



# Chronic health conditions among culturally and linguistically diverse Australians, 2021

Web report | Last updated: 08 Feb 2023 | Topic: [Culturally and linguistically diverse Australians](#) | [Media release](#)

## About

People from culturally and linguistically diverse (CALD) backgrounds are identified as a priority population in a number of key Australian Government health strategies. This web report is part of a program of work on the health status of CALD people in Australia and presents data on the prevalence of chronic conditions reported by CALD Australians in the Australian Bureau of Statistics' 2021 Census of Population and Housing.

Cat. no: PHE 320

### Findings from this report:

- This report provides detailed data and a comprehensive picture of the health status of CALD populations in Australia
  - [People born overseas generally had a lower prevalence of long-term health conditions than people born in Australia](#)
  - [Low English proficiency & more than 10 years in Australia was associated with a higher prevalence of chronic conditions](#)
  - The prevalence of specific chronic conditions varied depending on the measure of cultural and linguistic diversity used
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## Summary

In the 2021 Census of Population and Housing more than 7 million people living in Australia indicated they were born overseas and 6 million reported speaking a language other than English. For the first time, the Census collected information on selected long-term health conditions experienced by the Australian population.

This web report explores the prevalence of chronic health conditions by country of birth, time since arrival, main language used at home and English proficiency. It also presents data for these conditions by combinations of country of birth and time since arrival, language used at home and English proficiency and time since arrival and English proficiency.

For some conditions - asthma, cancer, mental health and lung conditions - all countries of birth had a similar or lower age-standardised prevalence than for the Australian-born population. For dementia, heart disease, stroke, diabetes and kidney disease there were many countries of birth with a higher prevalence than for the Australian-born population, particularly for people born in countries from regions such as Polynesia, South Asia and the Middle East. For example, Bangladesh-born Australians had the highest prevalence of both diabetes and heart disease (12% and 4.6%, respectively). Kidney disease was highest in people born in Polynesian countries such as Tonga (1.9%) and Samoa (1.5%).

For main languages use at home, the findings were similar to those for country of birth. For example, people who spoke Tongan or Māori (Cook Island) had the highest prevalence of diabetes and kidney disease, respectively.

The year of arrival in Australia and level of English proficiency were interacting factors that related to the prevalence of many long-term health conditions. A higher age-standardised prevalence of several long-term health conditions was observed among people who first arrived in Australia a greater number of years ago, particularly for arthritis, asthma, mental health and lung conditions. This finding was strongest for people who still had low English proficiency and had first arrived in Australia more than 10 years ago.

The prevalence of chronic health conditions increased with time since arrival across all conditions for most countries of birth. However, Iraq had a higher prevalence among more recent arrivals for multiple conditions, including dementia, heart disease and kidney disease. A lower English proficiency among people who spoke Arabic (the most common language spoken in Iraq) was also related to a higher prevalence of long-term health conditions.

The patterns observed are likely to reflect the diverse cultures, languages, migration trajectories, social and economic circumstances among culturally and linguistically diverse people in Australia.

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## Background

This report explores the prevalence of chronic health conditions reported by people from culturally and linguistically diverse (CALD) backgrounds in Australia using data on long-term health conditions and 4 CALD indicators collected through the Australian Bureau of Statistics (ABS) 2021 Census of Population and Housing.

Australia is one of the most culturally and linguistically diverse countries in the world and has grown to be even more multicultural in recent years. According to the 2021 Census of Population and Housing (the Census), more than 7 million people (28%) in Australia were born overseas - an increase from 6.1 million (26%) in 2016 (ABS 2022a). Between 2016 and 2021, the number of people who reported speaking a language other than English at home also increased from almost 5 million people in 2016 (22%) to around 6 million (23%). In 2021, 3.4% of the Australian population indicated they spoke English not well or not at all.

There is great heterogeneity among CALD people in Australia as they have diverse cultures, languages, and migration trajectories (Khatri and Assefa 2022). There is no universally accepted or official operational definition of CALD, and approaches to identifying and reporting on CALD populations are inconsistent between organisations (Pham et al. 2021). Country of birth (excluding 'main English-speaking countries') and language used at home are commonly used criteria for identifying people from CALD backgrounds (FECCA 2020). Consequently, significant numbers of people from CALD backgrounds, such as those who were born in Australia, were born in main-English speaking countries or who have good English language proficiency, may be under-represented in Australian reporting.

### Cultural and linguistic diversity and health

People from CALD backgrounds are identified as a priority population in multiple key Australian Government strategies (AIHW 2022). Some CALD populations face inter-connected health and social disadvantages, and greater challenges when dealing with the health-care system and services (Henderson et al. 2011; Khatri and Assefa 2022). For first generation immigrants, in the early years following migration, some people have relatively better health than the Australian-born population (known as the 'healthy migrant effect') due to the combination of health screening checks and strict eligibility requirements before they migrate and through immigrant self-selection, particularly under the skilled migration stream (AIHW 2018; Jatrana et al. 2017; Kennedy et al. 2006; Khatri and Assefa 2022; Kennedy et al. 2014). Some studies also suggest that the healthy migrant effect can disappear after immigrants have lived in a host country for a long time, and acculturation can vary for different immigrant populations depending on differences in education, income and language (AIHW 2018; Hamilton 2015; Jatrana et al. 2017). For more information on the healthy migrant effect, see the AIHW report [Reporting on the health of culturally and linguistically diverse populations in Australia: An exploratory paper](#).

The ABS (2022b) recommends the 'Standards for Statistics on Cultural and Language Diversity' (the Standards) to standardise the collection and reporting of information on CALD. The Standards include a Minimum Core set of indicators including *country of birth of person*, *main language other than English spoken at home*, *proficiency in spoken English* and *Indigenous status*. The Standards also recommend a set of non-core indicators, which includes *year of arrival in Australia*. For more information on other CALD indicators of the Standards, visit the ABS web page [Standards for Statistics on Cultural and Language Diversity, Australia](#).

Each CALD indicator has its unique strengths and limitations, and the use of a single indicator from the Standards is generally inadequate to account for the socio-cultural differences within the CALD population (ABS 1999; AIHW 2022). Combining the CALD indicators can provide additional information on a person's socio-cultural identity and a more accurate measure of cultural and language background and diversity.

The 2021 Census, for the first time, collected information on selected long-term health conditions experienced by the Australian population (ABS 2022c). The inclusion of long-term health conditions in the 2021 Census allows for the analysis of chronic health conditions reported by CALD populations at more detailed levels than is currently possible from existing health surveys, across a wide range of CALD indicators. A limitation is that the data rely on self-reported responses from a single question which may result in under-reporting compared to other interviewer-facilitated surveys using detailed sets of questions. See [Technical notes](#) for more details on long-term health conditions measured in the 2021 Census.

This report investigates the prevalence of long-term health conditions in relation to 4 CALD indicators collected in the 2021 Census, individually and in combination as follows:

- country of birth of person
- year of arrival in Australia
- language used at home
- proficiency in spoken English (if report a language used other than English)
- country of birth of person and year of Arrival in Australia
- year of arrival in Australia and proficiency in spoken English
- language used at home and proficiency in spoken English.

For more information on the CALD indicators used in this report, their strengths and limitations, see [Technical notes](#).

Although Aboriginal and Torres Strait Islander people are diverse in language and culture, their experiences and needs as First Australians are unique and are therefore considered distinct from the CALD population for the purposes of this report. For more on the health of Indigenous Australians, see *Indigenous Australians Overview*.

### Accounting for age effects

There is a strong association between the prevalence of chronic conditions and increasing age. In the 2021 Census, most long-term health conditions were more common in older age groups (ABS 2022d).

It is important to account for this age effect when comparing CALD groups in Australia as migration patterns have varied over time, including both the number of immigrants and the types of visas and countries which people have arrived from. This has produced different age structures for Australia's contemporary CALD population groups (Wilson et al. 2020). Therefore, differences in the prevalence of chronic conditions between CALD population groups could be due to their different age structures.

The influence on age structure is demonstrated in Table 1 showing the median ages for the 20 most common overseas countries of birth plus those born in Australia from the 2021 Census. In general, older immigrants are more likely to have been born in European countries, while younger immigrants are more likely to have arrived in Australia from Asian countries.

Table 1: Median age by country of birth, Census 2021

| Country                          | Males | Females | Persons |
|----------------------------------|-------|---------|---------|
| Australia                        | 33    | 35      | 34      |
| China (excludes SARs and Taiwan) | 39    | 40      | 39      |
| England                          | 57    | 58      | 58      |
| Germany                          | 67    | 65      | 66      |
| Greece                           | 73    | 75      | 74      |
| Hong Kong (SAR of China)         | 42    | 44      | 43      |
| India                            | 35    | 35      | 35      |
| Iraq                             | 40    | 39      | 40      |
| Italy                            | 71    | 73      | 72      |
| Lebanon                          | 54    | 55      | 54      |
| Malaysia                         | 41    | 43      | 42      |
| Nepal                            | 29    | 28      | 28      |
| New Zealand                      | 45    | 45      | 45      |
| Pakistan                         | 32    | 33      | 33      |
| Philippines                      | 39    | 42      | 41      |
| Scotland                         | 60    | 62      | 61      |
| South Africa                     | 45    | 45      | 45      |
| South Korea                      | 39    | 40      | 39      |
| Sri Lanka                        | 42    | 43      | 42      |
| USA                              | 40    | 38      | 39      |
| Vietnam                          | 49    | 46      | 48      |

#### Notes

1. Persons who were overseas visitors at the time of the Census were excluded from analysis.
2. Australia includes External Territories. South Korea reflects the 'Korea, Republic of (South)' and USA reflects the 'United States of America' classification of the SACC, 2016.

Source: Multi-Agency Data Integration Project (MADIP), 2006 - 2020, MADIP Modular Product, ABS DataLab. Findings based on use of MADIP Data.

The effects of age can be accounted for through presenting age-standardised results and explored by examining age-specific results; see [Technical notes](#) for information on age-standardisation. This report presents both crude and age-standardised percentages of people who reported having each of these conditions among the CALD populations described above.

The commentary on the findings in this report refers to the prevalence of long-term health conditions defined as the percentage of people who reported long-term health conditions in the 2021 Census. All comparisons are based on age-standardised results. However, crude prevalence results are also presented in the interactive data visualisations. Results for specific age groups can be found in [Data tables](#).

## References

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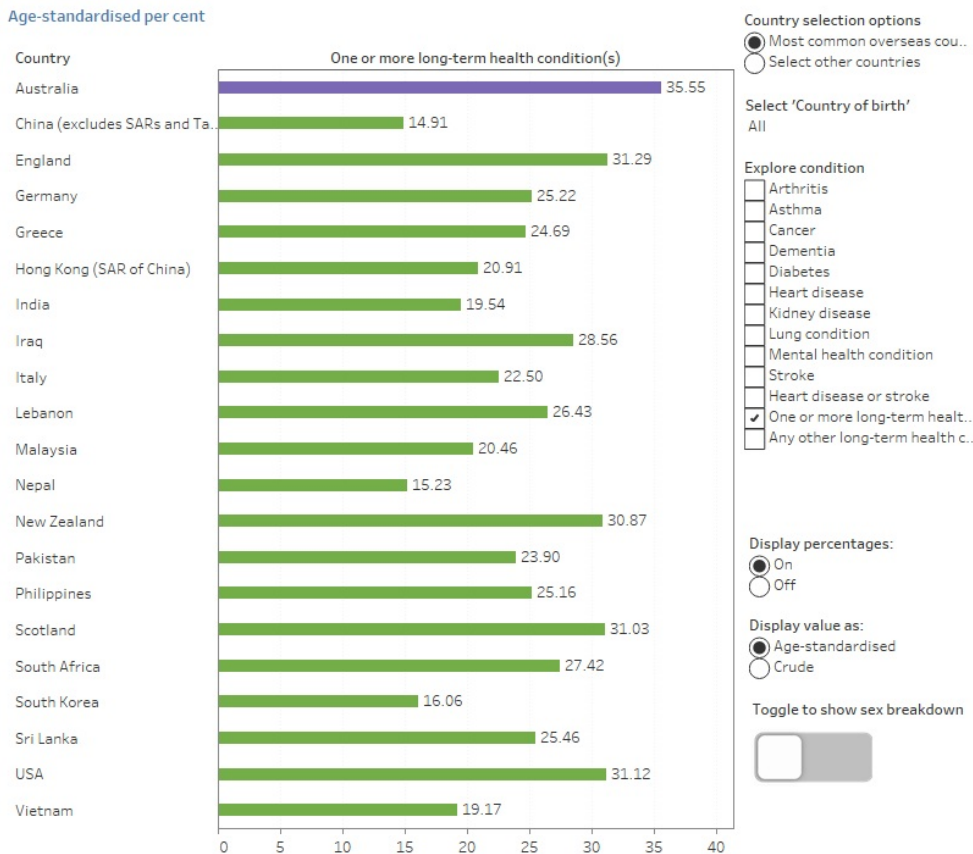
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## Country of birth

**Figure 1: Long-term health conditions by country of birth, by sex, 2021**

This graph shows the crude and age-standardised percentages of people reporting long-term health conditions in the 2021 Census, by country of birth and sex. Among the 20 most common overseas countries of birth, people born in Asian countries generally had a higher prevalence of diabetes, heart disease and kidney disease than for other conditions, while those born in Australia, English-speaking countries and European countries generally had a higher prevalence of arthritis, asthma, cancer, lung conditions and mental health conditions. Among all countries of birth reported in the Census, the prevalence of many conditions was high for people born in Polynesian countries Overall, there were variations between each condition and at the region level of country of birth.



Long-term health conditions by country of birth, by sex, 2021  
 Source: Multi-Agency Data Integration Project (MADIP), 2006 - 2020, MADIP Modular Product. ABS DataLab. Findings based on use of MADIP data. Supplementary Table S1.  
<https://www.aihw.gov.au>

[See notes >](#)

People born in Australia had the highest prevalence of at least one long-term health condition (36%).

When comparing the prevalence of one or more long-term health condition(s) between the 20 most common overseas countries of birth:

- People born in Iraq had the highest prevalence (29%) among the non-main English-speaking countries, followed by those born in Lebanon (26%) and Sri Lanka (25%)
- People born in China (15%), Nepal (15%) and South Korea (16%) had the lowest prevalence.

Coronary heart disease and dementia are 2 of the leading causes of disease burden in Australia (AIHW 2022). For these diseases, many of the 20 most common countries of birth populations had a higher prevalence than Australia. For example:

- People born in Pakistan had the highest prevalence of heart disease (4.6%), followed by those born in Iraq (4.0%) and Sri Lanka (3.9%). In comparison, people born in Australia had a prevalence of 3.6%.
- Those born in Italy had the highest prevalence of dementia (0.9%), followed by those born in Iraq (0.8%) and Vietnam (0.8%). In comparison, people born in Australia had a prevalence of (0.6%)

People born in Asian countries generally had a higher prevalence of diabetes, heart disease and kidney disease than for other conditions, while those born in Australia, English-speaking and European countries generally had a higher prevalence of arthritis, asthma, cancer, lung conditions and mental health conditions.

People born in some countries such as Iraq, Pakistan, Lebanon and Sri Lanka had some of the highest prevalence of many individual conditions, compared with the 20 most common overseas countries of birth and Australia. For example, people born in Iraq had the:

- highest percentage of reporting stroke (1.2%) and kidney disease (1.3%)
- third highest percentage of reporting arthritis (7.2%).

When the results were compared between all countries of birth as reported in the 2021 Census:

- the prevalence of many individual conditions including dementia, diabetes, heart disease, stroke and kidney disease were high for people born in Polynesian countries. This includes people born in Cook Islands and Tonga, who had the highest prevalence of stroke and kidney disease, respectively
- Bangladesh-born Australians had the highest prevalence of both diabetes and heart disease (12% and 4.6%, respectively).

## Reference

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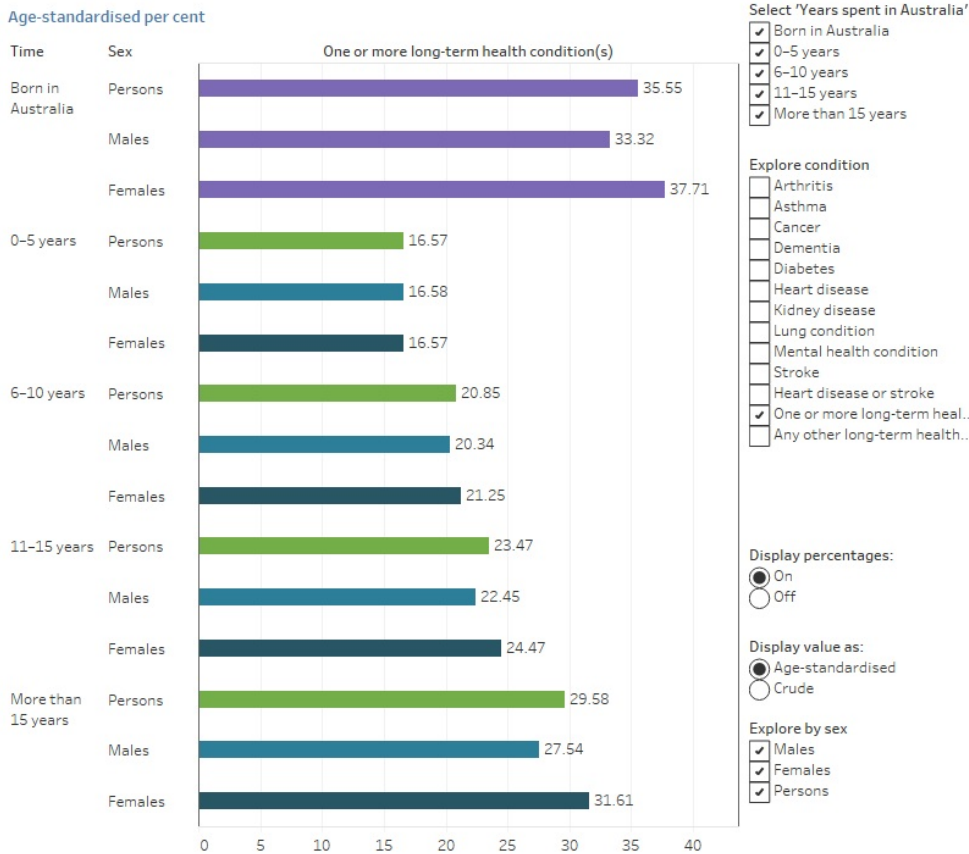
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## Time since arrival in Australia

Figure 2: Long-term health conditions by time since arrival in Australia, by sex, 2021

This graph shows the crude and age-standardised percentages of people reporting long-term health conditions in the 2021 Census, by time since arrival in Australia and sex. The age-standardised prevalence of an individual condition generally increased as the time since arrival in Australia increased, reducing the gap between the Australian-born and overseas-born populations. Overall, there were variations between each condition and time since arrival in Australia.



Long-term health conditions by years spent in Australia, by sex, 2021  
Source: Multi-Agency Data Integration Project (MADIP), 2006 - 2020, MADIP Modular Product. ABS DataLab. Findings based on use of MADIP data. Supplementary Table S2.  
<http://www.aihw.gov.au>

See notes >

The prevalence of long-term health conditions generally increased as the number of years since arriving in Australia increased, reducing the gap between the Australian-born and overseas-born populations.

For one or more condition(s), the prevalence increased from 17% for people who first arrived within the last 5 years before the 2021 Census to 30% for those who first arrived more than 15 years ago.

Compared to people who first arrived in Australia within the last 5 years, the prevalence of long-term health conditions among people who first arrived more than 15 years ago was:

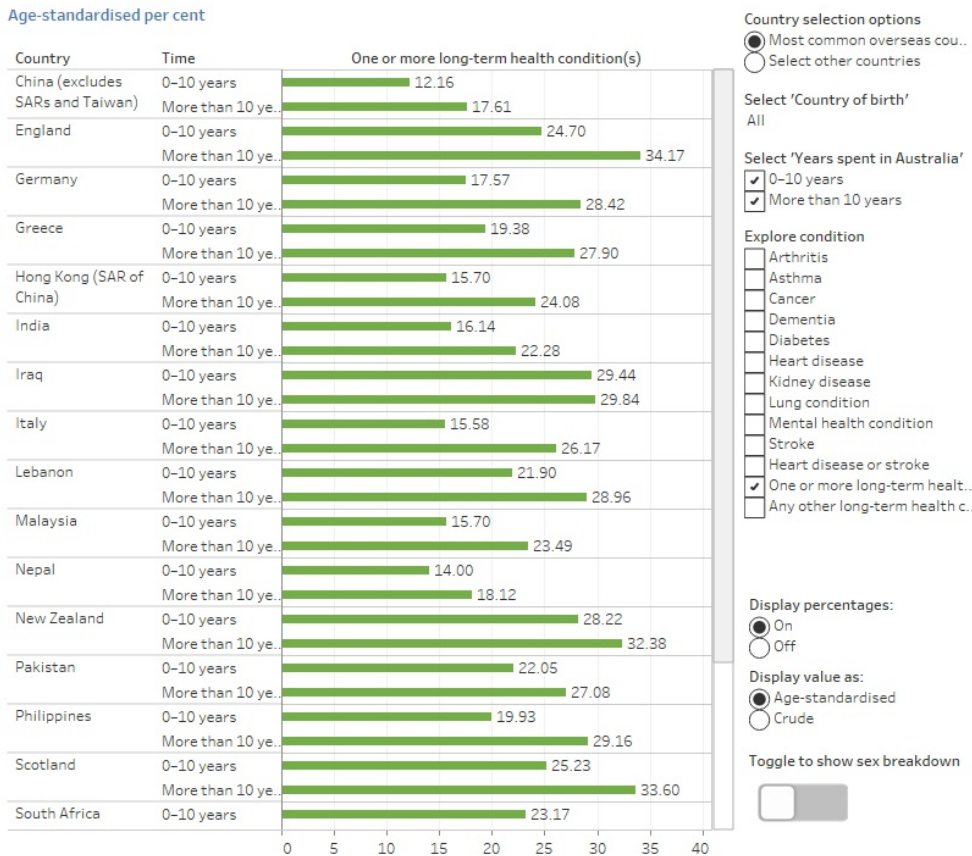
- 4 times as high for a mental health condition (8.2% and 2.1%, respectively)
- more than twice as high for arthritis (6.3% and 2.5%, respectively), asthma (7.2% and 2.7%, respectively) and lung conditions (1.1% and 0.46%, respectively).



## Country of birth and time since arrival

**Figure 3: Long-term health conditions by country of birth and time since arrival in Australia, by sex, 2021**

This graph shows the crude and age-standardised percentages of people reporting long-term health conditions in the 2021 Census, by country of birth, time since arrival in Australia and sex. In general, for all the 20 most common overseas countries of birth, except Iraq, the age-standardised prevalence of one or more long term health condition(s) increased as time since arrival in Australia increased. Overall, there were variations between each condition, and at the region level of country of birth and time since arrival in Australia.



Long-term health conditions by country of birth and time since arrival in Australia, by sex, 2021.  
 Source: Multi-Agency Data Integration Project (MADIP), 2006 - 2020, MADIP Modular Product. ABS DataLab. Findings based on use of MADIP data. Supplementary Table S3.  
<http://www.aihw.gov.au>

[See notes >](#)

For the 20 most common overseas countries of birth, except Iraq, the prevalence of one or more long-term health condition(s) increased as the time since arriving in Australia increased, even after accounting for age differences between the populations.

This pattern was generally consistent for individual long-term health conditions with some exceptions.

For people born in Iraq, the prevalence of most conditions showed little difference between people who arrived within the last 10 years (recent arrivals) and people who arrived more than 10 years (early arrivals) before the 2021 Census. Exceptions were cardiovascular disease, kidney disease and dementia, where there was a higher prevalence for recent arrivals compared with early arrivals:

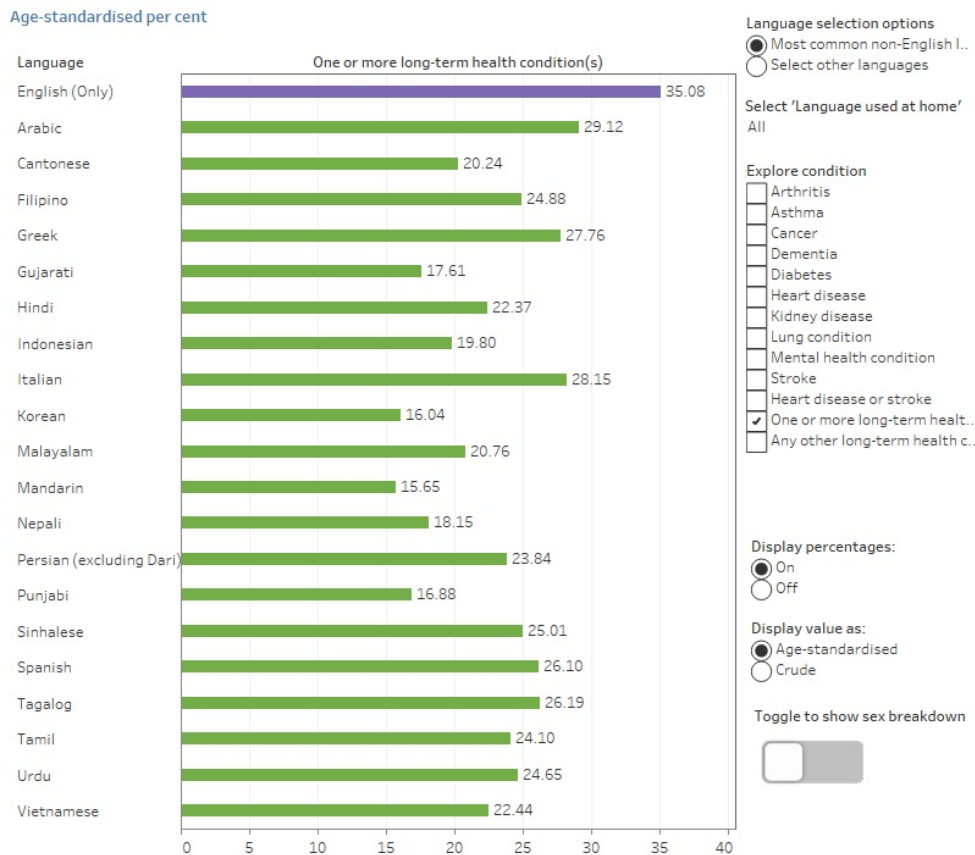
- heart disease: 4.9% and 3.5%
- kidney disease: 1.7% and 1.1%
- dementia: 1.0% and 0.7%.

People born in New Zealand and Pakistan also had a higher prevalence for dementia for recent (0.6%) compared with early (0.4%) arrivals.

## Language used at home

Figure 4: Long-term health conditions by language used at home, by sex, 2021

This graph shows the crude and age-standardised percentages of people reporting long-term health conditions in the 2021 Census, by language used at home and sex. People who spoke Asian languages had a relatively higher prevalence of diabetes, dementia, heart disease, stroke and kidney disease than for other conditions, while people who spoke some European languages had a relatively higher prevalence of arthritis, asthma, lung condition, cancer and mental health condition. Among all language groups reported in the Census, sign languages (such as AusLan), Tongan and Maori language groups had a higher prevalence for many conditions. Overall, there were variations between each condition and language used at home.



Long-term health conditions by language used at home, by sex, 2021  
 Source: Multi-Agency Data Integration Project (MADIP), 2006 - 2020, MADIP Modular Product. ABS DataLab. Findings based on use of MADIP data. Supplementary Table S4.  
<http://www.aihw.gov.au>

See notes >

Among the 20 most common non-English language groups, people who spoke Arabic (29%), Italian (28%), Greek (28%) and Tagalog (26%) had the highest prevalence of one or more long-term health condition(s), while those who spoke Punjabi (17%), Gujarati (18%), Korean (16%) and Mandarin (16%) had the lowest. People who spoke English (only) were more likely than the 20 most common non-English language population groups to report one or more long-term health condition(s) (35%).

People who spoke some specific non-English languages had a high prevalence of several long-term health conditions. For example, among the 20 most common non-English language groups, people who spoke:

- Urdu at home had the highest prevalence of diabetes (11%) and heart disease (4.8%)
- Arabic at home had the highest prevalence of kidney disease (1.2%) and stroke (1.0%).

People who spoke some Asian languages (such as Urdu, Tamil, Persian or Hindi) had a relatively higher prevalence of diabetes, dementia, heart disease, stroke and kidney disease than for other conditions, while people who spoke some European languages had a relatively higher prevalence of arthritis, asthma, lung conditions, cancer and mental health conditions.

When the results were compared between all languages used at home as reported in the 2021 Census, people who spoke:

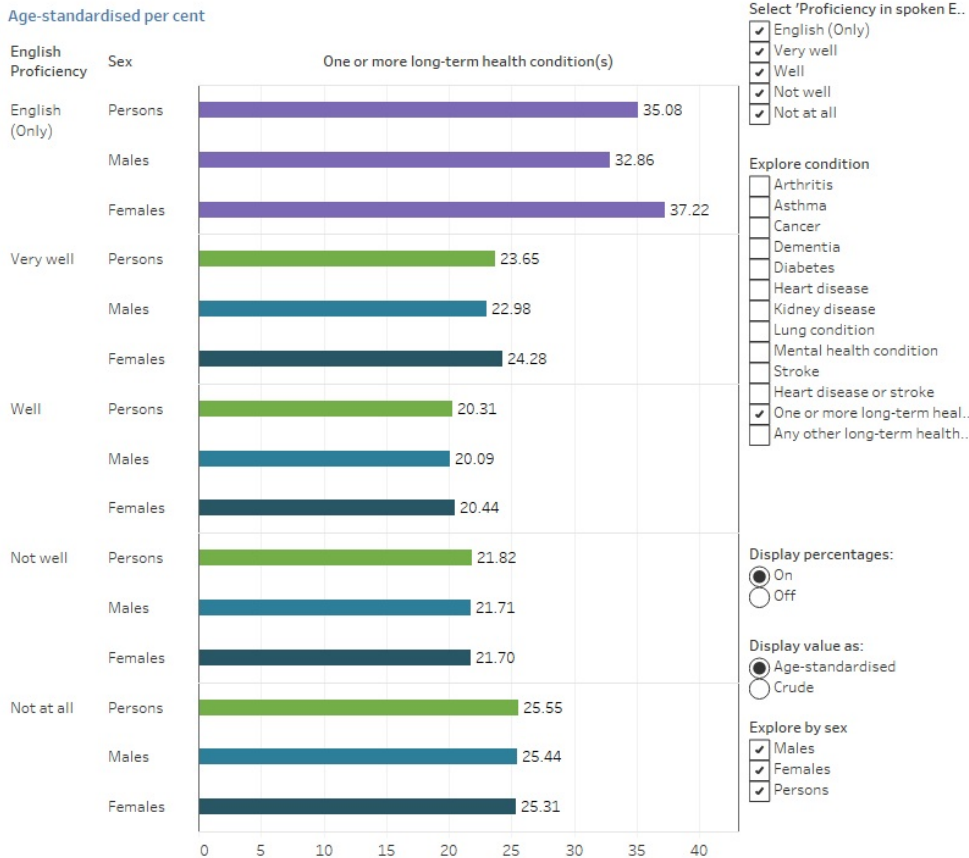
- sign languages (such as Auslan) had a relatively high prevalence of many conditions including arthritis, asthma, cancer, lung conditions, and mental health conditions
- Tongan and Māori (Cook Island) languages had the highest prevalence of diabetes and kidney disease, respectively.



## Proficiency in spoken English

Figure 5: Long-term health conditions by proficiency in spoken English, by sex, 2021

This graph shows the crude and age-standardised percentages of people reporting a long-term health condition in the 2021 Census, by proficiency in spoken English and sex. For most conditions, the prevalence was higher in those who did not speak English well or at all compared to those who spoke it well or very well. However, for asthma, the prevalence was lower in those who did not speak English well or very well compared with those who spoke it well or very well. Overall, there were variations between each condition and proficiency in spoken English.



Long-term health conditions by proficiency in spoken English, by sex, 2021  
 Source: Multi-Agency Data Integration Project (MADIP), 2006 - 2020, MADIP Modular Product. ABS DataLab. Findings based on use of MADIP data. Supplementary Table S5.  
<http://www.aihw.gov.au>

See notes >

For people who spoke a language other than English, the prevalence of one or more long-term health condition(s) had a U-shaped relationship with level of proficiency in spoken English:

- very well (24%)
- well (20%)
- not well (22%)
- did not speak English at all (26%).

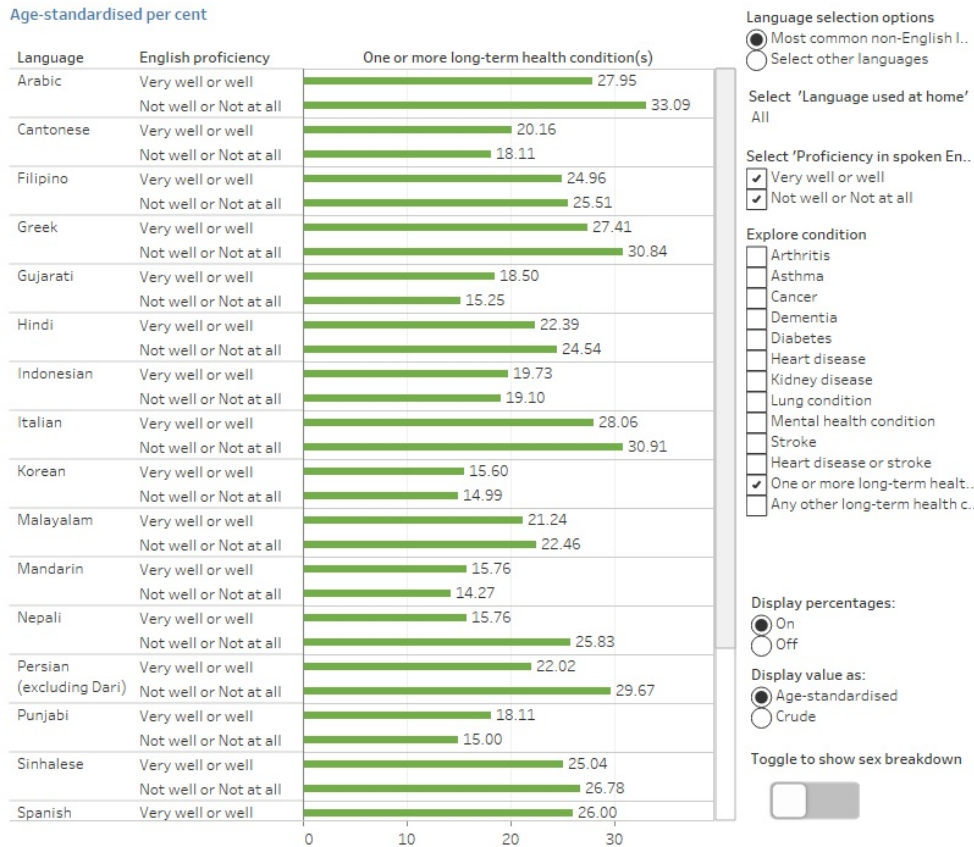
For most conditions, the prevalence was higher in those who did not speak English well or at all compared to those who spoke it well or very well, including dementia, kidney disease, lung conditions, mental health, stroke and heart disease.

However, for asthma, the prevalence was lower in those who did not speak English well or very well compared with those who spoke it well or very well.

## Language used at home and proficiency in spoken English

Figure 6: Long-term health conditions by language used at home and proficiency in spoken English, by sex, 2021

This graph shows the crude and age-standardised percentages of people reporting long-term health conditions in the 2021 Census, by language used at home and sex. The age-standardised percentages of reporting most individual conditions were generally higher for people with low English proficiency than those for individuals with high English proficiency. Overall, there were variations between each condition, language used at home and proficiency in spoken English.



Long-term health conditions by language used at home and proficiency in spoken English, by sex, 2021.  
 Source: Multi-Agency Data Integration Project (MADIP), 2006 - 2020, MADIP Modular Product, ABS DataLab. Findings based on use of MADIP data. Supplementary Table S6.  
<http://www.aihw.gov.au>

[See notes >](#)

People who spoke Arabic, Italian and Greek at home had the highest prevalence of one or more long-term condition(s) for those with high English proficiency (people who spoke English very well or well) and low English proficiency (people who did not speak English well or at all).

Among the 20 most common non-English language groups, the differences observed across levels of proficiency were similar to those observed in the analysis using the 'proficiency in spoken English' variable alone.

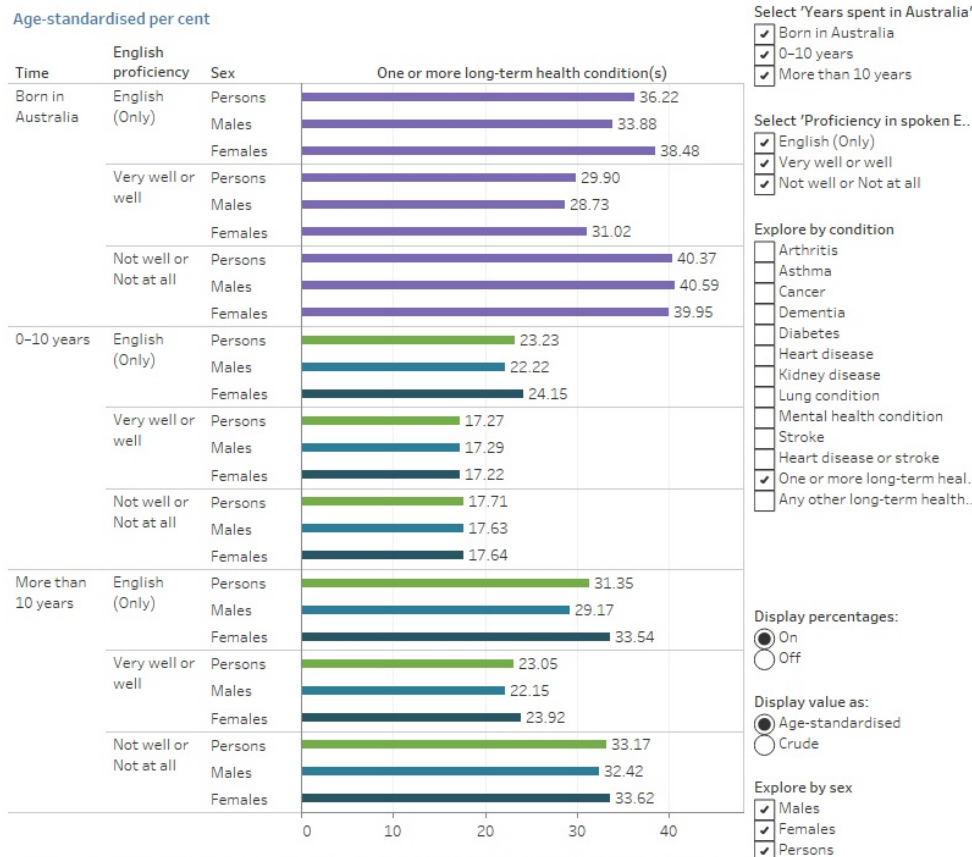
For some conditions (such as cancer and asthma), people with high English proficiency generally had a higher prevalence, compared with people with low English proficiency. For example, the prevalence of asthma was higher for people with high English proficiency among 19 out of the 20 most common non-English language groups (except Nepali).



## Time since arrival in Australia and proficiency in spoken English

Figure 7: Long-term health conditions by time since arrival in Australia and proficiency in spoken English, by sex, 2021

This graph shows the crude and age-standardised percentages of people reporting long-term health conditions in the 2021 Census, by time since arrival in Australia, proficiency in spoken English and sex. Among the early arrivals, the age-standardised percentage increased as the proficiency in spoken English decreased for all individual conditions except asthma. Among the recent arrivals, people with low English proficiency had higher percentages of reporting some individual conditions than those for people who only spoke English at home. Overall, there were variations between each condition, time since arrival in Australia and proficiency in spoken English.



Long-term health conditions by time since arrival in Australia and proficiency in spoken English, by sex, 2021.

Source: Multi-Agency Data Integration Project (MADIP), 2006 - 2020, MADIP Modular Product, ABS DataLab. Findings based on use of MADIP data. Supplementary Table S7. <http://www.aihw.gov.au>

[See notes >](#)

For early arrivals (people who first arrived more than 10 years before the 2021 Census), the prevalence of one or more long-term health condition(s) was higher for people with low English proficiency (33%) than for people with high proficiency (23%).

Early arrivals with low English proficiency also had a higher prevalence of some individual conditions than for people with high English proficiency, including dementia (1.3% for low and 0.5% for high proficiency, respectively) and mental health conditions (6.8% and 3.9%).

The pattern observed for early arrivals was similar for people born in Australia. In addition, there was a higher prevalence for people with low compared with high English proficiency for diabetes, heart disease, kidney disease, stroke and lung conditions.

For recent arrivals (people who first arrived 0-10 years before the 2021 Census), the prevalence of one or more long-term health condition(s) was similar for people who had high (17%) or low (18%) English proficiency .

The pattern for recent arrivals was similar for many individual conditions, except for asthma which was higher in recent arrivals with high English proficiency (2.8%) compared with low proficiency (1.7%). As seen for early arrivals, the prevalence of dementia and mental health conditions was higher for people with low compared to high English proficiency.



## Technical notes

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## Technical notes

This report used the Multi-Agency Data Integration Project (MADIP) extract of the 2021 Census of Population and Housing (Census), as at July 2022.

MADIP is a secure data asset combining information on healthcare, education, government payments, income and taxation, employment, and population demographics (including the Census) over time.

For more information on MADIP, see [Data Assets](#).

The Census provides a contemporary picture of Australian society every 5 years and an extensive geographic and sociodemographic coverage of the people who were usual residents of Australia on the Census night.

The 2021 Census was conducted on 10 August 2021; however, people could complete the Census between July and September 2021. The scope of the Census is every person present in Australia on Census night residing in private and non-private dwellings, with the exception of:

- people in Australian external territories (minor islands such as Heard and McDonald Island)
- foreign diplomats and their families
- foreign crew members on ships who remain on the ship and do not undertake migration formalities
- people leaving an Australian port for an overseas destination before midnight on Census Night.

The 2021 Census includes a new health topic to capture data about Australians reporting selected long-term health conditions. This allows for the analysis of long-term health conditions data at more detailed geographic and sub-population levels than ABS health surveys can support.

For more information on the 2021 Census, see [About the Census](#).

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## Technical notes

### Country of birth of person

'Country of birth of person' is coded using the 'Standard Australian Classification of Countries (SACC), 2016'. For more information on the 'Country of birth of persons' data item in the 2021 Census, see [Country of birth of person \(BPLP\)](#).

Country of birth is the most commonly used indicator of CALD, and the one for which most information is collected and reported (ABS 1999; AIHW 2022). It is easy to define and is consistent over time, however it has its limitations. For example, country of birth alone does not provide information on the year that people arrived in Australia, which can impact their familiarity with the Australian society and practices.

### Year of arrival in Australia

'Year of arrival in Australia' reports the year in which a person born overseas first arrived in Australia to live for one year or more. For more information on this indicator, see [Year of arrival in Australia \(YARP\)](#).

This report presents this information using 'Years spent in Australia', calculated as the difference between the year of arrival and the year of the 2021 Census. People who were born in Australia are also presented for comparison.

Two categorisations of 'Years spent in Australia' for people born overseas were used for the analyses presented in this report:

- '0-5 years', '6-10 years', '11-15 years' and 'more than 15 years'
- '0-10 years' and 'more than 10 years'

The latter was used where 'Years spent in Australia' was analysed in combination with other indicators, including 'Country of birth of person' and 'Proficiency in spoken English'. This approach maximised the number of populations to report without compromising the confidentiality and reliability of the data.

In this report, people who have spent '0-10 years' and 'more than 10 years' in Australia since first arrival are referred to as 'recent arrivals' and 'early arrivals', respectively

The length of time migrants have been in Australia can give an indication of how familiar they are with Australian society and health practices (ABS 1999; AIHW 2022). It is also useful to explore how the social characteristics of migrants change with length of time spent in Australia (ABS 1999). However, when used individually, it fails to inform on socio-cultural differences between the populations. It also does not take into account the fact that as an individual spends more time in the host country, their proficiency in the language can improve, thereby enhancing their ability to access healthcare (AIHW 2022).

### Country of birth of persons and Year of arrival combined

Combining the 'Country of birth of person' and 'Year of arrival' (analysed as 'Years spent in Australia') can provide useful information on the extent to which people who arrived in Australia from different countries have become familiar with the Australian society, practices, and the Australian health system (ABS 1999; AIHW 2022). It can also be useful for identifying how the health outcomes of people who born in the same country may have differed by their length of residence in Australia, and whether the differences in health outcomes between the overseas-born and the Australian-born populations has changed over time.

### Language used at home

'Language used at home' identifies whether a person uses a language other than English at home and if so, records the main non-English language which is used. This indicator is coded, using the 'Australian Standard Classification of Languages (ASCL), 2016'. For more information on the 'Language used at home' data item in the Census see [Language used at home \(LANP\)](#).

The language used at home indicator has unique strengths. It identifies a second language other than English and can inform the extent to which community languages are retained by their community or replaced by English and is a component of understanding ethnicity (ABS 1999; AIHW 2022). A limitation of this indicator is that it includes people whose first, main and most proficient language is English in a category with individuals whose use of a language other than English may only be marginal. It also fails to inform the differences in peoples' proficiency in English within a population who reported the same language as their main language other than English used at home.

### Proficiency in spoken English

'Proficiency in spoken English' in the 2021 Census was collected only for those who nominate speaking a language other than English at home and the indicator classifies a person's self-assessed proficiency in spoken English where they identified that they use a main language other than English at home. This item also includes the 'English (only)' category referring to people who use English only at home. For more information on the this Census data item, see [Proficiency in spoken English \(ENGLP\)](#).

Main results for 'Proficiency in spoken English' were presented at the most detailed level available from the 2021 Census, consisting of the categories: 'Very well', 'Well', 'Not Well' and 'Not at all'.

When 'Proficiency in spoken English' was analysed in combination with the 'Languages used at home' or the 'Years spent in Australia' indicators, it was categorised as 'Very well or well' and 'Not well or not all'. This approach maximised the number of populations to report without compromising the confidentiality and reliability of the data.

Proficiency levels of spoken English are referred to as high ('very well or well') and low ('not well or not at all') in this report.

This information is useful to identify those who may experience barriers in accessing services due to their lack of ability in spoken English (ABS 1999). It is important to note that the indicator does not provide information on other aspects of communication such as listening, reading, and writing, which are also relevant to understanding health information. Additionally, a person's assessment of their ability to speak English is subjective, as different people may have different requirements for spoken English proficiency in everyday life (ABS 1999; AIHW 2022).

### Language used at home and Proficiency in spoken English combined

The 'Language used at home' indicator in the 2021 Census provides information on ethnicity that cannot be collected from the 'Proficiency in spoken English' indicator at the same level of detail, while 'Proficiency in spoken English' can inform on potential disadvantage when accessing services or programs.

There may be differences in proficiency in spoken English within a population who share the same language, and across the different populations grouped by the languages used at home. In 2021, around 1 in 3 (30.5%) Australians who used Vietnamese as the main language other than English at home did not speak English well or at all, compared with around 1 in 11 (8.8%) of those who used Punjabi at home (ABS 2022a).

Combining language used at home with proficiency in spoken English can help understand differences in health service or program access between CALD groups.

### Proficiency in spoken English and Year of arrival combined

Combining the proficiency in spoken English and the year of arrival data may provide information on migrants for whom English language proficiency may have been a barrier to access health services over longer periods of time (ABS 1999; AIHW 2022). It can help account for the differences in potential disadvantage between population groups by the years spent in Australia.

### Additional information

The relevant sections of this report focus on the results for the most common 20 countries of birth other than Australia and the most common 20 languages used at home other than English. However, results for all countries of birth and all languages used at home (as coded in and reported by the corresponding Census indicators) are also included in the corresponding interactive data visualisations. The most common 20 countries of birth other than Australia and the most common 20 languages used at home other than English in Australia are referred to as the 'most common 20 overseas countries of birth' and the 'most common 20 non-English language groups', respectively, throughout this report. The term 'language group' used in this report refers to a population grouped by the specific language (e.g., Arabic as indicated in the Census, rather than a group of languages originating from the same region (e.g., Middle Eastern Semitic languages).

This report presents the 'Country of birth of persons' and 'Language used at home' at the most detailed level of their corresponding classifications, as well as the following 'supplementary codes and categories' included in these indicators:

- **'so described'** - these categories hold responses that are broader than the highest category of the variable
- **'not elsewhere classified (nec)'** - these categories are used for responses where there isn't a specific category in the classification
- **'not further defined (nfd)'** - these categories are used when enough information exists to partially code a response, but there is not enough information to code it to the most detailed category in the classification

For more information on supplementary codes and categories used in Census indicators, visit [Understanding supplementary codes in Census variables](#).

## Technical notes

Long-term health conditions are diagnosed by a doctor or nurse, last six months or longer and include health conditions that:

- may recur from time to time, or
- are controlled by medication, or
- are in remission.

These variables record the type of selected long-term health condition(s) a person has reported. Respondents can record multiple long-term health conditions including:

- arthritis
- asthma
- cancer (including remission)
- dementia (including Alzheimer's)
- diabetes (excluding gestational diabetes)
- heart disease (including heart attack or angina)
- kidney disease
- lung condition (including COPD or emphysema)
- mental health condition (including depression or anxiety)
- stroke
- any other long-term health condition(s).

This report also presents data for those who had at least one long-term health condition (including any other long-term health conditions) and those who reported having 'heart disease or stroke'. A limitation of the long-term health condition variables in the 2021 Census is that the data rely on the responses from a single question, unlike the ABS surveys that have a detailed set of questions to capture the information on the conditions more accurately.

For more information on the purpose, collection method, advantages and limitations of the long-term health conditions in the Census see [\*Comparing ABS long-term health conditions data sources\*](#).

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## Technical notes

The 'Sex' variable in the 2021 Census is based on a person's sex characteristics, such as their chromosomes, hormones and reproductive organs (ABS 2022b). While typically based upon the sex characteristics observed and recorded at birth or infancy, a person's sex can change over the course of their lifetime and may differ from their sex recorded at birth (AIHW 2022). For more information on the 'Sex' variable in the 2021 Census, see [Sex \(SEXP\)](#).

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## Technical notes

### Crude percentage

Crude percentages are calculated as the number of people with a particular characteristic in a population under study, divided by the number of people in that population, multiplied by 100. In this report, crude percentages based on denominators less than 100 people were not considered reliable and not presented (marked n.p.).

### Age-standardised percentage

Age standardisation is a method of reducing the influence of age when comparing two or more populations with different age structures. In this report, the direct age-standardisation approach was used. Direct age standardisation applies the age-specific results to a 'standard population' in order to determine the proportion or rate that would have occurred if the populations under study had the same age distribution as the 'standard population'. The method provides the age-standard proportions or rates as single summary measures. The 2001 Australian Standard Population was used to calculate age-standardised proportions and age-standardised rates.

Results based on small populations, or a small number of events are unreliable and exhibit a large amount of random variation. Age-standardised proportions were not presented (marked 'n.p'), if the total number of events was less than 20 over all age groups or the denominator was less than 30 in any one age group, for any population under study.

Direct standardisation may not remove all confounding and produce precise age adjustment if the categories used are not sufficiently narrow. Conversely, age groups that are too fine can introduce excessive volatility into the age-standardised rates. Having no events in an age group can produce misleading results, since cells with zero events are assumed to have zero variance, resulting in an underestimation of the true variance. For many populations of interest, the number of events was zero at some specific ages, particularly younger ages, regardless of the health outcome. 10-year age groupings starting with the age group 0-17, and 18-34 up to age 75 and over were used to calculate the age-standardised percentages.

Throughout this report, the age-standardised percentage is referred to as 'prevalence'.

### Age-specific percentage

Age-specific percentages are useful for comparing the results across age groups when results are strongly age-dependent. The age-specific proportions are calculated by dividing the number of events occurring in each specified age group in a population of interest by the total number of people in the same age group of that corresponding population, multiplied by 100.

The comparison of age-specific results can be cumbersome when it requires many comparisons. Additionally, breaking the data further by the age groups, can lead to many small populations that have insufficient size to maintain the confidentiality and the reliability of the data. In order to maximise the number of populations to report, the age-specific percentages were calculated, using the broad age groups, 0-44, 45-64 and 65 and over.

### Suppressions

Analyses were conducted through the ABS DataLab, which is a secure environment, allowing virtual access to files for the users to undertake real time analysis of data, including the 2021 Census, in MADIP. Analytical outputs are required to be vetted by the ABS before being cleared outside the DataLab. In this report, some data are suppressed and not presented (marked n.p.) based on the requirements of the ABS to manage confidentiality.

For more information on the ABS DataLab, and its 'Output rules', see [DataLab](#).

## Technical notes

Table: Abbreviations and descriptions

| Term   | Description                                     |
|--------|---|
| ABS    | Australian Bureau of Statistics                 |
| ASCL   | Australian Standard Classification of Languages |
| AIHW   | Australian Institute of Health and Welfare      |
| SACC   | Standard Australian Classification of Countries |
| CALD   | Culturally and Linguistically Diverse           |
| Census | Census of Population and Housing                |
| COPD   | Chronic obstructive Pulmonary disease           |
| MADIP  | Multi-Agency Data Integration Project           |
| nec    | not elsewhere classified                        |
| nfd    | not further defined                             |
| n.p    | not presented                                   |
| USA    | United States of America                        |

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## Technical notes

ABS (Australian Bureau of Statistics) (1999) *Standards for statistics on Cultural and Language Diversity*, ABS website, accessed 22 August 2022.

ABS (2022a) *Cultural diversity of Australia*, ABS website, accessed 22 August 2022.

ABS (2022b) *Sex (SEXP)*, ABS website, accessed 1 November 2022.

Australian Institute of Health and Welfare (2022) *Reporting on the health of culturally and linguistically diverse populations in Australia: An exploratory paper*, AIHW, Australian Government, accessed 17 October 2022. doi:10.25816/fd8z-0b84.

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## Notes

### Data quality statement

For information on 2021 Census of Population and Housing data quality, see [Quality declaration](#).

### Amendment

**10 January 2023** - One change made to correct a minor typo for one of the age groups that was incorrectly specified as 45-54 which should be 45-64. The change was made in the Age-specific percentage section under Technical notes - Measures.

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# Data

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## Related material

### Resources

### Related topics

- [Cancer](#)
  - [Chronic disease](#)
  - [Chronic kidney disease](#)
  - [Chronic musculoskeletal conditions](#)
  - [Chronic respiratory conditions](#)
  - [Dementia](#)
  - [Diabetes](#)
  - [Heart, stroke & vascular diseases](#)
  - [Mental health](#)
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