

Aboriginal and Torres Strait Islander Social Health Atlas of Australia: Notes on the Data

Published: October 2019

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General information

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Geographical structures

For information regarding the geographies available, refer to the [geographical structures](#) information.

Statistical information

For information on the statistics presented, refer to the [statistical information](#) available from the PHIDU website.

Terminology

'Aboriginal' and 'Indigenous Australians' refer to Aboriginal and Torres Strait Islander people.

Notes on the Data: Indicators and Data sources

Age distribution, estimated resident population, 2016

- Aboriginal male/ female/ total population by 5 year groups: 0-4 years to 65+ years, estimated resident population, 2016
- *by IARE, Remoteness*

Indicator detail: The data presented are the age/ sex group total as a per cent of the total Aboriginal male/ female/ total population in each age/sex group.

There is a substantial difference between the Census counts of Aboriginal and Torres Strait Islander Australians and the estimated resident population (ERP), adjusted for net undercount as measured by the Post Enumeration Survey undertaken by the ABS (the ERP is 17.5% higher for Australia than the Census count). Given this difference, and as the ABS has not released Aboriginal ERP by age at the Indigenous Area level used in the Social Health Atlases, PHIDU has produced an estimated resident population at 2016. This is of particular importance for the calculation of rates of hospitalisation, mortality etc.

The ERP for June 2016 for Aboriginal populations is available from the ABS for Statistical Areas Level 2 (SA2, total population only): PHIDU concurred the SA2 populations to produce a 2016 ERP for each IARE (total population only). The ERP for 2016 is available by Indigenous Region (IREG), by 5-year age group. To produce estimated resident populations by age group for each IARE, PHIDU applied the proportional age distribution from the Census counts (usual resident population) in each IARE to the ERP total for the IARE.

Source: Developed by PHIDU, using the method as noted above

Indigenous status, estimated resident population, 2016

- Aboriginal population as a proportion of total population, estimated resident population, 2016
- *by IARE, Quintiles, Remoteness*

Indicator detail: The data presented are the number of Aboriginal people as a proportion of the total Australian population.

There is a substantial difference between the Census counts of Aboriginal and Torres Strait Islander Australians and the estimated resident population (ERP), adjusted for net undercount as measured by the Post Enumeration Survey undertaken by the ABS (the ERP is 17.5% higher for Australia than the Census count). Given this difference, and as the ABS has not released Aboriginal ERP by age at the Indigenous Area level used in the Social Health Atlases, PHIDU has produced an estimated resident population at 2016. This is of particular importance for the calculation of rates of hospitalisation, mortality etc.

The ERP for June 2016 for Aboriginal populations is available from the ABS for Statistical Areas Level 2 (SA2, total population only): PHIDU concurred the SA2 populations to produce a 2016 ERP for each IARE (total population only). The ERP for 2016 is available by Indigenous Region (IREG), by 5-year age group. To produce estimated resident populations by age group for each IARE, PHIDU applied the proportional age distribution from the Census counts (usual resident population) in each IARE to the ERP total for the IARE.

Source: Developed by PHIDU, using the method as noted above

Indigenous status by age, estimated resident population, 2016

- [Aboriginal population as a proportion of total population by 5 year groups: 0-4 years to 65+ years, estimated resident population, 2016](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail: The data presented are the number of Aboriginal people in each 5 year age group as a proportion of the total Australian population.

There is a substantial difference between the Census counts of Aboriginal and Torres Strait Islander Australians and the estimated resident population (ERP), adjusted for net undercount as measured by the Post Enumeration Survey undertaken by the ABS (the ERP is 17.5% higher for Australia than the Census count). Given this difference, and as the ABS has not released Aboriginal ERP by age at the Indigenous Area level used in the Social Health Atlases, PHIDU has produced an estimated resident population at 2016. This is of particular importance for the calculation of rates of hospitalisation, mortality etc.

The ERP for June 2016 for Aboriginal populations is available from the ABS for Statistical Areas Level 2 (SA2, total population only): PHIDU concorded the SA2 populations to produce a 2016 ERP for each IARE (total population only). The ERP for 2016 is available by Indigenous Region (IREG), by 5-year age group. To produce estimated resident populations by age group for each IARE, PHIDU applied the proportional age distribution from the Census counts (usual resident population) in each IARE to the ERP total for the IARE.

Source: Developed by PHIDU, using the method as noted above

Education

- [Aboriginal early school leavers who left school at Year 10 or below, or did not go to school, 2016](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail:

The data are presented as an age-standardised rate, to adjust for the changing rates of educational opportunity and participation faced by subsequent generations of the population.

The data presented are the number of Aboriginal persons who left school at Year 10 or below, or did not go to school as a proportion of all Aboriginal people aged 16 years and over.

Note that the extent to which those who have left school at this age to enter the labour force is not accounted for in these data. In addition, the numerator excludes the 9.5% of the population aged 15 years and over whose highest year of school was not stated: however, these records are included in the denominator.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016.

- [Aboriginal full-time participation in secondary school education at age 16, 2016](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail:

As data covering all sectors (government, non-government, Catholic and independent) are not available at the small area level from State and Territory education authorities, the data used in this analysis are from the 2016 Australian Bureau of Statistics (ABS) Population Census. As such, they are not official estimates of participation at age 16 in full-time secondary education. However, they are useful in showing the extent of variations between areas, by socioeconomic status and by remoteness.

The data presented are the number of 16 year old Aboriginal young people in full-time secondary school education, as a proportion of all Aboriginal people 16 years of age.

Secondary school is either Government, Catholic or other Non Government schools.

Note that percentages may be more than 100% due to the ABS' randomisation of both the numerator and denominator for confidentiality purposes.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016.

- [Aboriginal participation in vocational education and training, 2017](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail:

Inclusions

Vocational education and training (VET) data includes all VET activity delivered in Australia to Australian residents by government providers (TAFE institutes, Universities and other government providers), community education providers, enterprise providers, private training providers and schools.

Note that student counts may be inflated as it is possible for students to attend multiple training providers within one collection period.

Source: Compiled by PHIDU based on data from the National Centre for Vocational Education Research Ltd., 2017; and the Aboriginal estimated resident population as at 30 June 2016, developed by PHIDU based on the ABS Estimates of Aboriginal and Torres Strait Islander Australians, June 2016.

- Load Pass Rate of vocational education and training subjects for Aboriginal students, 2017
- by IARE, Quintiles, Remoteness

Indicator detail:

Inclusions

Vocational education and training (VET) data includes all VET activity delivered in Australia to Australian residents by government providers (TAFE institutes, Universities and other government providers), community education providers, enterprise providers, private training providers and schools.

Definitions

Funding source

Vet activity is reported as government-funded if the activity received Commonwealth and state funding, and privately-funded if domestic fee-for-service. Funding source is attributed irrespective of VET provider.

Load Pass Rate

The load pass rate (LPR) is the ratio of hours, or full-year training equivalents (FYTEs), attributed to students who gain competencies/passed assessment in an assessable module or unit of competency to all students who were assessed and either passed, failed or withdrew. The calculation is based on the annual hours (or FYTEs) for each assessable module or unit of competency and includes competencies achieved/units passed through recognition of prior learning (RPL).

The calculation for LPR is as follows:

Competency achieved passed + RPL granted, as a proportion of

Competency achieved passed + Competency not achieved failed + Withdrawn discontinued + RPL granted.

Source: Compiled by PHIDU based on data from the National Centre for Vocational Education Research Ltd., 2017.

Early childhood development: Australian Early Development Census indicators, 2009, 2012 and 2015

- Aboriginal children assessed as developmentally vulnerable on one or more domains, 2009, 2012 and 2015
- by IARE
- Aboriginal children assessed as developmentally vulnerable on two or more domains, 2009, 2012 and 2015
- by IARE
- Aboriginal children assessed as developmentally vulnerable in the physical health and wellbeing domain, 2009, 2012 and 2015
- by IARE
- Aboriginal children assessed as developmentally vulnerable in the social competence domain, 2009, 2012 and 2015
- by IARE
- Aboriginal children assessed as developmentally vulnerable in the emotional maturity domain, 2009, 2012 and 2015
- by IARE
- Aboriginal children assessed as developmentally vulnerable in the language and cognitive (school based) domain, 2009, 2012 and 2015
- by IARE
- Aboriginal children assessed as developmentally vulnerable in the communication skills and general knowledge domain, 2009, 2012 and 2015
- by IARE

Indicator detail: The AEDC results report on the number of children scoring in the following percentile ranges: 0 to 10th percentile (developmentally vulnerable), 11th to 25th percentile (developmentally at risk) and above the 25th percentile (developmentally on track).

The PHIDU data are presented for children identified as being of Aboriginal and Torres Strait Islander origin who were:

- developmentally vulnerable (0 to 10th percentile) on one or more domains;
- developmentally vulnerable (0 to 10th percentile) on two or more domains;

and who were assessed as being developmentally vulnerable (0 to 10th percentile) in the following domains:

- Physical health and wellbeing domain
- Social competence domain
- Emotional maturity domain
- Language and cognitive skills (school-based) domain
- Communication skills and general knowledge domain

Data are not shown for areas where one or more of the following have been met:

- less than fifteen children had valid AEDC scores;

- less than two teachers had completed the AEDC instrument for children in that location;
- the AEDC instrument was completed for less than 80% of all non-special needs children;
- three or fewer Aboriginal children were assessed;
- 90 per cent or more of a population group is considered developmentally vulnerable in any domain or subdomain; or
- for New South Wales only, data are not shown where the number of developmentally vulnerable children number is between one and five inclusively.

Additional minor suppressions have also occurred where necessary to preserve confidentiality of related suppressed cells.

Notes:

1. The data supplied for Boulia - Diamantina - Winton and Carpentaria - Burke - Mornington were grouped communities, as were the raw data for Ceduna and Ceduna - West Coast. The data presented here are of these grouped communities.
2. In the raw data provided, where 90 per cent or more of a population group is considered developmentally vulnerable in any domain or subdomain, the number and percentage of children vulnerable was grouped to '90 per cent and over'. This applies to Domain Indicators (developmentally vulnerable category) and Vulnerability Summary Indicators (DV1 and DV2) and is to prevent the identification of individual children as developmentally vulnerable. In these instances, PHIDU have not shown data for these areas.
3. Data for 2015 are new and for 2009 and 2012 are revised

Source: Compiled by PHIDU based on data from the 2009, 2012 and 2015 Australian Early Development Censuses, provided by the Australian Government Department of Education and Training.

Learning or Earning, 2016

- [Aboriginal 15 to 24 year olds engaged in school, work or further education/training, 2016](#)
- by IARE, Quintiles, Remoteness

Indicator detail: The data presented are Aboriginal 15 to 24 year olds engaged in school, work or further education/training, as a proportion of all Aboriginal 15 to 24 year olds.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016

Families, 2016

- [Aboriginal single parent families with children aged less than 15 years, 2016](#)
- by IARE, Quintiles, Remoteness

Indicator detail: The data presented are one parent families with children under 15 years where at least one family member at home on Census night was an Aboriginal or Torres Strait Islander person (may include families with dependent students and non-dependents), as a proportion of all Aboriginal families with children under 15 years.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016

- [Aboriginal low income families, 2016](#)
- by IARE, Quintiles, Remoteness

Indicator detail: The data presented are families with at least one Aboriginal person counted at home on Census night and with an income under \$26,000 p.a, as a proportion of all Aboriginal families.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016

- [Aboriginal jobless families with children aged less than 15 years, 2011](#)
- by IARE, Quintiles, Remoteness

Indicator detail: The data presented are families with at least one Aboriginal person counted at home on Census night and either couple families with children under 15 years in which two persons whose relationship in the household was "husband, wife or partners (including same-sex partners)" reported their labour force status as "unemployed" or "not in the labour force"; or in which the lone parent in the family reported their labour force status as "unemployed" or "not in the labour force".

Source: Compiled by PHIDU based on the ABS Census 2011 data.

- [Children aged less than 15 years in Aboriginal jobless families, 2011](#)
- by IARE, Quintiles, Remoteness

Indicator detail: The data presented are children aged less than 15 years in families with at least one Aboriginal person counted at home on Census night and either couple families with children under 15 years in which two persons whose relationship in the household was "husband, wife or partners (including same-sex partners)" reported their labour force status as "unemployed" or "not in the labour force"; or in which the lone parent in the family reported their labour force status as "unemployed" or "not in the labour force".

Source: Compiled by PHIDU based on the ABS Census 2011 data.

Housing, 2016

- [Private dwellings rented by Aboriginal households from the government housing authority, 2016](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail: A private dwelling can be a house, flat or even a room. It can also be a caravan, houseboat, tent, or a house attached to an office, or rooms above a shop.

An Aboriginal household is any household where at least one usual resident at home on Census night was an Aboriginal or Torres Strait Islander person.

The data presented are of private dwellings rented by Aboriginal households from the government housing authority, as a proportion of all private dwellings with Aboriginal households.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016

- [Private dwellings rented by Aboriginal households from a housing co-operative, community or church group, 2016](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail: A private dwelling can be a house, flat or even a room. It can also be a caravan, houseboat, tent, or a house attached to an office, or rooms above a shop.

An Aboriginal household is any household where at least one usual resident at home on Census night was an Aboriginal or Torres Strait Islander person.

The data presented are of private dwellings rented by Aboriginal households from a housing co-operative, community or church group, as a proportion of all private dwellings with Aboriginal households.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016

- [Housing suitability, 2016](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail: The criteria used to derive the variable are based on the Canadian National Occupancy Standard for housing appropriateness and are sensitive to both household size and composition. The measure assesses the bedroom requirements of a household by specifying that:

- there should be no more than two persons per bedroom
- children less than five years of age of different sexes may reasonably share a bedroom
- children less than 18 years of age and of the same sex may reasonably share a bedroom
- single household members 18 years and over should have a separate bedroom, as should parents or couples and
- a lone person household may reasonably occupy a bed-sitter.

A private dwelling can be a house, flat or even a room. It can also be a caravan, houseboat, tent, or a house attached to an office, or rooms above a shop.

An Aboriginal household is any household where at least one usual resident was an Aboriginal or Torres Strait Islander person.

The data presented are of dwellings rented by Aboriginal households requiring extra bedrooms, as a proportion of all private dwellings with Aboriginal households.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016

- [Aboriginal persons living in crowded dwellings, 2016](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail: Aboriginal persons living in dwellings assessed as crowded according to the Canadian National Occupancy Standard. The measure assesses the bedroom requirements of a household, accounting for both household size and composition, specifying that:

- there should be no more than two persons per bedroom
- children less than five years of age of different sexes may reasonably share a bedroom
- children less than 18 years of age and of the same sex may reasonably share a bedroom
- single household members 18 years and over should have a separate bedroom, as should parents or couples and
- a lone person household may reasonably occupy a bed-sitter.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016

- [Aboriginal persons living in severely crowded dwellings, 2016](#)
- [by IARE, Quintiles, Remoteness](#)

Indicator detail: Aboriginal persons living in dwellings assessed as needing four or more additional bedrooms to accommodate all persons currently living in the household, according to the Canadian National Occupancy Standard (see Persons living in crowded dwellings above).

Severely crowded households are one of the six Homeless Operational Groups developed by the ABS to estimate homelessness. This is because people living in severe overcrowding are considered to lack of control of and access to space for social relations (one of the key elements of the ABS definition of homelessness) and are considered not to have accommodation alternatives when remaining in such extreme living arrangements (ABS, 2012).

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016.

Internet access at home, 2016

- Private dwellings with Aboriginal households, and Internet not accessed at dwelling, 2016
- *by IARE, Quintiles, Remoteness*
- Private dwellings with Aboriginal households, and Internet accessed at dwelling, 2016
- *by IARE, Quintiles, Remoteness*
- Private dwellings with Aboriginal households with children, and Internet not accessed at dwelling, 2016
- *by IARE, Quintiles, Remoteness*
- Private dwellings with Aboriginal households with children, and Internet accessed at dwelling, 2016
- *by IARE, Quintiles, Remoteness*

Indicator detail: The data record whether any member of the household accesses the Internet from the dwelling. This includes accessing the internet through a desktop/laptop computer, mobile or smart phone, tablet, music or video player, gaming console, smart TV or any other device. It also includes accessing through any type of connection for example ADSL, fibre, cable, wireless, satellite and mobile broadband (3G/4G).

A private dwelling can be a house, flat or even a room. It can also be a caravan, houseboat, tent, or a house attached to an office, or rooms above a shop.

An Aboriginal household is any household where at least one usual resident was an Aboriginal or Torres Strait Islander person.

Source: Compiled by PHIDU based on the ABS Census of Population and Housing, August 2016

Labour force, 2016

- Aboriginal unemployment, 2016
- *by IARE, Quintiles, Remoteness*

Source: Compiled by PHIDU based on the ABS Census 2016 data.

- Aboriginal female labour force participation, 2016
- *by IARE, Quintiles, Remoteness*

Source: Compiled by PHIDU based on the ABS Census 2016 data.

Summary measure of Indigenous outcomes, 2016

- Indigenous Relative Socioeconomic Outcomes Index, 2016
- *by IARE, Remoteness*

Indicator detail: The Indigenous Relative Socioeconomic Outcomes index (IRSEO) is an Indigenous specific index derived by the Centre for Aboriginal Economic Policy Research (CAEPR) from the 2016 Census of Population and Housing.

The IRSEO is composed of nine socioeconomic outcomes of the usual resident population. These are:

Population 15 years and over employed;

Population 15 years and over employed as a manager or professional;

Population 15 years and over employed full-time in the private sector;

Population 15 years and over who have completed Year 12;

Population 15 years and over who have completed a qualification;

Population 15 to 24 years old attending an educational institution;

Population 15 years and over with an individual income above half the Australian median;

Population who live in a house that is owned or being purchased; and

Population who live in a house with at least one bedroom per usual resident

The IRSEO reflects relative advantage or disadvantage at the Indigenous Area level. The Index ranges from 1 to 100, where a score of 1 represents the most advantaged area and a score of 100 represents the most disadvantaged area.

For further information, refer to the [Socioeconomic outcomes paper](#), produced by the Centre for Aboriginal Economic Policy Research (CAEPR).

Source: Compiled by PHIDU based on the CAEPR Indigenous Relative Socioeconomic Outcomes Index, 2016 data.

Note: Greater Capital City Statistical Areas, major urban centres, State/ Territory and Australian totals were constructed using population-weighted averages.

Mothers and babies, 2012 to 2014

Data quality: As is the case in most statistical collections in Australia, Indigenous status is under-reported in the midwives data collections from which these data are compiled. However, the level of completeness of coverage (the extent to which the identification of Indigenous Australians occurs in data collections) in these collections is generally higher than in the deaths or hospital inpatient data collections. It should also be noted that coverage is likely to vary between geographical areas.

- **Low birth weight babies, 2012 to 2014**
- by IARE, Quintiles, Remoteness

Indicator detail: The data comprise all Aboriginal and Torres Strait islander babies (live born) weighing less than 2500 grams at birth, expressed as a proportion of all Aboriginal and Torres Strait Islander live births (data over 3 years).

Data are not shown for areas where there were fewer than 20 births.

Notes:

1. Northern Territory: As data were available at the Indigenous Region level only, the figures reported for each Indigenous Area are the figures for the Indigenous Area's corresponding Indigenous Region.
2. Australian Capital Territory total: So as to not reveal data for the confidentialised Indigenous Area of Stromlo – Namadgi, the ACT total has also been confidentialised.

Source: Compiled by PHIDU based on data from: NSW Department of Health; Consultative Council on Obstetric and Paediatric Mortality and Morbidity, Victoria; Perinatal Data Collection, Department of Health, Queensland; Department of Health and Ageing SA; WA Department of Health; Tasmanian Perinatal Database; NT Department of Health; and ACT Health.

- **Smoking during pregnancy, 2012 to 2014**
- by IARE, Quintiles, Remoteness

Indicator detail: The data comprise Aboriginal and Torres Strait islander women who reported that they smoked during a pregnancy, expressed as a proportion of the number of pregnancies of Aboriginal and Torres Strait islander women. Note that the data may include women who were pregnant more than once during the time period (3 years).

Notes:

1. Northern Territory: As data were available at the Indigenous Region level only, the figures reported for each Indigenous Area are the figures for the Indigenous Area's corresponding Indigenous Region.
2. Australian Capital Territory total: So as to not reveal data for the confidentialised Indigenous Area of Stromlo – Namadgi, the ACT total has also been confidentialised.

Source: Compiled by PHIDU based on data from: NSW Department of Health; Consultative Council on Obstetric and Paediatric Mortality and Morbidity, Victoria; Perinatal Data Collection, Department of Health, Queensland; Department of Health and Ageing SA; WA Department of Health; Tasmanian Perinatal Database; NT Department of Health; and ACT Health.

Immunisation, 2018 calendar year

- **Aboriginal children fully immunised at 1 year of age, 2 years of age and 5 years of age, 2018**
- by IARE, Quintiles, Remoteness

Indicator detail: The data presented are of registered* Aboriginal children fully immunised at 1 year of age, 2 years of age and 5 years of age.

For the purposes of reporting the data, fully immunised means a child receives the vaccinations due at or immediately prior to the age at which the measurement occurs. It is assumed that all previous vaccinations were received.

The definitions of fully immunised are:

- **Children aged 1 year:** Fully immunised at 1 year means that a child aged 12 months to less than 15 months received three doses of a diphtheria, tetanus and whooping cough-containing vaccine, three doses of polio vaccine, two or three doses of Haemophilus influenzae type b vaccine (dependent of the type of vaccine used), three doses of hepatitis B vaccine, and three doses pneumococcal vaccine, all prior to the age of 1 year.
- **Children aged 2 years:** Fully immunised at 2 years means that a child aged 24 to less than 27 months received three doses of a diphtheria, tetanus and whooping cough-containing vaccine, three doses of polio vaccine, three or four doses of Haemophilus influenzae type b vaccine (dependent of the type of vaccine used), three doses of hepatitis B vaccine, one dose of a measles, mumps and rubella-containing vaccine, one dose of meningococcal C vaccine, and one dose of varicella (chicken pox) vaccine, all prior to the age of 2 years.
- **Children aged 5 years:** Fully immunised at 5 years means that a child aged 60 to less than 63 months received four doses of a diphtheria, tetanus and whooping cough-containing vaccine, four doses of polio vaccine, and two doses of a measles, mumps and rubella-containing vaccine, all prior to the age of 5 years.

For further information, refer to [coverage information](#) produced by the National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS).

Data are not shown for areas where there were fewer than 10 registered Aboriginal children or fewer than 10 Aboriginal children immunised.

Note: In this edition the data for the Anangu Pitjantjatjara Indigenous Area have been shown as 'n.a.' (not available), due to concerns as to the reliability of the data.

*Registered on the Australian Childhood Immunisation Register (ACIR). The ACIR is a national register that records vaccinations given to children under seven years old. It also provides immunisation history statements to parents or guardians.

Source: Compiled by PHIDU based on data provided by the Australian Childhood Immunisation Register, Medicare Australia, 2018 calendar year.

Disability

- **Aboriginal people with a profound or severe disability and living in the community, 2011**
- by IARE, Quintiles, Remoteness

Indicator detail: The 'Core Activity Need for Assistance' variable was developed by the Australian Bureau of Statistics (ABS) for use in the five-yearly population Census to measure the number of people with a profound or severe disability, and to show their geographic distribution. A person with profound or severe limitation needs help or supervision always (profound) or sometimes (severe) to perform activities that most people undertake at least daily, that is, the core activities of self-care, mobility and/or communication, as the result of a disability, long-term health condition (lasting six months or more), and/or older age. Fewer people are reported under this measure as having a profound or severe disability as are measured in the ABS Survey of Disability, Ageing and Carers (SDAC). The reasons for this are definitional (the SDAC approach, which uses a filtering approach to determine whether the respondent has a disability, and the severity) as compared to the self-report approach in the Census; and the large not-stated category in the Census data, with more people not responding to this set of questions than are reported as having a profound or severe disability. While the SDAC figures should be used as the measure for this concept, the Census data are appropriate for getting an understanding of the geographic distribution of this population group.

This indicator describes Aboriginal people of all ages with a profound or severe disability who were 'living in the community' only. The ABS published figures, however, include those living in long-term residential accommodation in nursing homes, accommodation for the retired or aged (not self-contained), hostels for the disabled and psychiatric hospitals; as well as those 'living in the community'.

Details of the total number of people with a disability – including those with a moderate or mild disability – are not available.

Source: Compiled by PHIDU based on the ABS Census 2011 (unpublished) data.

- **Unpaid assistance provided by Aboriginal people aged 15 years and over to persons with a disability, 2016**
- by IARE, Quintiles, Remoteness

Indicator detail: The 'Assistance to persons with a disability (unpaid)' variable records people who, in the two weeks prior to Census Night, spent time providing unpaid care, help or assistance to family members or others because of a disability, a long-term illness (lasting six months or more) and/or problems related to older age.

The data presented are Aboriginal people aged 15 years and over who provided unpaid assistance to persons with a disability, as a proportion of the total Aboriginal population aged 15 years and over.

Source: Compiled by PHIDU based on the ABS Census 2011 data.

Median age at death, 2011 to 2015

- **Median age at death of Aboriginal males, 2011 to 2015 (NSW, Qld, SA, WA & NT only)**
- by IARE
- **Median age at death of Aboriginal females, 2011 to 2015 (NSW, Qld, SA, WA & NT only)**
- by IARE
- **Median age at death of Aboriginal person, 2011 to 2015 (NSW, Qld, SA, WA & NT only)**
- by IARE

Indicator detail: Median age of death is an indicator of premature mortality. It is the age at which exactly half the deaths registered in a given time period were deaths of people above that age and half were deaths below that age.

Deaths data

For deaths data released since 2007, the ABS has applied a staged approach to the coding of cause of death which affects the number of records available for release at any date, with data being released as preliminary, revised, or final. This release is comprised of preliminary data for 2015, revised data for 2014 and final data for 2011, 2012 and 2013. For further information about the ABS revisions process, see the following and related sites:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0Explanatory%20Notes12015?OpenDocument>.

Data quality

Almost all deaths in Australia are registered. However, Indigenous status is not always recorded, or recorded correctly. The incompleteness of Indigenous identification (referred to as completeness of coverage) means that the number of deaths registered as Indigenous is an underestimate of the actual number of deaths which occur in the Indigenous population. It should also be noted that completeness of coverage is likely to vary between geographical areas.

While there is incomplete coverage of Indigenous deaths in all state and territory registration systems, some jurisdictions have been assessed by the Australian Bureau of Statistics (ABS) as having a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced. Those jurisdictions are New South Wales, Queensland, South Australia, Western Australia and the Northern Territory.

Source: Data compiled by PHIDU from deaths data based on the 2011 to 2015 Cause of Death Unit Record Files supplied by the Australian Coordinating Registry and the Victorian Department of Justice, on behalf of the Registries of Births, Deaths and Marriages and the National Coronial Information System.

Premature mortality by sex, 2011 to 2015

- Deaths of Aboriginal males/ females/ persons aged 0 to 54 years, 2011 to 2015 (NSW, Qld, SA, WA & NT only)
- by IARE, Quintiles, Remoteness
- Deaths of Aboriginal males/ females/ persons aged 0 to 64 years, 2011 to 2015 (NSW, Qld, SA, WA & NT only)
- by IARE, Quintiles, Remoteness
- Deaths of Aboriginal males/ females/ persons aged 0 to 74 years, 2011 to 2015 (NSW, Qld, SA, WA & NT only)
- by IARE, Quintiles, Remoteness

Indicator detail: The data presented are the average annual indirectly age-standardised rates per 100,000 males/ females/ population (aged 0 to 54 years/ 0 to 64 years /0 to 74 years, as appropriate); and/or indirectly age-standardised ratios, based on the Australian standard.

Deaths data

For deaths data released since 2007, the ABS has applied a staged approach to the coding of cause of death which affects the number of records available for release at any date, with data being released as preliminary, revised, or final. This release is comprised of preliminary data for 2015, revised data for 2014 and final data for 2011, 2012 and 2013. For further information about the ABS revisions process, see the following and related sites:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0Explanatory%20Notes12015?OpenDocument>.

Data quality

Almost all deaths in Australia are registered. However, Indigenous status is not always recorded, or recorded correctly. The incompleteness of Indigenous identification (referred to as completeness of coverage) means that the number of deaths registered as Indigenous is an underestimate of the actual number of deaths which occur in the Indigenous population. It should also be noted that completeness of coverage is likely to vary between geographical areas.

While there is incomplete coverage of Indigenous deaths in all state and territory registration systems, some jurisdictions have been assessed by the Australian Bureau of Statistics (ABS) as having a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced. Those jurisdictions are New South Wales, Queensland, South Australia, Western Australia and the Northern Territory.

Source: Data compiled by PHIDU from deaths data based on the 2011 to 2015 Cause of Death Unit Record Files supplied by the Australian Coordinating Registry and the Victorian Department of Justice, on behalf of the Registries of Births, Deaths and Marriages and the National Coronial Information System. The population is the estimated resident population (ERP) from the Australian Census 2011.

Premature mortality by selected cause, 2011 to 2015

- Deaths from cancer, persons aged 0 to 54 years/ 0 to 64 years/ 0 to 74 years, 2011 to 2015 (NSW, Qld, SA, WA & NT only)
- by IARE, Quintiles, Remoteness

ICD-10 codes: C00-D48

- Deaths from circulatory system diseases, persons aged 0 to 54 years/ 0 to 64 years/ 0 to 74 years, 2011 to 2015 (NSW, Qld, SA, WA & NT only)
- by IARE, Quintiles, Remoteness

ICD-10 codes: I00-I99

- Deaths from respiratory system diseases, persons aged 0 to 54 years/ 0 to 64 years/ 0 to 74 years, 2011 to 2015 (NSW, Qld, SA, WA & NT only)
- by IARE, Quintiles, Remoteness

ICD-10 codes: J00-J99

- Deaths from external causes, persons aged 0 to 54 years/ 0 to 64 years/ 0 to 74 years, 2011 to 2015 (NSW, Qld, SA, WA & NT only)
- by IARE, Quintiles, Remoteness

ICD-10 codes: V01-Y98

Indicator detail: The data presented are the average annual directly age-standardised rates per 100,000 population (aged 0 to 54 years/ 0 to 64 years /0 to 74 years, as appropriate); and/or directly age-standardised ratios, based on the Australian standard.

Deaths data

For deaths data released since 2007, the ABS has applied a staged approach to the coding of cause of death which affects the number of records available for release at any date, with data being released as preliminary, revised, or final. This release is comprised of preliminary data for 2015, revised data for 2014 and final data for 2011, 2012 and 2013. For further information about the ABS revisions process, see the following and related sites:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0Explanatory%20Notes12015?OpenDocument>.

Data quality

Almost all deaths in Australia are registered. However, Indigenous status is not always recorded, or recorded correctly. The incompleteness of Indigenous identification (referred to as completeness of coverage) means that the number of deaths registered as Indigenous is an underestimate of the actual number of deaths which occur in the Indigenous population. It should also be noted that completeness of coverage is likely to vary between geographical areas.

While there is incomplete coverage of Indigenous deaths in all state and territory registration systems, some jurisdictions have been assessed by the Australian Bureau of Statistics (ABS) as having a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced. Those jurisdictions are New South Wales, Queensland, South Australia, Western Australia and the Northern Territory.

Source: Data compiled by PHIDU from deaths data based on the 2011 to 2015 Cause of Death Unit Record Files supplied by the Australian Coordinating Registry and the Victorian Department of Justice, on behalf of the Registries of Births, Deaths and Marriages and the National Coronial Information System. The population is the estimated resident population (ERP) from the Australian Census 2011.

Home and Community Care Program, 2014/15

Indicator detail: Clients whose status is recorded as Indigenous at the date of most recent assessment.

Source: Compiled by PHIDU using data from the Australian Institute of Health and Welfare, 2014/15; and the average of the estimated resident population (non-ABS), 30 June 2014 and 30 June 2015.

- Home and Community Care Program: Indigenous clients (as a proportion of total clients), 2014/15
- by IARE, Quintiles, Remoteness

Indicator detail: Clients whose status is recorded as Indigenous at the date of most recent assessment.

- Home and Community Care Program: Indigenous clients (as a proportion of the Indigenous population), 2014/15
- by IARE, Quintiles, Remoteness

Hospital admissions, 2014/15 to 2016/17

Indicator detail: The data presented are of the number of separations, or completions of the episode of care of a patient in hospital, where the completion can be the discharge, death or transfer of the patient, or a change in the type of care (e.g., from acute to rehabilitation). In this atlas the term 'admission' is used in place of the more technical 'separation'. As these data relate to short-term episodes of care, and not to long-stay episodes, the number of admissions is similar to the number of separations in any year.

Data have been aggregated over a period of three years to increase the number of admissions at the Indigenous Area level, thereby allowing data for more conditions to be published.

Note that the data are based on the count of all admissions. As such, repeat admissions for one person are counted as separate admissions. In addition, patients admitted to one hospital and transferred to another hospital are counted as separate admissions. The impact of these hospital transfers would result in a higher rate of admissions in regional areas compared to the metropolitan areas, as well as for certain conditions which are more likely to result in transfers.

Caution should be used in the interpretation of these data because of jurisdictional differences in data quality as well as under-identification of Aboriginal and Torres Strait Islander people. The AIHW found that nationally, about 88% of Indigenous Australians were identified correctly in hospital admissions data in the 2011–12 study period, and the 'true' number of separations for Indigenous Australians was about 9% higher than reported (Australian Institute of Health and Welfare 2016. Admitted patient care 2014–15: Australian hospital statistics. Health services series no. 68. Cat. no. HSE 172. Canberra: AIHW).

For details of data quality see the *Data quality statement: National Hospital Morbidity Database 2014–15* ([METeOR ID: 638202](#))

Data Source: There is a substantial difference between the Census counts of Aboriginal and Torres Strait Islander Australians and the estimated resident population (ERP), adjusted for net undercount as measured by the Post Enumeration Survey undertaken by the ABS (the ERP is 17.5% higher for Australia than the Census count). Given this difference, and as the ABS has not released Aboriginal ERP by age at the Indigenous Area level used in the Social Health Atlases, PHIDU has produced an estimated resident population at 2016. This is of particular importance for the calculation of rates of hospitalisation, mortality etc.

The ERP for June 2016 for Aboriginal populations is available from the ABS for Statistical Areas Level 2 (SA2, total population only); PHIDU concurred the SA2 populations to produce a 2016 ERP for each IARE (total population only). The ERP for 2016 is available by Indigenous Region (IREG), by 5-year age group. To produce estimated resident populations by age group for each IARE, PHIDU applied the proportional age distribution from the Census counts (usual resident population) in each IARE to the ERP total for the IARE.

Exclusions: The national data published by the Australian Institute of Health and Welfare exclude well babies (i.e., babies not admitted for acute care) who are nine days older or less, other than the second or subsequent live born infant of a multiple birth whose mother is currently an admitted patient. [For further information see Australian Institute of Health and Welfare. Australian hospital statistics 2014–15. Health services series no. 68. (Cat. no. HSE 172) Canberra: AIHW; 2014.].

Same-day admissions for dialysis for kidney disease have also been excluded from the data in this atlas for the categories of admissions for males, females and total people, and admissions of persons, by age, as they represent many repeat visits by a relatively small number of patients, who may have multiple admissions in a week: their inclusion can dramatically alter the geographic distribution of other categories of admissions (see the separate note for Same-day admissions for renal dialysis, below, for further details); these data are presented separately. All other same-day admissions are included.

Confidentiality of data: Counts of between 1 and 4 admissions have been suppressed.

Where data are published by age and either the age groups 0 to 14 years or 15 years and over has been confidentialised, the alternate age group has also been confidentialised for the same area, as their publication would allow identification of the confidentialised age group.

Source: Compiled by PHIDU using data from the Australian Institute of Health and Welfare, supplied on behalf of State and Territory health departments for 2014/15 to 2016/17. The 2016 estimated resident population (erp) was calculated by PHIDU – see Data Source above.

Admissions by sex, 2014/15 to 2016/17

- Total admissions, Aboriginal persons,
- *by IARE, Quintiles, Remoteness*
- Male total admissions, Aboriginal males
- *by IARE, Quintiles, Remoteness*
- Female total admissions, Aboriginal females
- *by IARE, Quintiles, Remoteness*

Admissions by age, 2014/15 to 2016/17

- Total admissions, Aboriginal persons aged 0 to 14 years
- *by IARE, Quintiles, Remoteness*
- Total admissions, Aboriginal persons aged 15 to 24 years
- *by IARE, Quintiles, Remoteness*
- Total admissions, Aboriginal persons aged 25 to 44 years
- *by IARE, Quintiles, Remoteness*
- Total admissions, Aboriginal persons aged 45 to 64 years
- *by IARE, Quintiles, Remoteness*
- Total admissions, Aboriginal persons aged 65 years and over
- *by IARE, Quintiles, Remoteness*
- Total admissions, Aboriginal persons aged 15 years and over
- *by IARE, Quintiles, Remoteness*

Admissions by selected principal diagnosis, 2014/15 to 2016/17

- Admissions for infectious and parasitic diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: A00-B99
- Admissions for all cancers, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: C00-D48
- Admissions for blood and blood-forming organs diseases and certain disorders involving the immune mechanism, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: D50-D89
- Admissions for endocrine, nutritional and metabolic diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: E00-E90
- Admissions for mental health related conditions, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: F00-F99
- Admissions for nervous system diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: G00-G99
- Admissions for eye and adnexa diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: H00-H59
- Admissions for ear and mastoid process diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: H60-H95
- Admissions for circulatory system diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: I00-I99

- Admissions for respiratory system diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: J00-J99
- Admissions for digestive system diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: K00-K93
- Admissions for skin and subcutaneous tissue diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: L00-L99
- Admissions for musculoskeletal system and connective tissue diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: M00-M99
- Admissions for genitourinary system diseases, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: N00-N99
- Admissions for pregnancy, childbirth and the puerperium, Aboriginal females aged 15 to 44 years
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: O00-O99
- Admissions for certain conditions originating in the perinatal period, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: P00-P96
- Admissions for injury, poisoning and other external causes, Aboriginal persons
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: S00-T98

Admissions by selected principal diagnosis and age, 2014/15 to 2016/17

- Admissions for infectious and parasitic diseases, Aboriginal persons aged 0 to 14 years
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: A00-B99
- Admissions for infectious and parasitic diseases, Aboriginal persons aged 15 years and over
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: A00-B99
- Admissions for respiratory system diseases, Aboriginal persons aged 0 to 14 years
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: J00-J99
- Admissions for respiratory system diseases, Aboriginal persons aged 15 years and over
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: J00-J99
- Admissions for digestive system diseases, Aboriginal persons aged 0 to 14 years
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: K00-K93
- Admissions for digestive system diseases, Aboriginal persons aged 15 years and over
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: K00-K93
- Admissions for injury, poisoning and other external causes, Aboriginal persons aged 0 to 14 years
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: S00-T98
- Admissions for injury, poisoning and other external causes, Aboriginal persons aged 15 years and over
- *by IARE, Quintiles, Remoteness*
ICD-10-AM codes: S00-T98

Same-day admissions for renal dialysis, 2014/15 to 2016/17

Additional indicator detail: The data presented are of the number of same-day admissions for dialysis for kidney disease, including both haemodialysis and peritoneal dialysis, International Classification of Disease (ICD-10-AM) codes Z49.1 and Z49.2. There are two main types of dialysis: peritoneal, which occurs inside the body and can be performed almost anywhere, usually in the home setting; and haemodialysis, which occurs outside the body and is most often conducted in a hospital or satellite setting. The reason for presenting these data separately from overnight admissions is

that they represent many repeat visits by a relatively small number of patients, who may have multiple admissions in a week. Their inclusion with other (overnight) admissions can dramatically alter the geographic distribution of these other categories of admissions. This is particularly evident in regional and remote areas, where dialysis facilities are located, and where those using them may have moved to live to be near the facility.

- Admissions for same-day dialysis for kidney disease, Aboriginal persons
- by IARE, Quintiles, Remoteness

ICD-10-AM codes: Z491 to Z492

Potentially preventable hospitalisations (vaccine-preventable, acute and chronic), 2014/15 to 2016/17

Additional indicator detail: Data definitions for potentially preventable hospitalisations are in the *National Healthcare Agreement: PI 18-Selected potentially preventable hospitalisations, 2016* available through METeOR ([METeOR ID: 598746](#)). Please refer to the [National Healthcare Agreement: PI 18-Selected potentially preventable hospitalisations, 2016 QS](#) ([METeOR ID: 600098](#)) for further information on data quality.

- Admissions for potentially preventable conditions, Aboriginal persons
- by IARE, Quintiles, Remoteness

Potentially preventable hospitalisations (vaccine-preventable, acute and chronic), by age, 2014/15 to 2016/17

- Admissions for potentially preventable conditions, Aboriginal persons aged 0 to 14 years
- by IARE, Quintiles, Remoteness
- Admissions for potentially preventable conditions, Aboriginal persons aged 15 to 24 years
- by IARE, Quintiles, Remoteness
- Admissions for potentially preventable conditions, Aboriginal persons aged 25 to 44 years
- by IARE, Quintiles, Remoteness
- Admissions for potentially preventable conditions, Aboriginal persons aged 45 to 64 years
- by IARE, Quintiles, Remoteness
- Admissions for potentially preventable conditions, Aboriginal persons aged 65 years and over
- by IARE, Quintiles, Remoteness
- Admissions for potentially preventable conditions, Aboriginal persons aged 15 years and over
- by IARE, Quintiles, Remoteness

Potentially preventable hospitalisations – Acute conditions, 2014/15 to 2016/17

- Admissions for acute cellulitis, Aboriginal persons
- by IARE, Quintiles, Remoteness
- Admissions for acute convulsions and epilepsy, Aboriginal persons
- by IARE, Quintiles, Remoteness
- Admissions for acute dental conditions, Aboriginal persons
- by IARE, Quintiles, Remoteness
- Admissions for acute ear, nose and throat infections, Aboriginal persons
- by IARE, Quintiles, Remoteness
- Admissions for acute urinary tract infections, including pyelonephritis, Aboriginal persons
- by IARE, Quintiles, Remoteness
- Admissions for total acute conditions, Aboriginal persons
- by IARE, Quintiles, Remoteness

Potentially preventable hospitalisations – Chronic conditions, 2014/15 to 2016/17

- Admissions for Chronic Obstructive Pulmonary Disease (COPD), Aboriginal persons
- by IARE, Quintiles, Remoteness
- Admissions for chronic diabetes complications, Aboriginal persons
- by IARE, Quintiles, Remoteness
- Admissions for total chronic conditions, Aboriginal persons
- by IARE, Quintiles, Remoteness