Usual residence one year ago	Did not assess	Poor	
Years at usual residence	Did not assess	Poor	
Ethnicity	Moderate	High	Census 2018 should be treated as a break in the time series, and that comparisons with ethnicity data prior to 2018 should be undertaken with extreme caution, particularly for Māori and Pacific ethnic groups.
Family type	Very poor	Moderate	Variation in response rates across place, ethnicity and age has resulted in a reduced and variable share of private households where information was obtained from all the members of a private household from the same source, at the same time.

2018 Census Variable	2018 Census External Data Quality Panel rating	Stats NZ quality rating	Note from External Data Quality Panel report
Years since arrival in New Zealand	Moderate	Moderate	Data has been assessed to be consistent with previous trends plus known migration at the regional council level of geography. Some variation is possible at geographies below this level. Government administrative records only exist since 1997, so that imputation for missing information using administrative records was more comprehensive for younger people.
Access to telecommunication systems	Moderate	Moderate	Stats NZ have compared 2018 Census trends (e.g. increasing levels of 'no access to landline') with industry information and the results appear in line.
Heating	Moderate	Moderate	Main types of heating used is a new classification for the 2018 Census. This is a multiple response variable.
Dampness	Moderate	Moderate	Stats NZ state "It was expected that an overall higher response rate to the Census would likely have given a higher rate of 'damp - always' and 'damp - sometimes', based on our understanding of the characteristics of non-respondents."
Mould	Moderate	Moderate	It should be noted that a classification of dampness and mould relating to a dwelling is not necessarily the same as such a classification for individuals in the household. Mould and dampness can be room-specific and may affect those living in dwellings differentially.
Access to amenities	Moderate	Moderate	The nature of the 2018 census non-response problems is likely to have led to underreporting from those dwellings/households more likely to have reported housing quality problems.
Tenure of household	Moderate	Moderate	The use of information on sector of landlord in the derivation for tenure of household is new to 2018 and will have improved the derivation of households in the 'do not own or hold in a family trust' category.

Note: Other variables used in this report, not mentioned above, were not assessed, or were of 'higher' or 'very high' quality.

Source: 2018 Census External Data Quality Panel. (2020). 2018 Census External Data Quality Panel: Assessment of variables. Available from [2018 Census External Data Quality Panel: Assessment of variables | Stats NZ](#)

Income data coverage was better in the 2018 Census, because of the use of administrative data. In 2013, lack of income data was the most common reason people were excluded from the estimate of severe housing deprivation. This was likely to be a source of an undercount of

Severe Housing Deprivation in 2013 because non-response to income questions was more common in deprived groups, including people not working (Suei, 2016).

Most of this report focuses on only the usual residents of housing, as described on Census night. However usual residents who were spending a night away from home on Census night were able to be analysed as a member of their household at their usual address.

Given the caveats and limitations, it is important to remember that the data presented here while giving the most accurate overall picture that we are able to, are probably an underestimate of the severity of the situation as it was in 2018.

Housing Lacking Basic Amenities

Of 1,653,792 private, occupied, households on Census night, there was enough information from 1,521,084 dwellings to categorise which dwellings did or did not lack basic amenities; 5.2 percent (78,900) did lack basic amenities and 94.8 percent (1,442,184) did not.

Overall there were 207,792 people known to be living in housing lacking basic amenities, and 3,782,112 people known to be living in housing with access to all six basic amenities i.e., safe drinking water, electricity, cooking facilities, a kitchen sink, toilet and bath or shower.

Characteristics of dwellings that lack basic amenities

Of the dwellings lacking basic amenities two-thirds (52,038) were missing only one of the six basic amenities (Table 2). The most common basic amenity missing was drinkable tap-water (3.2 percent of dwellings), and the second most common was electricity (1.7 percent of dwellings), about one percent of dwellings were missing each of the other four basic amenities.

Table 2: Absence of relevant basic amenities (number and percentage of dwellings)

	Number of dwellings missing this basic amenity	Percentage of dwellings missing this basic amenity	Number of dwellings missing only this one basic amenity	Percentage of dwellings missing only this one basic amenity
Drinkable tap-water	48087	3.2	30432	2.0
Electricity	25719	1.7	8232	0.5
Cooking facilities	17148	1.1	3762	0.2
Kitchen sink	15711	1.0	3177	0.2
Toilet	14553	1.0	3048	0.2
Bath or shower	14553	1.0	3387	0.2
Any basic amenity	78900	5.2	52038	3.3

Amenity data was available for most permanent private dwellings, with the least information available for private dwellings in a motor camp (71.4 percent, Table 3).

Table 3: Dwellings lacking basic amenities, by dwelling typology (number and percentage of dwellings)

Dwelling typology	Number of dwellings lacking basic amenities	Number of dwellings not lacking basic amenities	Percentage of dwellings with amenity data available
House	57,297	1,228,368	99.4
Unit	10,851	149,745	98.9
Town-house	2,898	70,437	99.3
Apartment	3,777	55,704	99.2
Mobile dwelling not in a motor camp	1,518	3,795	75.4
Improvised dwelling	789	2,496	88.5
Private dwelling in a motor camp	384	954	71.4

Note: This division of housing typologies, especially the distinction between units, apartments and townhouses are not standard StatsNZ outputs. We have used them acknowledging some inherent data quality issues because of their face-validity in describing New Zealand housing types which is not fully captured by considering the number of storeys a dwelling has.

Nearly three-quarters of dwellings lacking basic amenities were standard houses, with two percent mobile dwellings (not in motor-camps), one percent improvised dwellings and 0.5 percent private dwellings in motor-camps (Table 4).

Approximately half of dwellings lacking basic amenities were owned or in a family trust. Just over one-in-ten dwellings lacking basic amenities were public rentals¹.

Table 4: Type and tenure of dwellings, by access to basic amenities (percentage of dwellings)

		Percentage of dwellings lacking basic amenities	Percentage of dwellings NOT lacking basic amenities
Dwelling typology	House	73.9	81.3
	Unit	14.0	9.9
	Town-house	3.7	4.7
	Apartment	4.9	3.7
	Mobile dwelling not in a motor camp	2.0	0.3
	Improvised dwelling	1.0	0.2
	Private dwelling in a motor camp	0.5	0.1
Household tenure	Owned	38.5	53.7
	Family Trust	10.0	13.9
	Private rental	38.5	27.3
	Public rental	10.9	4.2
	Other (mainly rented unknown landlord)	2.1	0.9
		100.0	100.0

Note: This division of housing typologies, especially the distinction between units, apartments and townhouses are not standard StatsNZ outputs. We have used them acknowledging some inherent data quality issues because of their face-validity in describing New Zealand housing types which is not fully captured by considering the number of storeys a dwelling has. The public rental category contains a variety of government sector and charitable landlords including: city councils, community housing providers, government departments, hapū, HNZA (which became Kāinga Ora - homes and communities in 2019), iwi, local authorities, Māori land trusts, ministries, state-owned corporations or enterprises.

Housing lacking basic amenities often has fewer bedrooms (Table 5). Over a quarter of dwellings without basic amenities have only one resident, while larger dwellings with six or more people in them were also overrepresented among dwellings without basic amenities.

¹ The public rental category contains a variety of government sector and charitable landlords including: city councils, community housing providers, government departments, hapū, HNZA (which became Kāinga Ora - homes and communities in 2019), iwi, local authorities, Māori land trusts, ministries, state-owned corporations or enterprises.

Households living in dwellings lacking basic amenities were more likely to be one-person households, and more likely to be multi-family households (Table 5).

When occupancy and numbers of bedrooms are combined we can use the Canadian National Occupancy Standard to understand the number of bedrooms a dwelling would need to have to house the residents appropriately (Goodyear et al., 2011). Just over one-in-ten households living in dwellings lacking basic amenities needed extra bedrooms, and hence were classified as crowded (Table 5), and more than one-in-thirty needed at least two extra bedrooms and was classified as severely crowded..

Table 5: Dwelling room and occupancy characteristics, by access to basic amenities (percentage of dwellings)

		Percentage of dwellings lacking basic amenities	Percentage of dwellings NOT lacking basic amenities
Number of bedrooms in dwelling	1 bedroom	13.0	5.4
	2 bedrooms	22.8	18.5
	3 bedrooms	40.2	43.8
	4 bedrooms	17.9	24.8
	5 bedrooms	4.8	6.1
	6+ bedrooms	1.3	1.4
Number of people per dwelling	1 person	26.2	21.9
	2 people	29.5	33.9
	3 people	16.5	16.5
	4 people	13.7	15.9
	5 people	7.2	7.1
	6 people	3.6	2.8
	7 people	1.7	1
	8 people	0.8	0.5
	9 people	0.4	0.2
	10+ people	0.4	0.2
Household composition	One person	27.4	22.9
	One family	66.5	72.7
	Two families	4.5	3.4
	3+ families	0.4	0.2
	Other multi-persons	1.2	0.8
Level of crowding in dwelling	2+ bedrooms short	3.5	1.3
	1 bedroom short	7.8	3.7
	No extra bedrooms required	28.7	19.8
	1 excess bedroom	29.2	32.6
	2+ excess bedrooms	30.9	42.6

Note: Crowding is measured using the Canadian National Occupancy Standard.

One threshold of income poverty is the 60th percentile of average equivalised household income, using Jensen’s formula ((Jensen, 1978, 1988)). Using the Census 2018 data, the income poverty threshold is \$34,023. (Atkinson J et al., 2020). About 15 percent of households fell below this level in 2018. About twice the proportion of households in dwellings lacking basic amenities had an equivalized household income below the poverty threshold as those in dwellings with all six basic amenities (Table 6). The proportion *below* the poverty threshold was around a third of households with access to zero, and up to four basic amenities, while it was about a quarter of households living in dwellings with access to basic five basic amenities.

Table 6: Percentage of households below income poverty threshold by number of basic amenities (percentage of dwellings)

	Number of basic amenities available in dwelling							
	0	1	2	3	4	5	0 to 5	All 6
Percentage of households below poverty threshold	32.5	35.5	35.3	37.0	32.3	24.3	26.6	13.5

Households with the lowest incomes in dwellings lacking basic amenities had about half the income of low income households living in dwellings with all six basic amenities (Table 7). Further investigation is needed into the quality of the income data and understanding high income households in dwellings lacking basic amenities.

Table 7: Equivalized household income percentiles, by access to basic amenities (dwelling level, \$)

Equivalised household income percentiles	Equivalised household income for households living in dwellings lacking basic amenities (dollars)	Equivalised household income for households not living in dwellings lacking basic amenities (dollars)
10th	13,100	27,400
25th	27,400	40,900
50th (median)	48,800	69,900
75th	82,600	110,400
90th	120,100	163,000

Nearly a third of dwellings lacking basic amenities did not have electricity. However, in most dwellings lacking basic amenities the occupants had access to a mobile phone (Table 8). Just five percent of dwellings lacking basic amenities had no phone or internet services.

Heat pumps and plug-in electrical heaters were the most common heating sources reported regardless of access to basic amenities (Table 8). These were followed by wood burners. Over one-in-ten households living in dwellings lacking basic amenities reported using no heating, which was about three times the rate for households in dwellings not lacking basic amenities.

A quarter of dwellings lacking basic amenities did not have a refrigerator, while almost all dwellings with all basic amenities did so (Table 8).

Table 8: Availability of communication, heating and refrigerator amenities in dwellings, by access to basic amenities (percentage of dwellings)

		Percentage of dwellings lacking basic amenities	Percentage of dwellings NOT lacking basic amenities
Communication types available	Mobile	81.6	92.6
	Telephone	48.6	63.3
	Internet	71.5	87.2
	No communication source	5.8	0.8
Heating source	Heat pump	33.6	48.2
	Electrical heater	41.6	44.3
	Fixed gas	8.1	12.0
	Portable gas	7.9	6.2
	Wood-burner	29.0	32.6
	Pellet burner	0.9	1.0
	Coal burner	1.7	1.2
	Other heating	1.7	3.0
	No heating	10.9	3.6
Refrigerator availability	Fridge	74.4	98.1
	No fridge	25.6	1.9

Dwellings lacking basic amenities housing “always” had mould at over double the rate of dwellings with all basic amenities (Table 9).

Over a third of dwellings lacking basic amenities were damp at least sometimes, whereas only about a fifth of dwellings with all basic amenities were damp. Dwellings lacking basic amenities were ‘always’ damp, at over three times the rate of dwellings with all basic amenities (Table 9).

Table 9: Dwelling mould and damp levels, by access to basic amenities (percentage of dwellings)

		Percentage of dwellings lacking basic amenities	Percentage of dwellings NOT lacking basic amenities
How often mould in dwelling is larger than an A4 sheet of paper	Always A4 mould	10.5	4
	Sometimes A4 mould	19.7	12.3
	Never A4 mould	69.9	83.7
How often a dwelling feels or smells damp or has damp patches on the wall, ceiling, floor or window frames.	Always Damp	9.3	2.7
	Sometimes damp	27.4	18.1
	Never damp	63.3	79.2

Over a third of dwellings lacking basic amenities are in the Auckland region (Table 10). Over 6 percent of the dwellings in five regions: West Coast, Hawke’s Bay, Northland, Auckland and Gisborne were lacking basic amenities. Over a fifth of dwellings lacking basic amenities were in rural areas (Table 10).

Table 10: Region and rurality, by access to basic amenities (percentage of dwellings)

		Number of dwellings lacking basic amenities	Number of dwellings NOT lacking basic amenities	Percentage of dwellings in each area lacking basic amenities	Percentage of dwellings lacking basic amenities	Percentage of dwellings NOT lacking basic amenities
Region	Northland	3,759	53,772	6.5	4.8	3.7
	Auckland	28,263	422,514	6.3	35.8	29.3
	Waikato	7,593	141,933	5.1	9.6	9.8
	Bay of Plenty	3,960	96,036	4.0	5.0	6.7
	Gisborne	879	13,632	6.1	1.1	0.9
	Hawke's Bay	4,344	50,541	7.9	5.5	3.5
	Taranaki	1,725	40,416	4.1	2.2	2.8
	Manawatū—Whanganui	4,809	78,414	5.8	6.1	5.4
	Wellington	6,495	167,115	3.7	8.2	11.6
	Tasman	837	17,586	4.5	1.1	1.2
	Nelson	696	17,940	3.7	0.9	1.2
	Marlborough	903	16,485	5.2	1.1	1.1
	West Coast	1,077	11,064	8.9	1.4	0.8
	Canterbury	8,427	202,884	4.0	10.7	14.1
	Otago	3,396	76,986	4.2	4.3	5.3
	Southland	1,692	34,665	4.7	2.1	2.4
Rurality	Rural	17064	229758	6.9	21.6	15.9
	Urban	61791	1212363	4.8	78.4	84.1
					100	100

Note: Owing to small numbers of dwellings which are either not in a region, or not assigned a rurality the total numbers in the subsections of this table vary.

Characteristics of the occupants of housing lacking basic amenities

Of the usually resident population there were 207,792 people living in housing lacking basic amenities and 3,782,112 people living in housing with access to all six basic amenities. In this section we present the data to describe these people.

Sex

There is little difference by sex for exposure to housing lacking basic amenities (Figure 2).

The number of mobile dwellings not in motor camps, improvised dwellings and private dwellings in motor camps are low relative to other dwelling types (see Table 3 above). However, given the type of dwellings these are, the proportion of people living in them without access to basic amenities is high compared to other dwelling types (Figure 1). A higher proportion of males than females in motor camps were living in dwellings lacking basic amenities (Figure 1).

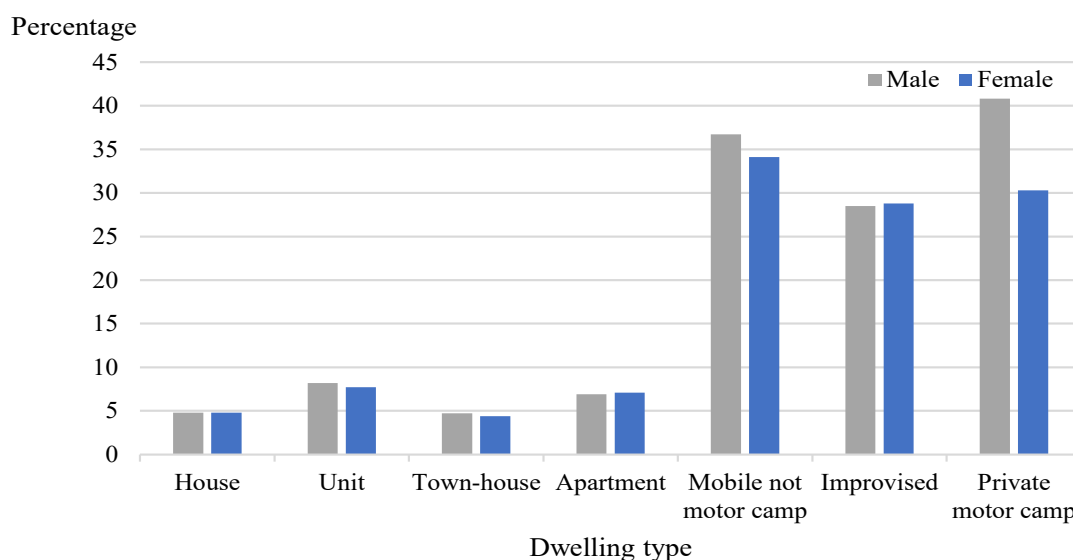


Figure 1: Percentage of people living in dwellings lacking basic amenities, by sex and dwelling typology (percentage of people)

Note: This division of housing typologies, especially the distinction between units, apartments and townhouses are not standard StatsNZ outputs. We have used them acknowledging some inherent data quality issues because of their face-validity in describing New Zealand housing types which is not fully captured by considering the number of storeys a dwelling has.

Age group by sex is presented below in Figure 2, with further tables by sex available in Appendix 2.

Age

The age group with the highest proportion of people living in dwellings lacking basic amenities was children under five years old (Figure 2, data can be found in Table 43 of Appendix 2). The age group with the second-highest proportion was 25 to 34 year olds, with decreasing proportions with increasing age from there. Four percent of people aged 75 years and over were living in dwellings lacking basic amenities.

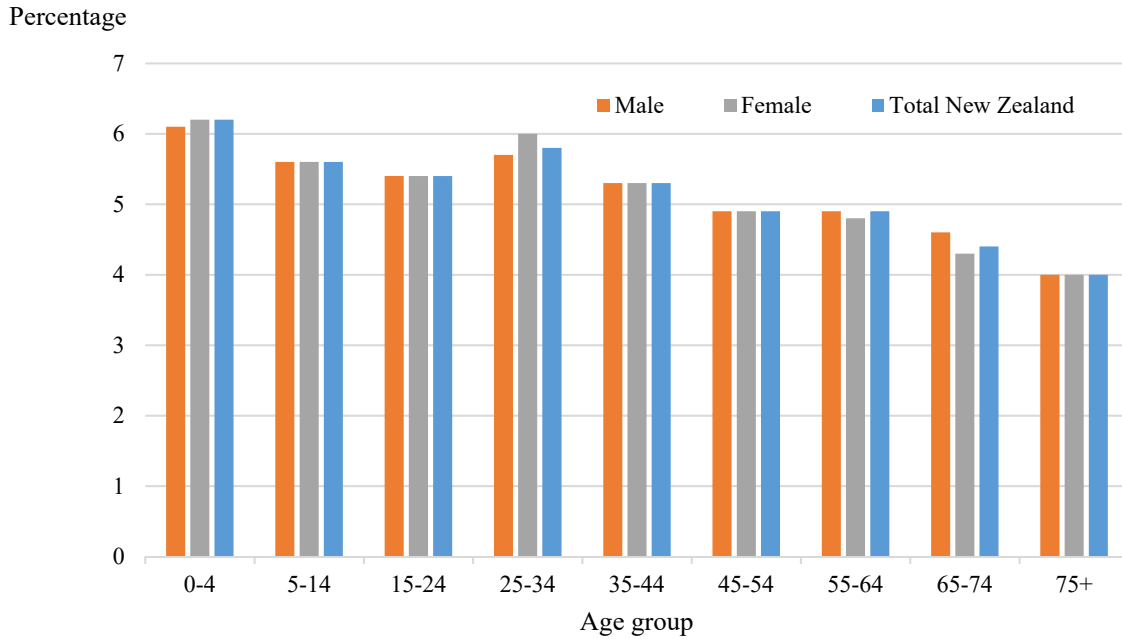


Figure 2: Percentage of people living in dwellings lacking basic amenities, by sex and age group

For every age-group the proportion of people living in dwellings lacking basic amenities was higher for those in rural areas (Figure 3). The effect of exposure to housing lacking basic amenities reducing with age seems less strong in rural areas than urban areas. The rural age group with the highest proportion of people living in dwellings lacking basic amenities was 25 to 34 year olds.

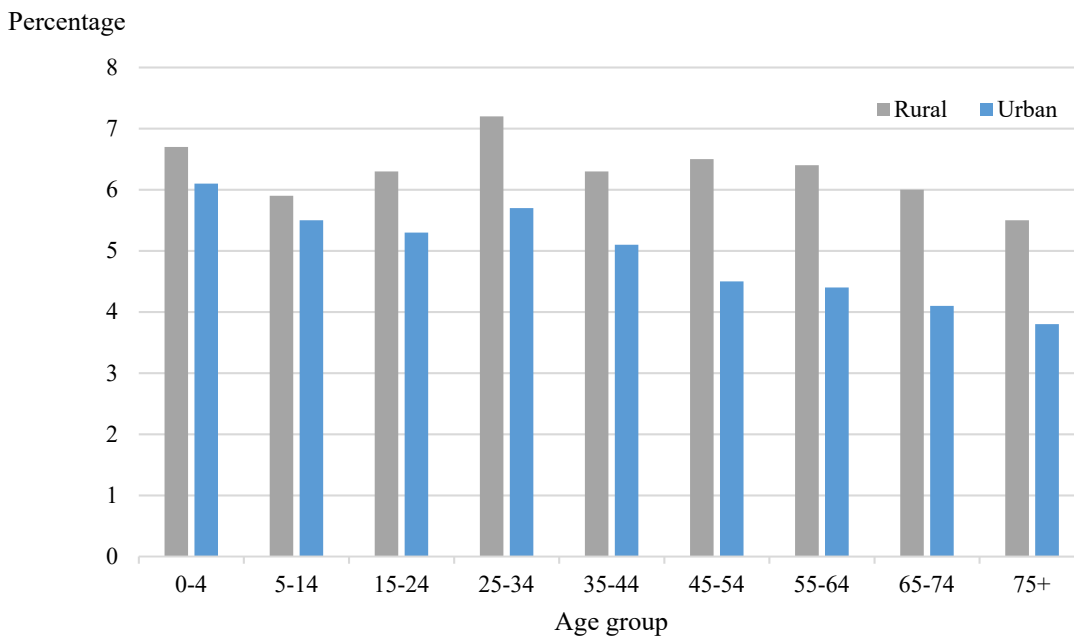


Figure 3: Percentage of people living in dwellings lacking basic amenities, by age group and rurality

The proportion of people living in dwellings lacking basic amenities was much higher for people living in mobile dwellings, improvised dwellings and private dwellings in motor-camps, than for those in houses, townhouses, units or apartments (Table 11). However, in the three less secure dwelling types, exposure to dwellings lacking basic amenities was highest for working age adults; while in the four more secure dwelling types the exposure rates to dwellings lacking basic amenities were highest for children. For those in improvised dwellings lack of access to basic amenities did not decrease with age.

Table 11: Percentage of people living in dwellings lacking basic amenities, by age group and dwelling type (percentage of people)

Age group	All individuals in NZ households	House	Unit	Town-house	Apartment	Mobile not motor camp	Improvised	Private dwelling in a motor camp
0-4	6.2	5.7	10.3	6.5	11.4	33.7	26.0	37.5
5-14	5.6	5.2	11.4	6.2	10.8	33.5	26.8	29.4
15-24	5.4	5.0	8.3	4.4	8.1	35.3	27.4	45.0
25-34	5.8	5.4	8.1	5.0	7.5	38.3	27.3	52.4
35-44	5.3	4.8	9.0	5.4	8.0	35.0	25.1	48.3
45-54	4.9	4.4	8.6	4.6	6.3	39.1	28.4	40.0
55-64	4.9	4.4	7.4	4.3	5.3	35.8	32.2	36.0
65-74	4.4	4.1	6.2	3.4	4.6	34.0	30.9	34.6
75+	4.0	3.7	4.6	3.0	4.5	28.9	32.8	23.1

Ethnicity

The description in this section uses “total ethnicity” – everyone who reported an ethnicity is included in the description of each group they reported they belonged to. The MELAA ethnic group includes Middle Eastern, Latin American, and African people.

Asian and Pacific peoples were more likely to live in housing lacking basic amenities than the overall New Zealand population. Māori and MELAA ethnic groups also had greater rates of living in housing lacking basic amenities than other New Zealanders (see Figure 4).

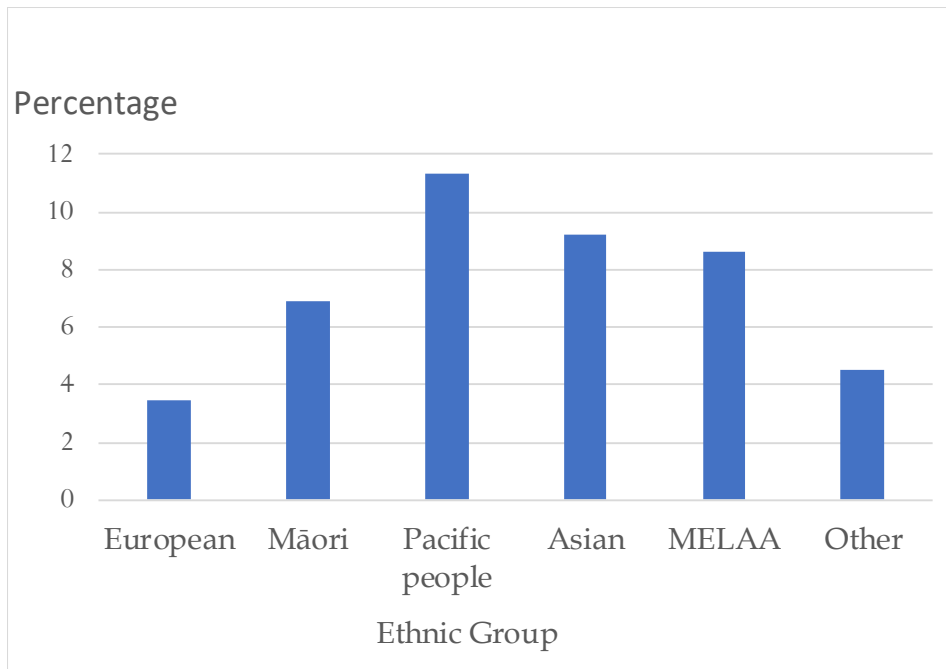


Figure 4: : Percentage of people living in dwellings lacking basic amenities, by ethnic group (total ethnicity)

People with disabilities were exposed to housing lacking basic amenities at greater rates than people without disabilities for all ethnicities (Table 12). This is an important finding, highlighting the inadequacy of housing available for people with disabilities. Pacific, MELAA and Asian people with disabilities had particularly high exposure rates. However, although not shown in this table, there were high rates of non-response to the disability question, and the group that did not respond also had high rates of exposure to housing lacking basic amenities.

Table 12: Percentage of people living in dwellings lacking basic amenities, by disability and ethnic group (percentage of people)

	European	Māori	Pacific people	Asian	MELAA	Other	Total New Zealand
Disabled	5.6	10.1	17.3	14.2	16.4	8	7.8
Not disabled	3.1	6.1	9.7	8.7	7.7	3.9	4.6

Note: Disability status assigned using the Washington group short set of questions which identifies those living with activity limitations that affect their everyday life. The activity limitations include: sight, hearing, walking or climbing steps, remembering or concentrating, washing all-over or dressing, communicating. People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African.

As the patterns of exposure to housing lacking basic amenities by ethnicity are so striking, we have included further cross-tabulations.

Over one in ten people living in public rentals were living in dwellings lacking basic amenities with all ethnic groups reporting higher rates of exposure in public rentals. These higher rates also showed clear differences by ethnic group.

For Pacific, MELAA, and Asian people living in a dwelling owned by a family trust was not protection from exposure to housing lacking basic amenities (Table 13). In contrast, for people of European, Māori, and Other ethnic groups, living in a dwelling owned by a family trust was approximately as protective from exposure to housing lacking basic amenities as living in a dwelling directly owned by the occupants.

People living in dwellings which were crowded were more likely to be exposed to housing lacking basic amenities than those in uncrowded dwellings (Table 13).

Table 13: Tenure, and crowding for people living in dwellings lacking basic amenities, by ethnic group (percentage of people)

		European	Māori	Pacific people	Asian	MELAA	Other	Total New Zealand
Tenure	Family Trust	2.5	4.5	11.5	11	11.2	3.7	3.9
	Owned	2.8	4.4	5.3	7.1	3.7	3.6	3.6
	Private rental	4.8	8.2	11.9	10.8	9.3	5.6	7.1
	Public rental	8.9	12.6	18.5	15.7	16.4	12.6	13.8
Crowding category	2 or more extra bedrooms needed	8.6	10.8	15.3	12.1	17.5	9.2	12.3
	1 extra bedroom needed	5.9	9.2	13.6	10.9	11.4	6.9	9.5
	0 extra bedrooms needed	4.3	7.5	11.1	9.6	9.9	5.7	6.4
	1 spare bedroom	3.1	5.6	8.2	8.3	6.5	3.9	4.2
	2 spare bedrooms	2.8	4.8	6.9	8.2	5	3.5	3.6

Note: The public rental category includes a variety of government sector and charitable landlords including: city councils, community housing providers, government departments, hapu, HNZA (which became Kāinga Ora - homes and communities in 2019), iwi, local authorities, Māori land trusts, ministries, state-owned corporations or enterprises. People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African. Crowding is measured using the Canadian National Occupancy Standard.

People who were in the same residence at census time as they had been a year earlier, reported lower rates of exposure to lack of basic amenities (Table 14). People of Pacific, MELAA, and Asian ethnicities who had been overseas a year earlier reported higher rates of exposure to lack of basic amenities than those who had been elsewhere in New Zealand. However, for people of Māori and European ethnicity the rates of exposure to housing lacking basic amenities were similar whether the person had been overseas or elsewhere in New Zealand a year earlier (Table 14).

Pacific, Asian and MELAA people who were born overseas had higher rates of exposure to housing lacking basic amenities than those born in New Zealand. However, people of Māori ethnicity born overseas had lower rates of exposure than those born in New Zealand (Table 14).

People who had been in New Zealand for one year or less had higher rates of exposure to housing lacking basic amenities than people who had been in New Zealand longer. People who have lived in New Zealand for up to 30 years still had higher rates of living in dwellings lacking basic amenities than those born in New Zealand (Table 14).

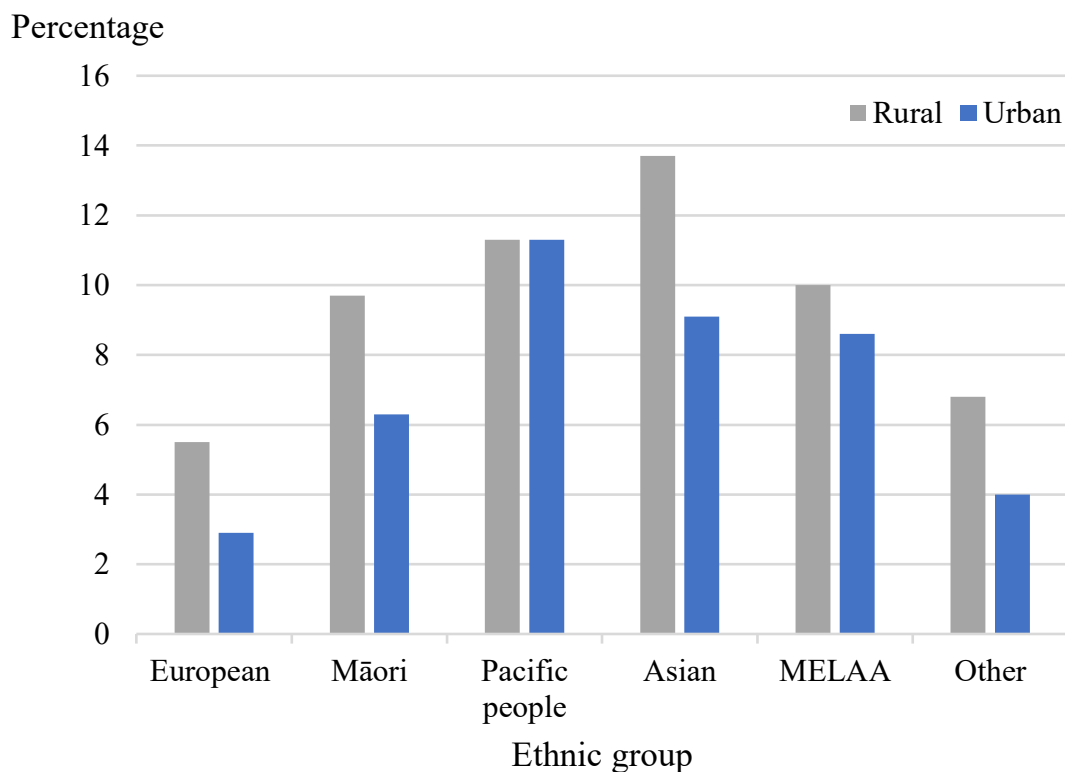
Table 14: Address change, years living in New Zealand and birthplace of people living in dwellings lacking basic amenities, by ethnic group (percentage of people)

		European	Māori	Pacific peoples	Asian	MELAA	Other	Total New Zealand
Usual address one year prior	Current residence	3.2	6.2	10.1	8.4	7.6	4.2	4.6
	Elsewhere in NZ	3.8	7.2	11.1	9.7	7.9	4.5	5.6
	Not born one year ago	3.9	7.8	11.8	9.3	9	6	6.3
	Overseas	3.7	6.8	11.7	11.5	11.7	4.1	7.6
	No fixed abode	10	12.6	21.4	s	s	s	10.9
Years living in New Zealand	Less than one	4	6.9	15.3	11.7	12.2	4	8.9
	One	3.7	6.0	18.7	11.6	11.7	5.8	9.1
	2-4	3.7	6.4	18	10.8	10.6	5.5	8.9
	5-9	3.4	5.5	18.5	10.6	9.1	3.7	8.3
	10-14	3.1	5.9	17.4	8.7	7.8	3.3	6.7
	15-19	3.3	5.3	16	9.6	7.5	4.1	7.6
	20-24	3	5.0	14.6	8.6	6.3	5.1	6.7
	25-29	3.3	5.9	13.4	7.9	6	3.3	6.6
	30+	3.2	5.1	9.9	4.8	4.5	4.5	4.3
Birthplace	Born in NZ	3.4	6.9	9.8	7.4	6.8	4.5	4.4
	Overseas	3.4	5.8	14.3	9.8	9.1	4.3	7.2
	Unknown or not stated	8	11.4	16.6	13.7	14.3	9.3	10.8

Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African. The No Fixed Abode category includes a number of different living circumstances including, among others, people recently returned from overseas and transients.

The same proportion of Pacific peoples lived in dwellings lacking basic amenities in rural and urban areas, for other ethnic groups those living in urban areas had lower rates than those in

rural areas (Figure 4)². However, low proportions overall, of Asian and Pacific peoples live in rural areas (4 percent of both ethnic groups), as compared to European (19 percent) and Māori (18 Percent) ethnic groups (data not shown) .



Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African.

Figure 5: Percentage of people living in dwellings lacking basic amenities, by ethnic group and rurality

Rates of exposure to housing lacking basic amenities varied across regions (Table 15, equivalent data for Auckland local board is shown in Table 16, for the same data by territorial authority see Appendix 2 Table 53). The Hawke’s Bay and West Coast had the highest proportions of people living in dwellings lacking basic amenities. Auckland had the second highest proportion of Pacific peoples living in dwellings lacking basic amenities, after Hawke’s Bay (Table 15).

Table 15: Percentage of people living in housing lacking basic amenities, by regional council and ethnic group (percentage of people)

	European	Māori	Pacific peoples	Asian	MELAA	Other	Total New Zealand
Northland	5.1	8.7	10.8	11.0	7.6	7.0	6.3
Auckland	3.1	6.5	12.6	10.0	9.4	4.6	6.6

² People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African

	European	Māori	Pacific peoples	Asian	MELAA	Other	Total New Zealand
Waikato	3.7	7.1	8.4	9.3	10.0	5.5	5.0
Bay of Plenty	2.7	5.8	6.6	8.2	5.6	2.8	3.8
Gisborne	3.8	9.2	10.0	8.5	s	5.0	6.2
Hawke's Bay	6.3	12.6	16.3	12.6	12.9	8.6	8.0
Taranaki	3.4	6.6	9.5	7.2	2.4	3.5	4.0
Manawatū—Whanganui	4.5	9.2	11.8	8.9	6.0	5.0	5.6
Wellington	2.5	5.0	8.3	5.9	8.8	3.2	3.6
Tasman/Nelson	3.8	4.1	8.5	9.0	9.4	5.7	4.0
Nelson	2.7	3.8	6.9	9.9	5.5	4.1	3.4
Marlborough	4.7	5.9	12.1	7.6	2.9	4.6	5.0
West Coast	7.4	10.3	10.8	12.0	13.0	8.0	7.8
Canterbury	3.0	4.7	8.9	7.9	6.3	3.6	3.8
Otago	3.3	4.9	8.5	7.3	8.2	4.6	3.8
Southland	3.7	5.1	6.3	12.0	10.5	4.4	4.3

Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African.

Table 16: Auckland local board and ethnicity groupings exposure to housing lacking basic amenities (percentage of people)

	European	Māori	Pacific peoples	Asian	MELAA	Other	Total New Zealand
Albert Eden	2.1	4.0	7.8	10.0	9.8	4.5	5.2
Devonport Takapuna	2.0	3.6	4.5	12.4	6.7	4.4	4.9
Franklin	4.8	8.6	12.6	11.7	10.0	6.1	5.9
Great Barrier	29.2	33.3	S	S	S	S	30.5
Henderson Massey	3.1	5.0	10.0	9.7	10.9	5.2	6.6
Hibiscus Bays	2.8	4.1	4.9	10.9	6.5	3.1	4.2
Howick	2.5	5.5	9.1	10.4	6.4	4.3	6.6
Kaipatiki	2.2	2.8	6.6	10.3	7.6	4.5	5.3
Mangere Otahuhu	5.7	9.4	15.3	9.5	16.1	6.1	12.1
Manurewa	4.1	7.6	13.9	7.6	12.4	4.5	8.9
Maungakiekie Tamaki	3.1	8.2	13.4	10.0	9.9	5.6	7.7
Orakei	1.8	3.9	5.3	8.5	5.9	3.0	3.5
Otara Papatoetoe	6.7	9.4	15.7	9.2	14.4	5.4	11.6
Papakura	3.4	7.2	12.6	7.0	3.1	2.9	6.2
Puketapapa	2.9	5.7	12.4	8.6	12.9	4.5	7.3
Rodney	5.1	7.3	11.4	15.4	7.2	5.8	6.0
Upper Harbour	3.1	4.1	7.0	13.1	8.1	4.7	7.3
Waiheke	9.2	10.0	s	s	8.2	s	9.9
Waitakere Ranges	2.7	4.8	9.1	6.5	8.1	2.7	3.9
Waitemata	2.4	4.4	7.8	12.6	13.0	4.7	6.3
Whau	2.9	5.9	11.1	9.0	11.0	4.4	7.0

Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African. s - numbers less than or equal to five are suppressed by Stats NZ in order to maintain privacy.

Housing lacking basic amenities and the definition of homelessness

The New Zealand definition of homelessness (Statistics New Zealand, 2015) contains a conceptual category which has not previously been evaluated, that of ‘uninhabitable housing.’ This section examines how housing lacking basic amenities might fill it, and the interaction with the other category in the definition of homelessness relevant to private housing ‘sharing accommodation with a household’. The operationalisation of the definition of homelessness for sharing accommodation considers the smaller groups that make up households, and for someone to be considered homeless requires:

- That the dwelling requires two or more extra bedrooms for its usual residents under the Canadian National Occupancy Standard;
- That the people in the household are not in the immediate nuclear family of an owner, or the census reference person;
- That the people in the household have a sufficiently low income that they are unlikely to be able to access other housing.

The analogous definition for uninhabitable housing is:

- That the dwelling is lacking at least one of the six basic amenities—thus meaning that the dwelling is lacking both amenity and privacy as the inhabitants must go outside to perform basic actions of living;
- That the people in the household have a sufficiently low income that they are unlikely to be able to access other housing, or if owners, repair the current dwelling.

We have used the same cut-off for equivalized household income for amenity-related severe housing deprivation (uninhabitable housing) as was used for equivalized family income for crowding-related severe housing deprivation (sharing accommodation).

Technical Points

- Owing to the way Jensen equivalisation functions, it is possible to have a household that consists of several families, each of which may be below the income threshold for families, but the households as a whole be above the income threshold for households. The effect of this, and that family-level equivalized income is considered for determining severe housing deprivation due to sharing/crowding, but household-level equivalised income is considered for determining uninhabitable housing is that it is possible for people to be living in severe housing deprivation due to sharing/crowding in a dwelling that also lacks basic amenities, but not be considered to be in uninhabitable housing. See appendix three for a worked example of this. However, there are relatively few of these households.
- Homeless population absentees, without a matched individual form, who were reported by the household as being missing from the dwelling, but for whom there was no available individual level information (besides age, sex, ethnicity) were excluded from the potentially homeless population, in case they had filled in a

form elsewhere saying they belonged there. However, these people were included earlier in the analysis in the Canadian National Occupancy Standard (CNOS) calculation, allowing the household to be classified as crowded.

- Most of this report focuses on only the usual residents of housing, as described on Census night. The post-Census analysis of people, who experience severe housing deprivation, in some cases reassigns people, who did not describe themselves as having a usual address, to the address that they were living in on Census night.
- The Jensen-Equivalized Household Income (JEAH) reported in the first two sections of this work is an income measure calculated in a standard way without considering the specific and detailed housing situations of the most vulnerable, therefore the incomes reported in previous sections may differ from those reported here.

Interaction of those considered homeless under the first three parts of the definition with housing lacking basic amenities

This section focuses on how people defined as “severely housing deprived” under the prior definition fit into the consideration of housing lacking basic amenities.

Overall, in 2018, 41,724 people were classified as homeless under the first three categories of the NZ definition of homelessness. Of these, 1695 people were classified through the records of homelessness providers, and 5668 people were living in non-private accommodation types (where the inhabitants did not fill in a census dwelling form, and therefore no amenities information is available). This means there were 34,362 people already classified as severely housing deprived for whom amenities information might theoretically be available. Of these people, amenities information was available for 29,364 :- this is 70% of the total prior-definition homeless population, and 85% of the homeless population living in private dwellings. Over the usually resident population as a whole amenities data was available for 85% of people.

Overall, of the people for whom their access to amenities is known, there were 29,364 people defined as homeless under the original definition, which excluded consideration of basic amenities. There were 3,954,975 defined as ‘not homeless’ and 6,728 whose status was unable to be determined. Thus, those whose status was unable to be determined were 0.17% of the total population.

For most of the tables in this section, those whose status was unable to be determined have been included with those whose status was not homeless to make up the residual category.³

Table 17 shows the total number of people usually resident in different types of dwelling classified as “private” under the New Zealand Definition of homelessness, by the number of basic amenities they have access to in their dwelling. Table 18 shows analogous information for just people in the first three categories of homelessness.

³ As there were a low number in the Cannot Be Determined category this is likely to have a negligible effect on the results. The bottom row of Table 19 was calculated using the cannot-be-determined population both included and excluded, the only effect was the rounded percentage of homeless in dwellings with only two amenities, reduced to by 0.1%.

Table 17: Number of basic amenities available by dwelling type (number of people)

	Number of basic amenities a person has access to in their dwelling						
	0	1	2	3	4	5	All 6
Roofless or Improved	123	123	132	159	291	657	3,699
Mobile (not in a motor-camp)	216	231	195	333	564	1,167	4,863
Private in a motor camp	18	36	51	78	177	228	1,053
Permanent Private	16,728	7,515	3,423	4,743	16,869	153,813	3,773,628

Note: The roofless and improvised categories have been combined in this table due to low numbers

Table 18: Number of basic amenities available for people classified as Severely Housing Deprived under the initial three categories by Dwelling type and number of basic amenities (number of people)

	Number of basic amenities a person has access to in their dwelling						
	0	1	2	3	4	5	All 6
Roofless or Improved	60	54	51	63	93	219	738
Mobile (not in a motor-camp)	105	96	69	165	174	288	1005
Private in a motor camp	12	15	15	39	60	78	240
Permanent Private	348	135	66	108	318	1926	22,836

Note: The roofless and improvised categories have been combined in this table due to low numbers

Table 19: Percentage of residents classified as Severely Housing Deprived under the initial three categories by Dwelling type and number of basic amenities (% person level)

	Number of basic amenities a person has access to in their dwelling							
	0	1	2	3	4	5	6	
Roofless or Improved	48.8	43.9	38.6	39.6	32.0	33.3	20.0	
Mobile (not in a motor-camp)	48.6	41.6	35.4	49.5	30.9	24.7	20.7	
Private in a motor-camp	66.7	41.7	29.4	50.0	33.9	34.2	22.8	
Permanent Private	2.1	1.8	1.9	2.3	1.9	1.3	0.6	
Overall percent homeless under the first three categories – of those with access to this number of amenities	3.1	3.8	5.3	7.1	3.6	1.6	0.7	

Note: The roofless and improvised categories have been combined in this table due to low numbers

Table 19 shows the percentage of those residents in each dwelling type and level of amenities that have been classified as homeless under the three main categories that have been used up until now. It shows that the great majority of people living with few basic amenities are not captured by the first three parts of the definition of homelessness, and that the lack of capture is particularly strong for people in permanent private dwellings.

Table 20 shows how defining severe housing deprivation by basic amenities interacts with defining it by crowding. It shows that although there are higher numbers of people in the category considered severely housing deprived both ways than might be expected by chance, the absolute numbers are relatively small.

Table 20: Uninhabitable housing and Sharing accommodation categories of severe housing deprivation (number and percentage of people)

	Number of people		Percentage of people	
	Uninhabitable	Not uninhabitable	Uninhabitable	Not uninhabitable
Sharing	1,629	28,491	0.04	0.68
Not sharing	60,390	4,078,893	1.45	97.83

Uninhabitable housing—Person level

Females were more likely to be experiencing severe housing deprivation through either lack of access to basic amenities (uninhabitable housing) or sharing accommodation (Table 21). For both sexes, severe housing deprivation classified by lack of basic amenities was more common than severe housing deprivation classified by crowding.

Table 21: Severe housing deprivation, by sex (number and percentage of people)

Sex	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
Male	27,807	13,602	729	1,986,141	1.37	0.67	0.04	97.92
Female	32,583	14,889	900	2,092,749	1.52	0.70	0.04	97.74

Pacific people had the highest rates of uninhabitable housing, followed by people of MELAA ethnicities. Māori and Asian people had similar but lower rates (Table 22). People of European and Other ethnicities had the lowest rates.

Table 22: Severe housing deprivation, by ethnic group (number and percentage of people)

Ethnic group	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
European	22281	7509	282	2961309	0.74	0.25	0.01	98.99
Māori	15669	10617	558	598497	2.51	1.70	0.09	95.71
Pacific	12969	8184	648	288789	4.18	2.63	0.21	92.98
Asian	15999	7239	387	615894	2.50	1.13	0.06	96.31
MELAA	2289	516	45	59265	3.69	0.83	0.07	95.41
Other	570	s	s	50478	1.12	s	s	98.88
Total New Zealand	60390	28491	1629	4078893	1.45	0.68	0.04	97.83

Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African. s - numbers less than or equal to five are suppressed by Stats NZ in order to maintain privacy.

People in younger age groups had higher rates of experiencing severe housing deprivation due to lack of basic amenities (Table 23). Children under five experienced over twice the rate of those aged over 75.

Table 23: Severe housing deprivation, by age group (number and percentage of people)

Age group	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
0-4	5910	2772	159	253254	2.25	1.06	0.06	96.63
5-14	12204	3681	252	555048	2.14	0.64	0.04	97.17
15-24	9105	9624	516	507447	1.73	1.83	0.10	96.35
25-34	7740	5829	294	544932	1.39	1.04	0.05	97.52
35-44	7017	2163	153	516846	1.33	0.41	0.03	98.23
45-54	6507	1500	111	562575	1.14	0.26	0.02	98.58
55-64	5937	1431	87	507960	1.15	0.28	0.02	98.55
65-74	3564	873	45	375561	0.94	0.23	0.01	98.82
75+	2406	615	15	255267	0.93	0.24	0.01	98.82

People living with disability experienced amenity related severe housing deprivation at nearly 2.5 times the rate of people without disability (Table 24). People with disability also had a higher proportion of people living in severe housing deprivation through sharing accommodation.

Table 24: Severe housing deprivation, by disability (number and percentage of people)

Disability status	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
Not disabled	40,350	17,295	1,020	3,321,225	1.19	0.51	0.03	98.26
Disabled	6,354	1,500	93	203,769	3.00	0.71	0.04	96.25

Note: Disability status assigned using the Washington group short set of questions which identifies those living with activity limitations that affect their everyday life.

People who were living either in the same address as a year previously, or elsewhere in New Zealand had higher rates of severe housing deprivation due to absence of basic amenities than due to a crowded living situation (Table 25). However, the rates were higher still for those who had been overseas a year previously, who had similar rates of severe housing deprivation due to both absence of basic amenities and crowding.

Table 25: Severe housing deprivation, by address change (number and percentage of people)

Usual residence one year prior	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
Current usual	37,089	11,592	675	2972859	1.23	0.38	0.02	98.37
Elsewhere in NZ	9,888	5,511	324	604,674	1.59	0.89	0.05	97.47
Not yet born	1,143	612	39	48,513	2.27	1.22	0.08	96.43
Overseas	2,718	2,940	162	95,340	2.69	2.91	0.16	94.25
No fixed abode	30	s	s	1152	2.54	s	s	97.46

Note: s - numbers less than or equal to five are suppressed by Stats NZ in order to maintain privacy. The No Fixed Abode category includes a number of different living circumstances including, among others, people recently returned from overseas and transients.

People born overseas had higher rates of severe housing deprivation from both lack of basic amenities and crowding than those born in New Zealand (Table 26).

Table 26: Severe housing deprivation, by birthplace (number and percentage of people)

Birthplace	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
New Zealand	37,092	17,226	894	2935,026	1.24	0.58	0.03	98.15
Overseas	22,101	10,365	666	1110,201	1.93	0.91	0.06	97.10

Among people who had spent less than one year in New Zealand, crowding was the most common form of severe housing deprivation (Table 27). People who had spent five or more years in New Zealand experienced crowding-related severe housing deprivation at a similar rate to people born in New Zealand. However, people who had been in New Zealand up to 29 years experienced living in uninhabitable housing at higher rates than people born in New Zealand (Table 27).

Table 27: Severe housing deprivation, by years in New Zealand (number and percentage of people)

Years in New Zealand	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
Less than one	1,983	2,784	150	58,338	3.13	4.40	0.24	92.23
One	1,845	1,569	72	59,010	2.95	2.51	0.12	94.42
2-4	3,432	1,830	120	142,485	2.32	1.24	0.08	96.36
5-9	3,972	1,125	99	176,310	2.19	0.62	0.05	97.14
10-14	2,994	975	75	169,473	1.73	0.56	0.04	97.67
15-19	2,880	687	57	138,672	2.02	0.48	0.04	97.45
20-24	1,542	375	24	84,765	1.78	0.43	0.03	97.76
25-29	852	198	18	46,962	1.77	0.41	0.04	97.78
30+	2,265	603	36	225,192	0.99	0.26	0.02	98.73
Born in NZ	37,092	17,226	894	2935026	1.24	0.58	0.03	98.15

Lack of basic amenities was a more common form of Severe Housing Deprivation than crowding for all tenure types (Table 28).

Table 28: Severe Housing Deprivation, by tenure (number and percentage of people)

Tenure	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
Family Trust	4,653	1,179	114	54,0591	0.85	0.22	0.02	98.91
Owned	13,329	7,476	201	2,114,637	0.62	0.35	0.01	99.02
Private rental	25,884	13,287	714	1,191,294	2.10	1.08	0.06	96.76
Public rental	15,243	6,285	540	200,751	6.84	2.82	0.24	90.10
Unknown—mainly rented to unknown landlords	1,287	261	60	31,620	3.87	0.79	0.18	95.16

Note: The public rental category includes a variety of government sector and charitable landlords including: city councils, community housing providers, government departments, hapū, HNZA (which became Kāinga Ora - homes and communities in 2019), iwi, local authorities, Māori land trusts, ministries, state-owned corporations or enterprises.

Approximately 40 percent of people living in dwellings with between zero and four of the six basic amenities were considered severely housing deprived due to lack of basic amenities (Table 29). However, inside that group there was not a strong pattern by number of basic amenities, with the great majority of the remainder considered not known to be severely housing deprived. About one in four people in dwellings with five of the six basic amenities were considered severely housing deprived due to lack of basic amenities. There was not a strong pattern of amenity absence for people considered severely housing deprived due to crowding.

Table 29: Severe housing deprivation, by number of basic amenities (number and percentage of people)

Number basic amenities	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
0	6378	147	201	9999	38.13	0.88	1.20	59.78
1	3012	54	81	4371	40.06	0.72	1.08	58.14
2	1503	21	45	1854	43.91	0.61	1.31	54.16
3	2016	54	54	2616	42.53	1.14	1.14	55.19
4	6390	111	207	10161	37.88	0.66	1.23	60.23
5	41091	882	1044	110760	26.72	0.57	0.68	72.03
6	--	22788	--	3749730	--	0.60	--	99.40

Note: -- These cell are empty by definition, as Housing lacking basic amenities cannot have all six basic amenities. See the technical note for a description and appendix three for a worked example of how people may be severely housing deprived due to sharing accommodation in a dwelling lacking basic amenities, but not meet the definition of uninhabitable housing.

People in urban areas had slightly higher rates of severe housing deprivation due to lack of basic amenities (Table 30).

Table 30: Severe housing deprivation, by rurality (number and percentage of people)

Rurality	Number of people				Percentage of people			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
Rural	7908	2115	93	649719	1.20	0.32	0.01	98.47
Urban	52482	26373	1536	3429135	1.50	0.75	0.04	97.71

Uninhabitable housing - Dwelling level

This section considers the conditions and numbers of dwellings in which people in severe housing deprivation live. These tables may be most useful for estimating the amount of retrofitting or repairs necessary to support this population out of severe housing deprivation.

Nearly two-thirds of dwellings with people in amenity-related severe housing deprivation do not have drinkable tap-water, nearly 4 in 10 of the dwellings lack electricity, one in four lack cooking facilities (Table 31). About one in five of these dwellings lack a kitchen sink, toilet, and bath or shower. Dwellings with people in only crowding-related severe housing deprivation unsurprisingly experience much lower rates of lack of basic amenities, but still about twice the rate of dwellings with occupants not experiencing severe housing deprivation.

Overall, 32,166 dwellings were reported through the census as missing at least one basic amenity and containing families or households with low enough incomes that they were unlikely to be able to change their situations themselves (Table 31). However, as discussed in the caveats section this is likely to be an underestimate.

Table 31: Severe housing deprivation, by types of missing basic amenities (number and percentage of dwellings)

Types of missing amenities	Number of dwellings				Percentage of dwellings			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
Drinkable tap-water	14,184	351	387	31,806	64.34	3.69	64.82	2.15
Electricity	8,538	219	294	15,570	38.73	2.30	49.00	1.05
Cooking facilities	5,955	138	186	10,071	27.01	1.45	31.00	0.68
Kitchen sink	4,851	120	150	9,642	22.00	1.26	25.00	0.65
Toilet	4,299	105	138	8,688	19.50	1.10	23.12	0.59
Bath or shower	4,380	102	129	8,814	19.86	1.07	21.50	0.60
Total dwellings in category	22,047	9519	600	1,480,119				

Note: See the technical note for a description and appendix three for a worked example of how people may be severely housing deprived due to sharing accommodation in a dwelling lacking basic amenities, but not meet the definition of uninhabitable housing.

About four in ten dwellings with between zero and four basic amenities were occupied by people in severe housing deprivation, and about one in four dwellings with five basic amenities were occupied by people in severe housing deprivation (Table 32).

Table 32: Severe housing deprivation, by number of basic amenities (number and percentage of dwellings)

Number of basic amenities	Number of dwellings				Percentage of dwellings			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
0	2,124	54	75	3,492	37.0	0.9	1.3	60.8
1	1,083	21	33	1,587	39.8	0.8	1.2	58.3
2	501	12	21	675	41.4	1.0	1.7	55.8
3	726	24	18	1,005	40.9	1.4	1.0	56.7
4	2,256	51	78	3,939	35.7	0.8	1.2	62.3
5	15,357	381	375	42,093	26.4	0.7	0.6	72.3
6	--	8,976	--	1,427,322	--	0.6	---	99.4

Note: -- These cell are empty by definition, as Housing lacking basic amenities cannot have all six basic amenities. See the technical note for a description and appendix three for a worked example of how people may be severely housing deprived due to sharing accommodation in a dwelling lacking basic amenities, but not meet the definition of uninhabitable housing.

Dwellings in urban and rural areas had similar rates of occupants experiencing amenity related severe housing deprivation, but those in urban areas had increased rates of occupants experiencing crowding-related severe housing deprivation (Table 33).

Table 33: Severe housing deprivation, by rurality (number and percentage of dwellings)

Rurality	Number of dwellings				Percentage of dwellings			
	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Only Sharing	Both uninhabitable and sharing	Neither uninhabitable nor sharing
Rural	3,432	705	36	23,8065	1.42	0.29	0.01	98.28
Urban	18,618	8,811	564	1,242,036	1.47	0.69	0.04	97.80

Over eight thousand dwellings in the Auckland area, 1.8 percent had occupants living in amenity-related severe housing deprivation (Table 34). Over two percent of the dwellings in the West Coast, Gisborne, Hawke’s Bay and Northland were uninhabitable, a total of 3,033 dwellings across those four regions.

Table 34: Severe housing deprivation, by region (number and percentage of dwellings)

Region	Number of dwellings			Percentage of dwellings		
	Only Uninhabitable	Sharing	Neither uninhabitable nor sharing	Only Uninhabitable	Sharing	Neither uninhabitable nor sharing
Northland	1,152	462	54,795	2.04	0.82	97.14
Auckland	8,217	5,211	435,912	1.83	1.16	97.01
Waikato	2,088	876	145,470	1.41	0.59	98.00
Bay of Plenty	1,062	681	97,329	1.07	0.69	98.24
Gisborne	327	141	13,968	2.27	0.98	96.76
Hawke's Bay	1,203	390	52,950	2.21	0.72	97.08
Taranaki	468	129	41,349	1.12	0.31	98.58
Manawatū—Whanganui	1,551	294	81,072	1.87	0.35	97.77
Wellington	1,878	759	170,433	1.09	0.44	98.48
Tasman	174	48	17,850	0.96	0.27	98.77
Nelson	168	48	18,225	0.91	0.26	98.83
Marlborough	159	51	17,007	0.92	0.30	98.78
West Coast	351	18	11,577	2.94	0.15	96.91
Canterbury	1,944	645	207,477	0.93	0.31	98.77
Otago	846	291	78,801	1.06	0.36	98.58
Southland	444	66	35,685	1.23	0.18	98.59

Note: the sharing category presented here includes those dwellings that were both uninhabitable and sharing.
See

Table 62 in Appendix 2 for further data.

Appendix 1: Housing which lacks access to basic amenities - Method

Background: Legal requirements for housing in New Zealand/Aotearoa

The Housing Improvement Regulations 1947 (1947), which are still in force, state that the minimum requirements for a “house” are:

- a living room with an approved source of heating
- a kitchen or kitchenette with:
 - a means to cook by both boiling and baking
 - a kitchen sink with a tap attached to a source of potable water
 - appropriate space for storing food
- at least one bedroom, although a combined bed/living space is permissible if the dwelling is intended for only one or two people.
- a separate bathroom which contains:
 - a bath or shower attached to a supply of “wholesome” water
 - a means of heating water
- a toilet
- a facility for washing clothes (if accommodating more than two people).

Additionally, the regulations stipulate minimum requirements for size of rooms, and that the dwelling be “free from dampness.” There is no specific mention of mould in the regulations, although the materials from which the dwelling is constructed are required to be “sound, durable” and “in a state of good repair.”

The healthy homes standards, which come into force between July 2021 and July 2024, require that rental housing:

- provide a fixed heater in the living room, giving guidance on the minimum acceptable heater output and heater types which depend on a variety of dwelling specific factors (such as local area and room size)
- insulation in the ceiling and underfloor where accessible
- openable windows in most habitable rooms, and mechanical extraction in the bathrooms and kitchen
- appropriate guttering and drains, and where there is an enclosed subfloor a ground moisture barrier if it is reasonably practicable to install
- appropriate draught-stopping.

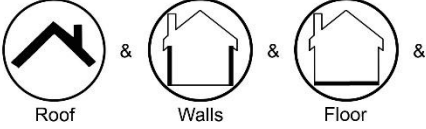

New Zealand Definition of Severe Housing Deprivation

Amore et al. (2013) defined severe housing deprivation (homelessness) by two conceptual criteria:

1. A person is living in severely inadequate housing (that is, housing below a minimum adequacy standard), due to;
2. A lack of access to housing that meets the minimum adequacy standard (rather than living in such circumstances as a matter of choice).

Unpacking criterion 1, severely inadequate housing was defined as housing lacking in two or more of three core dimensions: habitability (structural features); privacy and control; and

security of tenure. These dimensions were drawn from the European ‘ETHOS’ typology of homelessness (Edgar, 2009) and were the foundation of the New Zealand definition of homelessness (Statistics New Zealand, 2015). Amore et al. (2013) proposed definitions of these dimensions for New Zealand (Figure 6).

Dimension	Basic requirements
Habitability (structural features)	<p>1 Enclosure</p>  <p>Roof & Walls & Floor</p> <p>2 Basic amenities</p>  <p>Drinkable water & Toilet & Bath or shower & Cooking facilities & Energy source</p>
Privacy and control	<ol style="list-style-type: none"> 1 The dwelling is enclosed (as per Habitability criterion 1); <i>and</i> 2 The dwelling has all basic amenities (as per Habitability criterion 2); <i>and</i> 3 The dwelling is managed by the resident/s on a day-to-day basis (not by an external party) – that is, it is a private dwelling; <i>and</i> 4 The person is a permanent resident (not staying in the dwelling on a temporary basis).
Security of tenure	Legal termination of tenancy rights are equal to the minimum provided to people living in private rental housing.

Source: Adapted from Amore et al. (2013, p.5).

Figure 6: The three core dimensions of housing adequacy, broken down into the basic criteria for each dimension

Notably, occupants of dwellings that lack the habitability criteria are always categorised as severely housing inadequate, as in order to access the basic amenities the occupants must go outdoors, thereby also failing on the privacy criterion.

2018 Census data

The 2018 census included a question specifically to provide information on New Zealand’s housing lacking in basic amenities. The question was designed to reflect on the legal minimums, the definition of severe housing deprivation, and to help understand the extent to which some people are surviving without basic amenities (Stats NZ, 2020a). Respondents were told not to count anything that was disconnected or broken, but that amenities that were to be repaired, replaced or reconnected within several weeks could be counted. The guide-notes specified that off-grid options (like composting toilets or solar panels) counted if they were working. The question asked individually about seven amenities, which were:

- cooking facilities
- tap water that is safe to drink

- kitchen sink
- fridge
- bath or shower
- toilet
- electricity supply.

In addition to this, the Census also asked separate questions on: the dampness of the dwelling; the presence of mould; and the use of heating. Table 35 describes in more detail the dwelling information asked about in the census that could potentially be included in the development of the working definition of housing lacking basic amenities.

Table 35: Census 2018 housing quality or amenity variables potentially useful in understanding inadequate housing

Item	Notes
Drinkable Water	Listed in the 1947 regulations as a requirement. The census variable does not distinguish between dwellings without any water, with water that is not of potable quality due to chemical/metal contamination, or water that would be potable after boiling.
Toilet	Listed in the 1947 regulations as a requirement
Bath or Shower	Listed in the 1947 regulations as a requirement
Kitchen sink	Listed in the 1947 regulations as a requirement
Electricity	Not a requirement of the 1947 regulations, although an approved heat source is required in the living room, and methods of baking/boiling in the kitchen which presupposes some source of fuel.
Cooking facilities	The ability to both bake and boil is a requirement under the 1947 regulations. The census question does not require that much detail.
Refrigerator	Not specifically listed in the 1947 regulations as a requirement. Most refrigerators will require electricity to operate, so including a requirement for a functioning refrigerator may presuppose an electricity supply.
Heating source	This question was designed primarily around heating behaviours, not amenities. It asked which sources of heating were used, not which were available—so using this to distinguish the habitability of a dwelling might overestimate the number of dwellings lacking amenities (as heat sources would be less likely to be used: in highly efficient dwellings with little need for heating, by households with extreme budget constraints seeking to control costs; and by households that had recently moved and not yet needed to heat their dwelling in March when the census was carried out). A source of heating is required under the 1947 regulations, although under these an open fireplace is deemed sufficient. A fixed heating source is required under the Healthy Homes Standards for rental housing from at latest July 2024, but was not required in 2018.
Damp	Freedom from dampness is a requirement in the 1947 regulations. The Healthy Homes Standards require control of some sources of moisture, but do not specifically use dampness itself as a criterion. However, the census was carried out in March, at the end of summer, and households are more likely to be damp in

Item	Notes
	winter. This yields the possibility of households which have moved most recently being less likely to report dampness regardless of the quality of their dwelling. This could introduce a bias into the estimate.
Mould	Although highly desirable, freedom from mould is not a requirement under the 1947 regulations, or specified in the Healthy Homes Standards. Additionally, households which have moved most recently and have not spent a winter in their dwelling might be less likely to report mould regardless of the quality of their dwelling. This could introduce a bias into the estimate.

In terms of the number of dwelling responses available to analyse, the amenity data were more completely answered than the mould or dampness questions, and at a similar level to the heating question (Table 36). Including either the mould or the dampness question in the analysis would have increased the number of dwellings unavailable for analysis by an unacceptable amount. It is likely that those in the worst housing were least likely to answer difficult questions, so the use of the other variables might add additional bias that would not justify the usefulness of the information. Missing data from the heating question, both individually and in combination with the amenities question was less of a problem.

Table 36: Percentage of data available for analysis if answers to census questions required

	Amenity	Mould	Damp	Heating
Amenity	92.0	89.5	88.8	91.4
Mould	--	89.8	87.6	89.3
Damp	--	--	89.1	88.6
Heating	--	--	--	92.0

However, the heating question was designed to assess whether heating was used, not whether it was present. This posed two problems for the analysis:

- It is the presence of heating appliances not their use, that is most important to define whether a dwelling has appropriate amenities or not (and a well-designed modern dwelling might have little need to actually use a heating appliance regardless of its presence)
- The Census was asked in March, and it is plausible that those in poor quality housing might move at different rates to those in better quality housing, and therefore not have spent a winter (the time when heating is most likely to be used) in the dwelling. Therefore, use of the heating variable in the definition of housing lacking basic amenities might lead to a biased outcome,

In addition, although a heat source is required under the 1947 regulations, it is not listed under the habitability criteria in the definition of homelessness. For these reasons the lack of amenities analysis was based solely on the amenity question

Amenities

The most common amenities to be missing (either solely, or in combination with others) are drinkable tap-water and a refrigerator (Table 37). That drinkable tap-water is the sole amenity

absent from two percent of dwellings is an indication that the dwellings have plumbed water available, but that it is not of sufficient quality to drink, as there is implied access to plumbed water for the kitchen sink and bath or shower. The next most common amenity to be missing is electricity, unsurprisingly, over half the dwellings, which report a lack of electricity, also report the lack of a refrigerator; however, less than a third of those reporting the lack of a refrigerator also reported the lack of electricity. Electricity is the only amenity absent from 0.5% of dwellings—it is possible that these dwellings were physically connected to the grid, but disconnected due to payment issues rather than physical infrastructure of the dwelling. Overall, the residents of about 1% of dwellings reported the other amenities missing: cooking facilities, a bath or shower, a working toilet, or a kitchen sink. For each of these, about one fifth reported it as the sole amenity absent (Table 37).

Table 37: Relationship between absence of individual amenities (percentage of dwellings)

Amenity	Only amenity absent	Drinkable tap-water	Electricity	Cooking facilities	Kitchen sink	Fridge	Bath or shower	Toilet	Total
Drinkable Tap-water	2.0	3.2	0.8	0.7	0.7	0.9	0.6	0.6	3.2
Electricity	0.5		1.7	0.6	0.6	0.9	0.6	0.6	1.7
Cooking	0.2			1.1	0.6	0.7	0.5	0.6	1.1
Kitchen sink	0.2				1.0	0.7	0.6	0.6	1.0
Fridge	1.8					3.1	0.6	0.6	3.1
Bath or shower	0.2						1.0	0.6	1.0
Toilet	0.2							1.0	1.0
Any amenity	5.2								

Possible Definitions

We considered five possible definitions of housing lacking basic amenities.

The *a priori* definition of housing lacking basic amenities that we expected to use from theoretical considerations (and that we did choose) was: housing that is missing at least one of: drinkable tap-water, a kitchen sink, a shower or bath, a toilet, cooking facilities, electricity. This is the 1-of-6 definition.

The theoretical considerations behind it are:

- If basic enough amenities are considered then the absence of one of them is sufficient to render a dwelling difficult to live in appropriately
- Refrigerators are neither an intrinsic quality of a dwelling (they can be plugged in and moved), nor required under the 1947 regulations
- Although it was the most common amenity missing, drinkable water is a requirement under the 1947 regulations
- The census question did not distinguish between dwellings from which electricity is missing due to not being connected to the electricity network, and those who have

been cut off by the provider for payment or other issues – that is issues which are intrinsic to the dwelling and those that are not. However, the 1947 regulations required a heat source in the living area and this can be operationalised as access to electricity in the dwelling. In addition, in the years since 1947, electricity has come to be seen as an essential service

- The other features: toilet, kitchen sink, cooking facilities, and bathing facilities are all required under the 1947 regulations and a fixed feature of the dwelling.

The other definitions that we considered are:

- 1-of-7: this definition added a refrigerator to the required amenities. This is justified by considering a refrigerator to be a necessary part of basic cooking facilities.
- 1-of-5: this definition removed the need for drinkable tap-water from the basic amenities required. This was justified by considering that there are many different reasons for tap-water to be considered non-drinkable by residents, up to and including the taste of it with possibly no health consequences.
- 2-of-7: this definition required that two amenities (of the seven in the 1-of-7 definition) needed to be absent for housing to be lacking in basic amenities. This is justified by considering that severe housing deprivation should be defined conservatively in order to not overstate the problem.
- 2-of-6: this definition required that two amenities (of the six in the 1-of-6 definition) needed to be absent for housing to be lacking in basic amenities. This is justified by considering that severe housing deprivation should be defined conservatively in order to not overstate the problem.

Considering these definitions had the effect of bracketing the *a priori* definition to enable us to examine the effect of different levels of rigor.

There were over five times the number of dwellings lacking basic amenities under the 1-of-7 definition as the 2-of-6 definition (Table 38).

Table 38: Number and percentage of dwellings lacking basic amenities under different definitions

	1 of 7	1 of 6	1 of 5	2 of 7	2 of 6
Number of dwellings	106,497	78,900	45,906	26,862	19,476
Percentage of dwellings stated	7.0	5.2	3.0	1.8	1.3

The proportion of dwellings with five amenities (cooking facilities, bath or shower, toilet, electricity and kitchen sink), six amenities (the five amenities plus drinkable tap-water), and all seven amenities (the six plus a refrigerator) by region are available in Table 71, Table 60, and Table 72 in Appendix 2.

The following tables explore the ownership, rurality, the level of other services and problems in dwellings by the definition of housing lacking basic amenities. These tables present the effectiveness of the definition in distinguishing dwellings of that type, rather than the division of that service/problem/location among dwellings that meet the definition. That is, they are

focused on exploring the usefulness of the definition rather than primarily describing the housing.

Over one sixth of public rentals were captured by the 1-of-7 definition (Table 39), this is a higher rate of capture than for any other definition or dwelling tenure, this is the definition that included the absence of a refrigerator even if all other amenities were present. Rental housing was captured at higher rates by all definitions with private rentals having lower rates than public rentals. Each of the definitions captured dwellings at a similar rate for dwellings that were both directly owned, and those that were in family trusts, although that rate itself varied with higher rates found for the definitions that captured more dwellings overall.

Table 39: Definition of required basic amenities by dwelling tenure (percentage of dwellings in that ownership category)

	1 of 7	1 of 6	1 of 5	2 of 7	2 of 6
Family Trust	4.2	3.8	2.5	1.1	1.0
Owned	4.1	3.8	2.1	0.8	0.7
Private rental	12.1	7.2	4.1	3.1	1.8
Public rental	17.2	12.4	8.0	5.9	4.3
Other (mainly rented – landlord unstated)	12.1	11.1	8.4	5.9	5.3
Total NZ	7.0	5.2	3.0	1.8	1.3

Note: The public rental category includes a variety of government sector and charitable landlords including: city councils, community housing providers, government departments, hapū, HNZC (which became Kāinga Ora - homes and communities in 2019), iwi, local authorities, ministries, Māori land trusts, state-owned corporations or enterprises

The definitions of housing lacking basic amenities captured dwellings at broadly similar rates in both rural and urban areas as in New Zealand as a whole (Table 40). The 1-of-6 and 1-of-7 definitions captured slightly higher rates than the others in rural areas; these are the definitions that would define a dwelling with non-potable water but all other amenities as housing lacking basic amenities.

Table 40: Definition of required basic amenities by rurality (percentage of dwellings of that rurality)

	1 of 7	1 of 6	1 of 5	2 of 7	2 of 6
Rural	8.2	6.9	3.2	1.7	1.3
Urban	6.8	4.8	3.0	1.8	1.3
Total NZ	7.0	5.2	3.0	1.8	1.3

Of dwellings without a refrigerator present over 40% were captured by both the 1-of-6 and 2-of-7 definitions (Table 41), the 1-of-6 definition also captured 14% of the dwellings that were not heated, although the 1-of-7 definition captured 19%. All the proposed definitions of housing lacking basic amenities captured increased rates in households that did not heat (Table 41). By definition, all dwellings where a refrigerator was absent had to be missing at least one of the seven amenities (Table 41). Many dwellings which met the varying definitions of Housing Lacking Basic Amenities were lacking refrigerators.

Table 41: Definition of required basic amenities, by heating use and refrigerator presence (percentage of dwellings with that level of heating/refrigeration)

		1 of 7	1 of 6	1 of 5	2 of 7	2 of 6
Heating use	Yes	6.5	4.8	2.7	1.5	1.0
	No	18.6	14.2	9.6	7.5	5.9
Refrigerator present	Yes	4.0	4.0	1.9	0.5	0.5
	No	100.0	42.3	37.0	42.3	26.9
Total NZ		7.0	5.2	3.0	1.8	1.3

A fifth of dwellings that were rated “always damp” were captured under the 1-of-7 definition (Table 42). Under all the proposed definitions housing lacking basic amenities captured dwellings reported to be damp more frequently than they did dwellings in NZ as a whole. All the proposed definitions of dwellings lacking basic amenities captured dwellings reported to be always mouldy at over twice the rate they captured the total population of dwellings (Table 42).

Table 42: Definition of required basic amenities, by reported levels of damp and mould (percentage of dwellings with that level of mould/damp)

		1 of 7	1 of 6	1 of 5	2 of 7	2 of 6
How often a dwelling feels or smells damp or has damp patches on the wall, ceiling, floor or window frames.	Always Damp	20.6	14.9	8.0	6.7	4.4
	Sometimes damp	10.2	7.2	3.6	2.4	1.6
	Never damp	5.2	3.9	2.4	1.1	0.8
How often mould in dwelling is larger than an A4 sheet of paper	Always A4 mould	16.3	11.8	6.2	4.9	3.2
	Sometimes A4 mould	10.7	7.6	4.1	2.9	2.0
	Never A4 mould	5.5	4.1	2.4	1.2	0.9
Total New Zealand		7.0	5.2	3.0	1.8	1.3

Overall, the results given by each potential definition of housing lacking basic amenities were broadly consistent with each other, and there was no obvious reason to vary from the theoretical *a priori* definition, that housing lacking basic amenities would be defined as the absence of at least one of: drinkable tap-water, a kitchen sink, a bath or shower, a toilet, cooking facilities, and electricity from the dwelling.

Appendix 2: Additional tables

Further tables by sex

Table 43: Percentage of people living in dwellings lacking basic amenities, by sex, by age group, rurality, ethnic group, address change, and dwelling typology (percentage of people)

		Male	Female
Age group	0-4	6.1	6.2
	5-14	5.6	5.6
	15-24	5.4	5.4
	25-34	5.7	6.0
	35-44	5.3	5.3
	45-54	4.9	4.9
	55-64	4.9	4.8
	65-74	4.6	4.3
	75+	4.0	4.0
Rurality	Rural	6.4	6.2
	Urban	5	5
Ethnic group	European	3.5	3.4
	Māori	6.7	7.1
	Pacific peoples	11.1	11.6
	Asian	9.4	9.1
	MELAA	8.8	8.5
	Other	4.4	4.6
Usual residence one year prior	Same residence	4.6	4.6
	Elsewhere in NZ	5.6	5.6
	Overseas	7.6	7.7
	No fixed abode	10.1	11.9
Dwelling typology	House	4.8	4.8
	Unit	8.2	7.7
	Town-house	4.7	4.4
	Apartment	6.9	7.1
	Mobile not motor camp	36.7	34.1
	Improvised	28.5	28.8
	Private dwelling in a motor camp	40.8	30.3
Total New Zealand	Total New Zealand	5.2	5.2

Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African. This division of housing typologies, especially the distinction between units, apartments and townhouses are not standard StatsNZ outputs. We have used them acknowledging some inherent data quality issues because of their face-validity in describing New Zealand housing types which is not fully captured by considering the number of storeys a dwelling has.

Table 44: Percentage of people living in dwellings lacking each individual basic amenity by sex (percentage of people)

	Drinkable tap-water	Electricity	Cooking facilities	Kitchen sink	Bath or Shower	Toilet
Male	3.3	1.8	1.2	1.1	1.0	1.0
Female	3.3	1.8	1.1	1.0	0.9	0.9
Total New Zealand	3.3	1.8	1.1	1.0	0.9	0.9

Table 45: Percentage of people living in dwellings with the number of amenities available, by sex (percentage of people)

	Number of basic amenities available in dwelling							0 to 5	All 6
	0	1	2	3	4	5			
Male	0.4	0.2	0.1	0.1	0.5	3.9	5.2	94.8	
Female	0.4	0.2	0.1	0.1	0.4	3.9	5.2	94.8	

Further tables by age group

See also Table 43: Percentage of people living in dwellings lacking basic amenities, by sex, by age group, rurality, ethnic group, address change, and dwelling typology (percentage of people)

Table 46: Percentage of people living in dwellings lacking basic amenities, by age group, by rurality, ethnic group, and address change (percentage of people)

		0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
Rurality	Rural	6.7	5.9	6.3	7.2	6.3	6.5	6.4	6	5.5
	Urban	6.1	5.5	5.3	5.7	5.1	4.5	4.4	4.1	3.8
Ethnicity	European	3.7	3.4	3.3	3.3	3.1	3.5	3.7	3.6	3.4
	Māori	7.4	6.7	6.7	6.9	6.6	7.1	7.4	7.1	6.8
	Pacific peoples	12	11.6	11.4	11.3	11	11.3	10.9	9.8	10.1
	Asian	9.7	9.2	8.5	9.7	9.9	8.4	8.8	9.7	9.2
	MELAA	8.9	8.5	8.8	9.4	8.3	8.1	7.6	8.4	9.6
	Other	4.7	4.4	3.9	4.3	3.9	4.4	5.4	5.1	4
Usual residence one year prior	Same residence	5.2	4.8	4.9	5.3	4.7	4.4	4.4	4.1	3.7
	Elsewhere in NZ	6.2	6.2	4.9	5.7	5.9	5.8	5.7	5.3	4.3
	Overseas	8.3	8.9	6.9	7	8.5	7.9	7.8	8	6.8
	No fixed abode	s	s	7.5	8.8	12.3	11.9	14.1	9.9	14.3
Total New Zealand	Total New Zealand	6.2	5.6	5.4	5.8	5.3	4.9	4.9	4.4	4.0

Table 47: Percentage of people living in dwellings lacking each individual basic amenity by age group (percentage of people)

	Drinkable tap-water	Electricity	Cooking facilities	Kitchen sink	Bath or Shower	Toilet
0-4	4.2	2.3	1.4	1.2	1.0	1.0
5-14	3.6	2.1	1.3	1.1	1.0	1.0
15-24	3.4	2.0	1.3	1.1	1.0	1.0
25-34	3.9	2.2	1.4	1.2	1.0	1.0
35-44	3.5	1.9	1.2	1.2	1.0	1.0
45-54	3.1	1.6	1.0	1.0	0.9	0.9
55-64	2.9	1.4	0.9	0.9	0.9	0.9
65-74	2.5	1.3	0.8	0.8	0.8	0.8
75+	2.0	1.1	0.9	0.7	0.7	0.7
Total New Zealand	3.3	1.8	1.1	1.0	0.9	0.9

Table 48: Percentage of people living in dwellings with the number of amenities available, by age group (percentage of people)

	Number of basic amenities available in dwelling							All 6
	0	1	2	3	4	5	0 to 5	
0-4	0.5	0.2	0.1	0.2	0.6	4.6	6.2	93.8
5-14	0.5	0.2	0.1	0.2	0.5	4.2	5.6	94.4
15-24	0.5	0.2	0.1	0.2	0.5	4.0	5.4	94.6
25-34	0.5	0.2	0.1	0.2	0.6	4.2	5.8	94.2
35-44	0.5	0.2	0.1	0.1	0.5	3.9	5.3	94.7
45-54	0.4	0.2	0.1	0.1	0.4	3.7	4.9	95.1
55-64	0.3	0.2	0.1	0.1	0.4	3.8	4.9	95.1
65-74	0.3	0.1	0.1	0.1	0.4	3.5	4.4	95.6
75+	0.2	0.1	0.1	0.1	0.3	3.2	4.0	96.0

Table 49: Percentage of people living in dwellings lacking basic amenities, by age group, ethnic group and rurality (percentage of people)

		European	Māori	Pacific peoples	Asian	MELAA	Other	Total New Zealand
Rural	0-4	5.7	9.7	11.6	13.4	12.2	7.3	6.7
	5-14	5.0	8.7	10.8	12.3	9.0	5.8	5.9
	15-24	5.3	9.6	11.8	12.6	10.2	7.0	6.3
	25-34	6.1	9.6	11.5	13.8	10.7	7.9	7.2
	35-44	5.4	9.1	10.7	13.7	10.8	6.5	6.3
	45-54	5.7	10.7	11.1	14.3	10.2	6.7	6.5
	55-64	5.7	10.8	12.9	15.1	7.5	8.1	6.4
	65-74	5.4	10.6	11.5	16.9	s	6.1	6.0
	75+	5.0	10.1	8.3	12.9	s	5.1	5.5
Urban	0-4	3.2	6.9	12.0	9.5	8.7	4.4	6.1
	5-14	3.0	6.2	11.7	9.1	8.4	4.1	5.5
	15-24	2.9	6.2	11.4	8.4	8.8	3.6	5.3
	25-34	2.8	6.4	11.3	9.5	9.3	3.9	5.7
	35-44	2.6	6.1	11.1	9.8	8.1	3.4	5.1
	45-54	2.9	6.3	11.3	8.1	8.0	3.8	4.5
	55-64	3.1	6.4	10.8	8.5	7.5	4.5	4.4
	65-74	3.1	6.0	9.7	9.5	8.5	4.8	4.1
	75+	3.2	5.9	10.2	9.1	10.5	3.6	3.8
Total	0-4	3.7	7.4	12.0	9.7	8.9	4.7	6.2
	5-14	3.4	6.7	11.6	9.2	8.5	4.4	5.6
	15-24	3.3	6.7	11.4	8.5	8.8	3.9	5.4
	25-34	3.3	6.9	11.3	9.7	9.4	4.3	5.8
	35-44	3.1	6.6	11.0	9.9	8.3	3.9	5.3
	45-54	3.5	7.1	11.3	8.4	8.1	4.4	4.9
	55-64	3.7	7.4	10.9	8.8	7.6	5.4	4.9
	65-74	3.6	7.1	9.8	9.7	8.4	5.1	4.4
	75+	3.4	6.8	10.1	9.2	9.6	4.0	4.0

Note: Numbers less than or equal to five are suppressed by Stats NZ in order to maintain privacy. People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African.

Table 50: Number of people living in dwellings lacking basic amenities, by age group and ethnic group (number of people)

Age group	European	Māori	Pacific	Asian	MELAA	Other	Total New Zealand
0-4	6,300	4,281	3,465	4,587	501	153	15,255
5-9	13,170	8,502	7,230	7,431	801	327	30,363
15-24	11,085	6,405	5,835	7,350	693	180	26,937
25-34	10,878	5,064	4,212	12,582	1,176	255	30,897
35-44	10,551	4,149	3,309	9,948	876	273	26,733
45-54	14,454	4,626	3,084	5,832	504	384	26,778
55-64	14,784	3,774	2,061	4,533	267	390	24,312
65-74	11,262	1,926	1,041	2,652	129	189	16,554
75+	7,581	804	507	1,206	66	63	9,960

Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African.

Table 51: Number of people NOT living in dwellings lacking basic amenities, age group and ethnic group (number of people)

Age group	European	Māori	Pacific	Asian	MELAA	Other	Total New Zealand
0-4	165,948	53,850	25,362	42,909	5,124	3,090	232,377
5-14	374,472	118,617	54,927	73,296	8,673	7,134	511,635
15-24	328,920	89,490	45,321	79,056	7,185	4,383	471,561
25-34	320,388	68,178	33,045	117,546	11,388	5,616	497,634
35-44	329,184	58,902	26,676	90,423	9,714	6,699	476,175
45-54	397,155	60,171	24,132	63,951	5,694	8,352	521,577
55-64	379,719	47,217	16,794	47,058	3,237	6,843	476,589
65-74	303,078	25,227	9,543	24,576	1,398	3,510	355,608
75+	214,749	11,001	4,491	11,862	615	1,509	238,959

Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African.

Further tables by ethnicity

See also Table 43: Percentage of people living in dwellings lacking basic amenities, by sex, by age group, rurality, ethnic group, address change, and dwelling typology (percentage of people)

See also Table 46: Percentage of people living in dwellings lacking basic amenities, by age group, by rurality, ethnic group, and address change (percentage of people)

See also Table 49: Percentage of people living in dwellings lacking basic amenities, by age group, ethnic group and rurality (percentage of people)

See also Table 14: Address change, years living in New Zealand and birthplace of people living in dwellings lacking basic amenities, by ethnic group (percentage of people)

See also Table 13: Tenure, and crowding for people living in dwellings lacking basic amenities, by ethnic group (percentage of people)

Table 52: Percentage of people living in dwellings lacking each individual basic amenity by ethnic group (percentage of people)

	Māori	Pacific peoples	Asian	European	MELAA	Other	Total New Zealand
Drinkable tap-water	4.5	7.1	6.7	2.0	4.8	2.8	3.3
Electricity	2.1	5.9	3.8	0.9	4.2	1.3	1.8
Cooking facilities	1.1	3.7	2.7	0.5	2.5	0.8	1.1
Kitchen sink	0.9	2.8	2.6	0.5	2.2	0.8	1.0
Bath or Shower	1.0	2.4	2.0	0.5	1.6	0.8	0.9
Toilet	1.0	2.6	2.0	0.5	1.6	0.7	0.9

Table 53: Living in dwellings lacking basic amenities, by Territorial Authority and ethnic group (percentage of people)

	European	Māori	Pacific people	Asian	MELAA	Other	Total New Zealand
Far North District	7.4	10.9	16.1	13.8	8.9	12.3	8.8
Whangarei District	3.5	6.5	6.6	8.8	5.9	4.2	4.4
Kaipara District	6.0	8.1	10.5	20.5	s	6.5	7.0
Auckland	3.1	6.5	12.6	10.0	9.4	4.6	6.6
Thames-Coromandel District	5.6	8.7	8.5	9.5	s	7.1	6.0
Hauraki District	4.2	6.7	5.9	8.2	s	5.1	4.7
Waikato District	5.2	10.6	11.3	11.4	7.0	6.6	6.6
Matamata-Piako District	3.8	7.2	9.3	10.8	4.3	3.8	4.5
Hamilton City	2.6	5.4	8.2	8.9	11.7	4.0	4.7
Waipa District	2.7	5.7	6.2	8.3	8.0	5.3	3.3
Otorohanga District	4.6	11.2	15.1	17.9	s	11.4	6.5
South Waikato District	3.4	5.0	6.2	9.1	9.7	4.3	4.5
Waitomo District	4.8	11.5	15.2	14.9	s	20.0	7.9
Taupo District	3.3	6.3	7.4	7.6	s	3.9	4.1
Western Bay of Plenty District	3.4	6.8	10.9	8.8	5.1	3.6	4.2
Tauranga City	2.1	4.7	6.5	8.7	5.8	2.6	3.0
Rotorua District	2.9	5.3	5.8	7.1	5.3	2.9	4.0
Whakatane District	3.4	6.7	5.5	10.7	s	3.2	4.8
Kawerau District	3.4	3.7	s	3.6	s	S	3.5
Opotiki District	6.7	9.3	12.5	6.5	s	S	8.0
Gisborne District	3.8	9.2	10.0	8.4	s	5.0	6.2
Wairoa District	5.2	9.0	12.1	6.5	s	s	7.7
Hastings District	7.0	15.4	19.0	13.1	16.0	8.3	9.2
Napier City	6.1	11.6	12.2	12.0	11.7	9.0	7.2
Central Hawke's Bay District	4.2	5.9	5.4	15.3	s	7.1	4.8
New Plymouth District	3.2	5.7	9.6	6.4	1.8	3.6	3.6
Stratford District	3.4	5.9	12.5	S	s	5.1	3.7
South Taranaki District	4.0	8.5	8.3	10.9	s	2.7	5.1
Ruapehu District	7.7	18.7	12.7	15.2	s	13.9	11.5
Whanganui District	4.0	8.2	9.1	8.9	7.0	4.6	5.0
Rangitikei District	5.3	11.7	40.8	13.9	S	6.7	8.0

	European	Māori	Pacific people	Asian	MELAA	Other	Total New Zealand
Manawatū—Whanganui District	4.0	8.2	9.6	19.0	s	2.7	4.7
Palmerston North City	2.5	4.4	7.7	7.5	5.9	2.8	3.6
Tararua District	7.3	10.9	14.0	12.7	25.0	11.7	7.9
Horowhenua District	7.6	12.5	13.0	10.1	s	7.2	8.6
Kapiti Coast District	2.9	5.1	7.8	5.8	3.1	4.3	3.3
Porirua City	2.3	4.5	8.4	6.2	6.8	1.9	4.3
Upper Hutt City	2.8	4.6	6.3	5.3	7.6	3.3	3.3
Lower Hutt City	3.1	6.8	10.5	6.8	13.8	2.8	4.8
Wellington City	1.7	3.1	5.9	5.4	8.2	2.1	2.8
Masterton District	3.9	6.5	15.0	8.2	s	7.8	4.7
Carterton District	3.8	4.0	6.3	7.5	s	8.9	4.1
South Wairarapa District	4.3	6.5	8.1	8.7	s	8.7	4.6
Tasman District	3.8	4.1	7.9	9.3	9.4	5.7	4.0
Nelson City	2.7	3.8	6.9	9.9	5.5	4.6	3.4
Marlborough District	4.7	6.0	12.4	7.6	2.9	5.1	5.0
Kaikoura District	6.4	8.2	S	S	20.0	S	6.4
Buller District	13.4	21.1	14.3	12.9	27.3	14.3	13.9
Grey District	3.8	3.4	4.7	11.3	s	6.6	4.1
Westland District	6.1	8.5	16.7	12.2	s	3.8	6.8
Hurunui District	8.6	10.2	8.3	11.6	16.0	13.0	8.8
Waimakariri District	3.5	4.3	6.6	6.7	2.7	3.8	3.6
Christchurch City	2.4	4.5	8.9	8.0	6.4	3.0	3.6
Selwyn District	1.9	2.0	0.8	5.4	1.9	3.6	2.2
Ashburton District	3.8	6.3	15.5	8.9	7.7	8.7	4.7
Timaru District	4.4	6.5	11.2	7.4	7.2	4.3	4.7
Mackenzie District	5.1	8.0	s	10.4	s	s	5.4
Waimate District	7.7	7.8	8.7	12.2	23.1	10.3	8.1
Chatham Islands Territory	12.2	14.7	s	s	s	s	14.4
Waitaki District	4.0	7.2	16.1	7.3	12.1	3.4	4.7
Central Otago District	4.6	4.9	5.6	8.3	15.2	3.8	4.8
Queenstown-Lakes District	2.4	3.5	6.8	8.8	8.5	4.0	3.3
Dunedin City	3.0	4.3	7.0	6.6	6.5	4.5	3.4
Clutha District	5.4	7.6	15.8	10.1	17.2	9.6	5.8
Southland District	4.5	6.3	11.2	14.4	9.5	5.1	5.2

	European	Māori	Pacific people	Asian	MELAA	Other	Total New Zealand
Gore District	4.1	5.0	s	7.0	s	6.7	4.3
Invercargill City	3.1	4.6	5.4	11.0	10.3	3.9	3.8

Note: People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. . MELAA = Middle Eastern, Latin American and African. s - numbers less than or equal to five are suppressed by Stats NZ in order to maintain privacy.

Table 54: Number of people living in dwellings lacking basic amenities, by tenure and ethnic group (number of people)

Tenure	European	Māori	Pacific Peoples	Asian	MELAA	Other	Total New Zealand
Family Trust	10,935	1,848	1,479	7,098	471	246	20,652
Owned	45,426	10,572	4,656	21,327	663	978	76,038
Private rental	35,718	18,588	12,639	23,808	2,649	783	81,915
Public rental	6,291	7,971	11,457	2,553	1,158	162	25,308
Other (mainly rented unknown landlord)	1,686	555	516	1,329	69	45	3,876

Note: The public rental category includes a variety of government sector and charitable landlords including: city councils, community housing providers, government departments, hapū, HNZA (which became Kāinga Ora - homes and communities in 2019), iwi, local authorities, Māori land trusts, ministries, state-owned corporations or enterprises. People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African.

Table 55: Number of people NOT living in dwellings lacking basic amenities, by tenure and ethnic group (number of people)

Tenure	European	Māori	Pacific Peoples	Asian	MELAA	Other	Total New Zealand
Family Trust	433,806	39,597	11,352	57,474	3,741	6,327	512,904
Owned	1,592,925	227,550	83,037	277,353	17,298	26,118	2,013,591
Private rental	702,507	207,111	93,603	197,052	25,860	13,257	1,069,167
Public rental	64,689	55,059	50,586	13,707	5,883	1,128	158,367
Other (mainly rented unknown landlord)	19,680	3,336	1,716	5,085	246	306	28,083

Note: The public rental category includes a variety of government sector and charitable landlords including: city councils, community housing providers, government departments, hapū, HNZA (which became Kāinga Ora - homes and communities in 2019), iwi, local authorities, Māori land trusts, ministries, state-owned corporations or enterprises. People who reported more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities. MELAA = Middle Eastern, Latin American and African.

See also Table 50: Number of people living in dwellings lacking basic amenities, by age group and ethnic group (number of people)

See also Table 51: Number of people NOT living in dwellings lacking basic amenities, age group and ethnic group (number of people)

Further Tables

Table 56: Percentage of dwellings, by dwelling typology and number of amenities available (percentage of dwellings)

Dwelling typology	Number of basic amenities available in dwelling							
	0	1	2	3	4	5	0 to 5	All 6
House	0.3	0.2	0.1	0.1	0.3	3.7	4.7	95.3
Unit	0.5	0.3	0.2	0.2	0.8	5.2	7.2	92.8
Town-house	0.4	0.2	0.1	0.1	0.3	3.1	4.1	95.9
Apartment	0.6	0.3	0.1	0.3	0.8	4.8	6.8	93.2
Mobile dwelling not in a motor camp	3.3	3.5	3.2	5.1	8.3	16.6	40	60
Improvised dwelling	2	2.8	2.9	3.5	6.6	13.8	31.6	68.4
Private dwelling in a motor camp	1.6	2.5	3.8	5.7	14.2	12.6	40.3	59.7

Note: This division of housing typologies, especially the distinction between units, apartments and townhouses are not standard StatsNZ outputs. We have used them acknowledging some inherent data quality issues because of their face-validity in describing New Zealand housing types which is not fully captured by considering the number of storeys a dwelling has.

Table 57: Number and percentage of dwellings, by number of amenities available (number and percentage of dwellings)

	Number of amenities available in a dwelling			
	0-3	4	5	All 6
Number of dwellings	12,513	6,966	59,421	1,442,187
Percentage of dwellings	0.8%	0.5%	3.9%	94.8%

Geography

Region

Owing to the amount of missing data, the absolute number of households reporting an amenity missing by region is possibly only of marginal use. It is, however, reported here as an approximate indicator of the issue.

Table 58: Absence of individual amenities by region (Number of dwellings)

Region	Amenities missing from dwellings							Dwellings without amenity data available		Total number of dwellings
	Drinkable tap water	Electricity	Cooking facilities	Kitchen sink	Fridge	Bath or shower	Toilet	Number	Percentage	
Northland	2,244	1,056	657	609	1,692	744	726	6,723	10.5	64,254
Auckland	18,336	10,587	7,314	6,612	17,073	5,541	5,616	45,684	9.2	496,458
Waikato	4,533	2,277	1,551	1,338	5,046	1,323	1,305	13,401	8.2	162,930
Bay of Plenty	1,926	1,407	951	849	2,862	957	846	10,923	9.8	110,919
Gisborne	555	264	168	132	507	174	171	1,896	11.6	16,410
Hawkes Bay	3,342	804	531	486	1,755	513	504	5,352	8.9	60,237
Taranaki	975	516	327	294	1,230	312	282	3,111	6.9	45,252
Manawatū—Whanganui	3,219	1,098	798	672	2,601	672	627	7,185	7.9	90,408
Wellington	3,534	2,247	1,431	1,323	4,407	1,236	1,125	11,766	6.3	185,382
Tasman	435	225	141	138	411	153	177	1,122	5.7	19,545
Nelson	294	228	153	144	489	177	159	1,185	6.0	19,821
Marlborough	555	240	132	117	387	135	138	1,284	6.9	18,672
West Coast	723	243	144	150	438	150	129	1,368	10.1	13,506
Canterbury	4,542	2,991	1,902	1,869	6,048	1,881	1,815	14,094	6.3	225,408
Otago	1,920	1,005	633	627	1,725	639	606	5,283	6.2	85,665
Southland	921	510	318	342	1,143	345	306	2,286	5.9	38,646

Note: although a refrigerator is not considered a basic amenity, it has been included in this table as potentially useful information.

Table 59: Absence of individual amenities by region (Percentage of dwellings)

	Cooking facilities	Drinkable tap-water	Bath or shower	Toilet	Electricity	Kitchen sink	Fridge
Northland	1.1	3.9	1.3	1.3	1.8	1.1	2.9
Auckland	1.6	4.1	1.2	1.2	2.3	1.5	3.8
Waikato	1.0	3.0	0.9	0.9	1.5	0.9	3.4
Bay Plenty	1.0	1.9	1.0	0.8	1.4	0.8	2.9
Gisborne	1.2	3.8	1.2	1.2	1.8	0.9	3.5
Hawkes Bay	1.0	6.1	0.9	0.9	1.5	0.9	3.2
Taranaki	0.8	2.3	0.7	0.7	1.2	0.7	2.9
Manawatū—Whanganui	1.0	3.9	0.8	0.8	1.3	0.8	3.1
Wellington	0.8	2.0	0.7	0.6	1.3	0.8	2.5
Tasman	0.8	2.4	0.8	1.0	1.2	0.7	2.2
Nelson	0.8	1.6	0.9	0.9	1.2	0.8	2.6
Marlborough	0.8	3.2	0.8	0.8	1.4	0.7	2.2
West Coast	1.2	6.0	1.2	1.1	2.0	1.2	3.6
Canterbury	0.9	2.1	0.9	0.9	1.4	0.9	2.9
Otago	0.8	2.4	0.8	0.8	1.3	0.8	2.1
Southland	0.9	2.5	0.9	0.8	1.4	0.9	3.1

Note: although a refrigerator is not considered a basic amenity, it has been included in this table as potentially useful information. See Table 58 for total number of dwellings, number of dwellings with no amenity data, and percentage of dwellings with no amenity data.

Table 60: Distribution of the presence of the six basic amenities (cooking facilities, bath or shower, toilet, electricity, kitchen sink and safe drinking water) by region (number and percentage of dwellings)

Region	Number of dwellings				Percentage of dwellings			
	0-3 amenities	4 amenities	5 amenities	All 6 amenities	0-3 amenities	4 amenities	5 amenities	All 6 amenities
Northland	528	411	2,820	53,772	0.9	0.7	4.9	93.5
Auckland	5,610	2,721	19,929	422,517	1.2	0.6	4.4	93.7
Waikato	1,020	660	5,916	141,933	0.7	0.4	4.0	94.9
Bay of Plenty	660	396	2,907	96,036	0.7	0.4	2.9	96.0
Gisborne	141	78	660	13,632	1.0	0.5	4.5	93.9
Hawke's Bay	402	231	3,711	50,541	0.7	0.4	6.8	92.1
Taranaki	207	129	1,392	40,416	0.5	0.3	3.3	95.9
Manawatū—Whanganui	483	351	3,975	78,414	0.6	0.4	4.8	94.2
Wellington	948	600	4,944	167,118	0.5	0.3	2.8	96.3
Tasman	93	81	666	17,586	0.5	0.4	3.6	95.5
Nelson	102	72	519	17,940	0.5	0.4	2.8	96.3
Marlborough	93	54	753	16,485	0.5	0.3	4.3	94.8
West Coast	102	96	876	11,061	0.8	0.8	7.2	91.1
Canterbury	1,437	654	6,336	202,884	0.7	0.3	3.0	96.0
Otago	447	288	2,661	76,989	0.6	0.4	3.3	95.8
Southland	228	138	1,326	34,665	0.6	0.4	3.6	95.3

See Table 58 for total number of dwellings, number of dwellings with no amenity data, and percentage of dwellings with no amenity data.

Table 61: Percentage of dwellings that are lacking basic amenities by tenure and region (percentage of dwellings)

Region	Family Trust	Owned	Private rental	Public rental
Northland	4.9	5.4	9.0	11.4
Auckland	4.4	4.4	8.2	15.1
Waikato	3.7	3.7	7.3	10.6
Bay of Plenty	2.8	2.9	5.8	9.6
Gisborne	5.1	3.9	7.9	14.3
Hawke's Bay	5.2	6.2	11.3	17.0
Taranaki	2.7	3.0	6.4	10.4
Manawatū—Whanganui	3.9	4.4	8.5	11.3
Wellington	3.0	2.5	4.9	12.0
Tasman	3.9	4.0	6.3	6.5
Nelson	3.3	2.9	5.0	9.9
Marlborough	3.8	4.9	6.5	6.9
West Coast	6.3	7.7	12.0	10.7
Canterbury	3.4	3.0	5.5	9.5
Otago	3.2	3.4	5.7	8.3
Southland	3.2	3.5	7.5	7.4

See Table 58 for total number of dwellings, number of dwellings with no amenity data, and percentage of dwellings with no amenity data.

Table 62: Severe housing deprivation by region (number and percentage of dwellings)

Region	Uninhabitable	Sharing			Neither uninhabitable nor sharing
		Total sharing	Only sharing	Both uninhabitable and sharing	
Northland	1,152	462	438	24	54,795
Auckland	8,217	5,211	4,866	345	435,912
Waikato	2,088	876	813	63	145,470
Bay of Plenty	1,062	681	669	15	97,329
Gisborne	327	141	126	12	13,968
Hawke's Bay	1,203	390	357	30	52,950
Taranaki	468	129	s	s	41,349
Manawatū— Whanganui	1,551	294	270	27	81,072
Wellington	1,878	759	717	42	170,433
Tasman	174	48	s	s	17,850
Nelson	168	48	s	s	18,225
Marlborough	159	51	s	s	17,007
West Coast	351	18	s	s	11,577
Canterbury	1,944	645	624	24	207,477
Otago	846	291	282	9	78,801
Southland	444	66	s	s	35,685

Auckland Local Board

Table 63: Percentage of dwellings with missing amenities, by Auckland local board (percentage of dwellings)

	Drinkable tap-water	Electricity	Cooking facilities	Kitchen sink	Fridge	Bath or shower	Toilet
Albert Eden	3.1	2.0	1.3	1.3	4.0	1.0	1.1
Devonport Takapuna	3.1	1.7	1.0	1.1	3.1	0.8	0.9
Franklin	4.6	0.9	0.7	0.7	2.3	0.7	0.7
Great Barrier	6.3	24.3	3.6	3.6	13.5	7.2	9.0
Henderson Massey	3.9	2.7	1.9	1.7	4.4	1.4	1.4
Hibiscus Bays	2.7	1.2	0.8	0.8	2.4	0.7	0.7
Howick	4.5	2.2	1.5	1.5	3.7	1.2	1.2
Kaipatiki	3.2	1.9	1.3	1.2	3.6	0.9	1.0
Mangere Otahuhu	6.9	6.0	4.1	3.1	7.4	2.6	2.8
Manurewa	5.0	3.9	2.8	2.2	5.6	1.9	2.0
Maungakiekie Tamaki	4.5	3.0	2.2	1.8	5.5	1.6	1.6
Orakei	2.1	1.3	0.8	0.9	2.4	0.8	0.8
Otara Papatoetoe	6.7	5.4	3.7	2.7	7.3	2.4	2.4
Papakura	3.5	2.2	1.7	1.3	4.5	1.3	1.2
Puketapapa	4.5	2.9	2.0	1.8	4.7	1.6	1.6
Rodney	4.4	1.1	0.8	0.8	2.1	0.7	0.7
Upper Harbour	5.0	2.4	1.6	1.8	3.5	1.5	1.4
Waiheke	8.6	1.4	0.5	0.8	1.9	1.1	1.0
Waitakere Ranges	2.5	1.3	0.9	1.0	2.3	0.8	0.8
Waitemata	4.6	2.4	1.9	1.7	2.2	1.3	1.2
Whau	4.2	2.7	1.9	1.8	4.5	1.3	1.4

Note: although a refrigerator is not considered a basic amenity, it has been included in this table as potentially useful information.

Table 64: Number of dwellings with missing amenities, by Auckland local board (number of dwellings)

	Drinkable tap-water	Electricity	Cooking facilities	Kitchen sink	Fridge	Bath or shower	Toilet	Dwellings without amenity data available	Total dwellings	Percentage of dwellings without amenity data available
Albert Eden	933	594	393	384	1,191	297	318	2,241	32,028	7.0
Devonport Takapuna	600	324	201	219	606	153	180	1,209	20,760	5.8
Franklin	1,071	222	171	162	549	168	162	1,848	25,359	7.3
Great Barrier	21	81	12	12	45	24	30	207	540	38.3
Henderson Massey	1,236	855	591	528	1,383	447	426	3,981	35,439	11.2
Hibiscus Bays	930	402	273	285	828	249	243	2,163	36,678	5.9
Howick	1,836	897	627	600	1,512	498	501	2,958	43,584	6.8
Kaipatiki	858	519	342	333	951	243	273	2,247	28,911	7.8
Mangere Otahuhu	1,017	888	606	465	1,092	384	411	3,081	17,883	17.2
Manurewa	1,026	801	576	453	1,143	387	411	3,201	23,562	13.6
Maungakiekie Tamaki	984	660	471	384	1,209	348	339	2,616	24,408	10.7
Orakei	603	381	240	267	690	231	216	1,254	29,907	4.2
Otara Papatoetoe	1,131	912	621	459	1,242	402	411	3,483	20,412	17.1
Papakura	546	345	264	204	693	198	192	1,491	17,049	8.7
Puketapapa	705	453	309	285	738	255	249	1,692	17,328	9.8
Rodney	915	228	165	171	438	144	153	2,004	22,764	8.8
Upper Harbour	924	453	297	330	651	279	255	1,215	19,737	6.2
Waiheke	288	48	18	27	63	36	33	297	3,648	8.1
Waitakere Ranges	390	198	144	150	354	117	129	1,662	17,262	9.6
Waitemata	1,392	723	576	504	678	399	372	4,257	34,524	12.3
Whau	939	600	414	387	1,005	282	312	2,577	24,675	10.4

Note: although a refrigerator is not considered a basic amenity, it has been included in this table as potentially useful information.

Table 65: Distribution of presence of six basic amenities (cooking facilities, bath or shower, toilet, electricity, kitchen sink and safe drinking water) under, by Auckland local board area (number and percentage of dwellings)

Auckland local board area	Number of dwellings				Percentage of dwellings			
	0-3 amenities	4 amenities	5 amenities	All 6 amenities	0-3 amenities	4 amenities	5 amenities	All 6 amenities
Albert Eden	297	162	1,062	28,266	1.0	0.5	3.6	94.9
Devonport Takapuna	165	84	663	18,642	0.8	0.4	3.4	95.4
Franklin	105	96	1,242	22,065	0.4	0.4	5.3	93.8
Great Barrier	18	15	75	225	5.5	4.5	22.7	68.2
Henderson Massey	456	183	1,329	29,490	1.4	0.6	4.2	93.7
Hibiscus Bays	195	87	1,188	33,048	0.6	0.3	3.4	95.7
Howick	519	246	1,791	38,073	1.3	0.6	4.4	93.7
Kaipatiki	267	135	939	25,320	1.0	0.5	3.5	95.0
Mangere Otahuhu	462	204	1,029	13,107	3.1	1.4	7.0	88.5
Manurewa	432	192	1,050	18,687	2.1	0.9	5.2	91.8
Maungakiekie Tamaki	348	180	1,056	20,211	1.6	0.8	4.8	92.7
Orakei	195	87	768	27,603	0.7	0.3	2.7	96.3
Otara Papatoetoe	453	216	1,176	15,081	2.7	1.3	6.9	89.1
Papakura	189	87	621	14,661	1.2	0.6	4.0	94.2
Puketapapa	267	96	711	14,562	1.7	0.6	4.5	93.1
Rodney	105	78	1,107	19,470	0.5	0.4	5.3	93.8
Upper Harbour	270	108	912	17,232	1.5	0.6	4.9	93.0
Waiheke	21	24	315	2,994	0.6	0.7	9.4	89.3
Waitakere Ranges	99	69	480	14,955	0.6	0.4	3.1	95.9
Waitemata	420	231	1,422	28,194	1.4	0.8	4.7	93.1
Whau	324	147	993	20,634	1.5	0.7	4.5	93.4

Note: See Table 64 for total number of dwellings, number of dwellings with no amenity data, and percentage of dwellings with no amenity data

Housing lacking basic amenities definition

Table 66: Housing lacking basic amenity definition, by tenure type (number of dwellings)

		Missing-1-plus-of-5	Missing-1-plus-of-6	Missing-2-plus-of-6	Missing-1-plus-of-7	Missing-2-plus-of-7
Family trust	No answer	11,760	11,757	11,757	11,757	11,757
	Have amenity	202,638	199,872	205,698	199,092	205,482
	Do not have amenity	5,160	7,923	2,097	8,706	2,313
Owned	No answer	42,375	42,375	42,375	42,375	42,375
	Have amenity	788,499	774,669	799,224	772,098	798,522
	Do not have amenity	16,503	30,336	5,778	32,904	6,483
Private rental	No answer	57,252	57,252	57,252	57,255	57,252
	Have amenity	406,761	393,834	416,376	372,981	411,126
	Do not have amenity	17,445	30,369	7,827	51,225	13,080
Public rental	No answer	19,692	19,692	19,689	19,689	19,692
	Have amenity	63,360	60,300	65,913	57,051	64,782
	Do not have amenity	5,514	8,574	2,961	11,826	4,092
Other/ Unknown (mainly rented but unknown landlord)	No answer	1,632	1,632	1,629	1,629	1,629
	Have amenity	13,923	13,512	14,391	13,368	14,310
	Do not have amenity	1,281	1,695	813	1,836	894

Note: This category contains a variety of government sector and charitable landlords including: city councils, community housing providers, government departments, hapu, HNZN (which became Kāinga Ora - homes and communities in 2019), iwi, local authorities, ministries, Maori land trusts, State-owned corporations or enterprises

Table 67: Housing lacking basic amenity definition, by rurality (number of dwellings)

		Missing-1-plus-of-5	Missing-1-plus-of-6	Missing-2-plus-of-6	Missing-1-plus-of-7	Missing-2-plus-of-7
Rural	No answer	24,822	24,825	24,825	24,825	24,825
	Have amenity	238,950	229,758	243,528	226,689	242,514
	Do not have amenity	7,875	17,064	3,294	20,136	4,311
Urban	No answer	107,775	107,772	107,775	107,772	107,772
	Have amenity	1,236,162	1,212,363	1,257,996	1,187,835	1,251,627
	Do not have amenity	37,995	61,791	16,161	86,322	22,530

Table 68: Housing lacking basic amenities definition, by heating (number of dwellings)

		Missing-1-plus-of-5	Missing-1-plus-of-6	Missing-2-plus-of-6	Missing-1-plus-of-7	Missing-2-plus-of-7
Heated	No answer	8,514	8,514	8,511	8,514	8,514
	Have amenities	1,413,369	1,383,510	1,437,120	1,358,895	1,430,865
	Do not have amenity	38,970	68,829	15,219	93,444	21,477
No heating	No answer	648	648	645	645	648
	Have amenities	53,718	50,949	55,923	48,372	54,960
	Do not have amenity	5,685	8,457	3,483	11,034	4,446
Heating question not answered	No answer	123,546	123,546	123,549	123,546	123,546
	Have amenities	8,091	7,728	8,568	7,326	8,400
	Do not have amenity	1,251	1,614	774	2,019	939

Table 69: Housing lacking basic amenity definition by Mould (number of dwellings)

		Missing-1-plus-of-5	Missing-1-plus-of-6	Missing-2-plus-of-6	Missing-1-plus-of-7	Missing-2-plus-of-7
A4 mould always	No answer	342	345	342	342	345
	Have amenities	60,093	56,514	61,977	53,574	60,876
	Do not have amenity	3,948	7,530	2,064	10,470	3,168
A4 mould sometimes	No answer	645	645	645	645	645
	Have amenities	179,628	173,055	183,471	167,226	181,869
	Do not have amenity	7,599	14,175	3,759	20,004	5,364
A4 mould never	No answer	3,021	3,021	3,021	3,021	3,021
	Have amenities	1,200,063	1,179,327	1,219,095	1,162,227	1,215,120
	Do not have amenity	29,595	50,331	10,563	67,431	14,538

Table 70: Housing lacking basic amenity definition, by Dampness (number of dwellings)

		Missing-1-plus-of-5	Missing-1-plus-of-6	Missing-2-plus-of-6	Missing-1-plus-of-7	Missing-2-plus-of-7
Damp always	No answer	312	312	312	312	312
	Have amenities	40,554	37,485	42,144	35,001	41,106
	Do not have amenity	3,513	6,585	1,926	9,066	2,964
Damp sometimes	No answer	780	780	780	780	780
	Have amenities	262,905	253,206	268,287	244,926	266,052
	Do not have amenity	9,825	19,518	4,440	27,801	6,678
Damp never	No answer	3,039	3,039	3,036	3,036	3,036
	Have amenities	1,124,943	1,107,225	1,142,478	1,092,804	1,139,241
	Do not have amenity	27,303	45,024	9,771	59,442	13,008

Definition - Geography—Regional Council

Table 71: Distribution of the presence of five amenities (cooking facilities, bath or shower, toilet, electricity and kitchen sink) initially under consideration as the “basic” amenities, by region (number and percentage of dwellings)

Region	Number of dwellings			Percentage of dwellings		
	0-3 amenities	4 amenities	All 5 amenities	0-3 amenities	4 amenities	All 5 amenities
Northland	759	1,368	55,404	1.3	2.4	96.3
Auckland	6,576	10,251	433,950	1.5	2.3	96.3
Waikato	1,332	2,973	145,224	0.9	2.0	97.1
Bay of Plenty	876	1,908	97,212	0.9	1.9	97.2
Gisborne	180	306	14,028	1.2	2.1	96.7
Hawke’s Bay	486	1,026	53,373	0.9	1.9	97.2
Taranaki	279	711	41,151	0.7	1.7	97.7
Manawatū—Whanganui	627	1,608	80,994	0.8	1.9	97.3
Wellington	1,242	2,892	169,479	0.7	1.7	97.6
Tasman	150	351	17,925	0.8	1.9	97.3
Nelson	144	369	18,123	0.8	2.0	97.2
Marlborough	123	330	16,932	0.7	1.9	97.4
West Coast	168	303	11,670	1.4	2.5	96.1
Canterbury	1,785	3,693	205,833	0.8	1.7	97.4
Otago	579	1,440	78,360	0.7	1.8	97.5
Southland	294	747	35,316	0.8	2.1	97.1

See Table 58 for total number of dwellings, number of dwellings with no amenity data, and percentage of dwellings with no amenity data.

For information about distribution of the six basic amenities chosen see Table 60

Table 72: Distribution of the presence of seven amenities (cooking facilities, bath or shower, toilet, electricity, kitchen sink, safe drinking water, and a refrigerator) initially under consideration as the “basic” amenities by region (number and percentage of dwellings)

Region	Number of dwellings					Percentage of dwellings				
	0-3 amenities	4 amenities	5 amenities	6 amenities	All 7 amenities	0-3 amenities	4 amenities	5 amenities	6 amenities	All 7 amenities
Northland	426	198	612	3,444	52,851	0.7	0.3	1.1	6.0	91.9
Auckland	5,190	1,290	4,398	26,109	413,793	1.2	0.3	1.0	5.8	91.8
Waikato	924	327	1,284	8,157	138,834	0.6	0.2	0.9	5.5	92.8
Bay of Plenty	585	210	672	4,287	94,242	0.6	0.2	0.7	4.3	94.2
Gisborne	117	39	153	867	13,335	0.8	0.3	1.1	6.0	91.9
Hawke’s Bay	363	120	516	4,326	49,563	0.7	0.2	0.9	7.9	90.3
Taranaki	189	60	303	1,956	39,633	0.4	0.1	0.7	4.6	94.0
Manawatū—Whanganui	435	174	660	5,172	76,785	0.5	0.2	0.8	6.2	92.3
Wellington	873	270	1,035	7,080	164,358	0.5	0.2	0.6	4.1	94.7
Tasman	84	33	132	837	17,343	0.5	0.2	0.7	4.5	94.1
Nelson	78	42	123	774	17,619	0.4	0.2	0.7	4.2	94.5
Marlborough	87	21	99	945	16,239	0.5	0.1	0.6	5.4	93.4
West Coast	90	60	135	1,014	10,839	0.7	0.5	1.1	8.4	89.3
Canterbury	1,320	315	1,269	9,348	199,059	0.6	0.1	0.6	4.4	94.2
Otago	402	108	489	3,420	75,963	0.5	0.1	0.6	4.3	94.5
Southland	210	63	270	1,869	33,945	0.6	0.2	0.7	5.1	93.4

See Table 58 for total number of dwellings, number of dwellings with no amenity data, and percentage of dwellings with no amenity data.

Definition - Geography—Auckland local board

Table 73: Distribution of the presence of five amenities (cooking facilities, bath or shower, toilet, electricity and kitchen sink) initially under consideration as the “basic” amenities,, by Auckland local board area (number and percentage of dwellings)

Auckland local board area	Number of dwellings			Percentage of dwellings		
	0-3 amenities	4 amenities	All 5 amenities	0-3 amenities	4 amenities	All 5 amenities
Albert Eden	354	612	28,818	1.2	2.1	96.8
Devonport Takapuna	192	330	19,026	1.0	1.7	97.3
Franklin	150	357	23,001	0.6	1.5	97.8
Great Barrier	27	72	234	8.1	21.6	70.3
Henderson Massey	516	771	30,171	1.6	2.5	95.9
Hibiscus Bays	225	552	33,741	0.7	1.6	97.8
Howick	588	792	39,249	1.4	1.9	96.6
Kaipatiki	309	513	25,842	1.2	1.9	96.9
Mangere Otahuhu	540	675	13,584	3.6	4.6	91.8
Manurewa	501	672	19,191	2.5	3.3	94.3
Maungakiekie Tamaki	414	615	20,763	1.9	2.8	95.3
Orakei	234	438	27,984	0.8	1.5	97.7
Otara Papatoetoe	543	726	15,660	3.2	4.3	92.5
Papakura	228	345	14,988	1.5	2.2	96.3
Puketapapa	294	381	14,961	1.9	2.4	95.7
Rodney	144	357	20,256	0.7	1.7	97.6
Upper Harbour	294	417	17,814	1.6	2.3	96.2
Waiheke	30	75	3,246	0.9	2.2	96.9
Waitakere Ranges	132	255	15,216	0.8	1.6	97.5
Waitemata	486	747	29,031	1.6	2.5	95.9
Whau	375	549	21,171	1.7	2.5	95.8

Note: See Table 64 for total number of dwellings, number of dwellings with no amenity data, and percentage of dwellings with no amenity data.

For information on the distribution of the six basic amenities by Auckland local board see Table 65

Table 74: Distribution of presence of seven amenities (cooking facilities, bath or shower, toilet, electricity, kitchen sink, safe drinking water, and a refrigerator) initially under consideration as the “basic” amenities by Auckland local board (number and percentage of dwellings)

Auckland local board area	Number of dwellings					Percentage of dwellings				
	0-3 amenities	4 amenities	5 amenities	6 amenities	All 7 amenities	0-3 amenities	4 amenities	5 amenities	6 amenities	All 7 amenities
Albert Eden	285	75	273	1575	27579	1.0	0.3	0.9	5.3	92.6
Devonport Takapuna	156	39	132	933	18294	0.8	0.2	0.7	4.8	93.6
Franklin	96	24	189	1467	21732	0.4	0.1	0.8	6.2	92.4
Great Barrier	12	12	18	75	213	3.6	3.6	5.4	22.5	64.0
Henderson Massey	429	84	345	1821	28785	1.4	0.3	1.1	5.8	91.5
Hibiscus Bays	183	39	180	1587	32529	0.5	0.1	0.5	4.6	94.2
Howick	477	99	378	2409	37263	1.2	0.2	0.9	5.9	91.7
Kaipatiki	246	54	249	1326	24789	0.9	0.2	0.9	5.0	93.0
Mangere Otahuhu	435	117	300	1242	12708	2.9	0.8	2.0	8.4	85.9
Manurewa	405	102	303	1371	18180	2.0	0.5	1.5	6.7	89.3
Maungakiekie Tamaki	333	108	255	1524	19575	1.5	0.5	1.2	7.0	89.8
Orakei	177	33	156	1092	27195	0.6	0.1	0.5	3.8	94.9
Otara Papatoetoe	423	126	342	1479	14556	2.5	0.7	2.0	8.7	86.0
Papakura	177	48	159	903	14274	1.1	0.3	1.0	5.8	91.7
Puketapapa	252	51	171	954	14214	1.6	0.3	1.1	6.1	90.9
Rodney	90	36	123	1302	19209	0.4	0.2	0.6	6.3	92.5
Upper Harbour	246	57	168	1116	16935	1.3	0.3	0.9	6.0	91.4
Waiheke	15	12	33	330	2964	0.4	0.4	1.0	9.8	88.5
Waitakere Ranges	90	30	99	624	14760	0.6	0.2	0.6	4.0	94.6
Waitemata	366	81	273	1614	27933	1.2	0.3	0.9	5.3	92.3
Whau	300	69	249	1374	20106	1.4	0.3	1.1	6.2	91.0

Note: See Table 64 for total number of dwellings, number of dwellings with no amenity data, and percentage of dwellings with no amenity data.

Appendix Three – An example with thresholds

As discussed in the technical note before the section on severe housing deprivation, the definitions used to estimate the count of uninhabitable dwellings contain thresholds and cut points.

The Canadian definition of crowding calculates the number of bedrooms required in a dwelling by the number, ages, sexes and relationships of people living in the dwelling. If a dwelling has two or more bedrooms fewer than required under the definition we have called it severely crowded, and, subject to other criteria, some household members may be considered severely housing deprived.

The Jensen equivalisation (Jensen, 1978, 1988) was used to compare incomes of households of different compositions. It transforms incomes to compare them to a two-adult household. It takes account of both the extra costs of additional household members, and economies of scale potentially available to larger households, so directly counts the number of people, but also considers that an additional child may require less additional resource than an additional adult. To operationalise the homelessness criteria we have calculated the Jensen equivalisation for both the households and families living in households. If a household/family unit's income is below a threshold for income poverty then that is used as an indication of lack of access to other housing, or an inability to fix the housing and, subject to other criteria household members may be considered severely housing deprived.

This appendix gives an example of some of the interactions and consequences for the definition.

Scenario: a single parent with a six year old daughter, moving to share a two bedroom flat with a single parent of a six year old son. The adults are not a couple, and the move is to share expenses. Only one of the adults is named on the rental document, and this person filled in the census form as the reference person. The income of each parent individually is \$27,000, so the total household income is \$54,000. The dwelling is missing at least one basic amenity (perhaps the electricity has been cut off, and the adult answering the census form did not think it would be turned on soon)

Income: Under the Jensen equivalisation the equivalised income of each parent/child family is \$30,649, but that of the two child, two adult household is \$39,843. Thus the income of each parent/child family is under the \$34,022 threshold but that of the household as a whole is above it.

Crowding: The household is considered severely crowded. This is because under the Canadian crowding formula each person would ideally have their own bedroom (as children over the age of five of opposite sexes should be allocated to different bedrooms under the privacy considerations, as should adults who are not a couple), and the dwelling has only two bedrooms not the required four.

The parent/child duo who are NOT the tenure holders on the flat are considered severely housing deprived under the sharing accommodation criteria, as the dwelling is severely overcrowded, their family income is under the threshold and they are not in the immediate family of the census reference person. The hosting parent/child are not considered severely housing deprived due to their extra security of tenure.

Uninhabitable housing: Everyone in the household is living in housing lacking a basic amenity, but none are considered severely housing deprived under the uninhabitable housing criteria, as the household equivalised income is over the threshold.

Other income levels: If, however, the income of each of the adults was \$23,000 then the overall equivalised household income would be sufficiently low (\$33,941) that everyone in the dwelling would be considered to be living in uninhabitable housing, although only the guest parent/child family would also be severely housing deprived through sharing (with an with equivalised family income of \$26,108).

If, on the other hand, the income of each of the adults was \$31,000 then both the equivalised family incomes (35,189), and the equivalised household income (\$45,746) would be above the threshold, so no-one would be considered to be severely housing deprived under either criteria.

Other crowding levels: If the adults had moved in together as a consequence of being in a romantic relationship then the household would not be considered severely crowded as the adults would be expected to share a bedroom, and the dwelling would be only one bedroom short under the Canadian formula. No-one in the flat would be considered to be in severe housing deprivation due to crowding regardless of income levels (but depending on income levels might still be considered as being in uninhabitable housing)

References

1947. Housing Improvement Regulations, New Zealand.
- 2018 Census External Data Quality Panel, 2020. Final report of the 2018 Census External Data Quality Panel. Stats NZ,, Wellington, New Zealand
- Amore, K., 2019. Everyone Counts: Defining and measuring severe housing deprivation (homelessness), Department of Public Health. University of Otago.
- Amore, K., Viggers, H., Baker, M.G., Howden-Chapman, P., 2013. Severe housing deprivation: The problem and its measurement, , Official Statistics Research Series, 6.
- Amore, K., Viggers, H., Howden-Chapman, P., 2020. Severe housing deprivation in Aotearoa New Zealand, 2018. University of Otago, .
- Atkinson J, Salmond C, Crampton P, 2020. NZDep2018 Index of Deprivation, Final Research Report, December 2020. University of Otago, .
- Goodyear, R., Fabian, A., Hay, J., 2011. Finding the crowding index that works best for New Zealand (Statistics New Zealand Working Paper No 11-04). Statistics New Zealand, Wellington.
- Howden-Chapman, P., 2015. Home Truths: Confronting New Zealand's Housing Crisis. Bridget Williams Books, Wellington, New Zealand.
- Jensen, J., 1978. Minimum income levels and income equivalence scales. Department of Social Welfare, Wellington.
- Jensen, J., 1988. Income equivalences and the estimation of family expenditures on children. Department of Social Welfare, Wellington.
- Statistics New Zealand, 2015. New Zealand definition of homelessness: 2015 update.
- Stats NZ, 2019a. Data sources, editing, and imputation in the 2018 Census. Stats NZ Tatauranga Aotearoa, Wellington, New Zealand.
- Stats NZ, 2019b. Targeted field strategies for the 2018 Census. Stats NZ.
- Stats NZ, 2020a. Housing in Aotearoa: 2020. NZ Govt,, New Zealand.
- Stats NZ, 2020b. Post-enumeration survey: 2018.
- Suei, S., 2016. Comparing income information from census and administrative sources. Statistics New Zealand, , Wellington, New Zealand.
- United Nations, 1948. Universal Declaration of Human Rights. United Nations, .
- White, V., Jones, M., Cowan, V., Chun, S., 2017. BRANZ 2015 House Condition Survey: Comparison of house condition by tenure, SR370.