Monitoring Inequality in Australia: Time series

Notes on the data

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Inequality Graphs

The Inequality Graphs show variations for each indicator by socioeconomic status (SES), based on the ABS Index of Relative Socioeconomic Disadvantage (IRSD). Data are presented in five groupings of areas ('quintiles' or, as labelled within the graph interface, 'Quintile of Socioeconomic Disadvantage of Area'), each representing approximately one fifth (20%) of the population. The quintiles range from the 20% of the population living in the highest SES areas (least disadvantaged) to the 20% living in the lowest SES areas (most disadvantaged). The height of the bar for each quintile indicates the rate or per cent for the population usually resident in that quintile. The ratio of the rate in the most disadvantaged areas (Quintile 5) to that in the least disadvantaged areas (Quintile 1) is shown on the right hand side of the graph: it is labelled the 'Inequality ratio'.

Geographical structures

For information regarding additional geographies available, refer to the geographical structures information.

Statistical information

Except where otherwise stated, all age-standardised rates and ratios presented in the maps, data or graphs are based on the Australian standard. For further information on the statistics presented, refer to the statistical information available from the PHIDU website.
Introductory information

The indicator information and data sources are presented below in the general order used by PHIDU in their products by the themes of Demographic and Social Indicators, Health Status, Disability and Deaths and Use and Provision of Health and Welfare Services.

Please note that the source information reflects the relevant department/organisation name, based on the data PHIDU received most recently. Therefore, for the earlier time period, the source information may not reflect the former department or organisational name that provided us with the data at the time.

Demographic and Social Indicators

Indigenous status

- Aboriginal population as per cent of total population, 1986 and 2016 Usual Resident Population (URP)
  
  Notes: The data presented are the Aboriginal population as a per cent of the total Aboriginal population.
  
  Source: 1986 and 2016 URP compiled by PHIDU based on the ABS Census Usual Resident Population.

Birthplace & non-English speaking residents

- Australian-born population, 2001 and 2016
- People born (overseas) in predominantly English speaking countries, 2001 and 2016
- People born in predominantly non-English speaking (NES) countries, 2001 and 2016
- People born in NES countries resident in Australia for five years or more, 1986 and 2016
- People born in NES countries resident in Australia for less than five years, 1986 and 2016

Notes for all People born in predominantly English speaking (ES) / non-English speaking (NES) countries data: The following countries are designated as ‘predominantly ES’: Canada, Ireland, New Zealand, South Africa, United Kingdom and the United States of America; the remaining countries are designated as ‘predominantly NES’.

Resident in Australia for five years or more: Data comprise NES residents arriving prior to 1982 (1986 data) or 2012 (2016 data).

Resident in Australia for less than five years: Data comprise NES residents arriving from 1982 to 1986 (1986 data) or 2012 to 2016 (2016 data). The year 2016 is the period 1 January 2016 to 9 August 2016 (Census Night), therefore, the data presented represents a total time of approximately 4 years and 7 months.

- People aged 5 years and over who were born overseas and reported poor proficiency in English, 1986 and 2016
  
  Notes: The data comprise people born overseas who reported speaking English 'not well' or 'not at all'.
  
  Source for all Birthplace & non-English speaking residents data (above): Compiled by PHIDU based on the ABS Census 1986, 2001 or 2016 data.

Non-English speaking countries of birth

- Top eight birthplaces of people born in non-English speaking countries, 2006 and 2016

Notes: The data comprise residents of Australia who were born overseas in one of the predominantly non-English speaking countries. The countries presented are in the order of the top eight countries where people from non-English speaking countries were born in 2016. These are China (excluding Special Administrative Regions of Hong Kong & Macau, and Taiwan), India, Philippines, Vietnam, Italy, Malaysia, Germany, and Greece.

Source: Compiled by PHIDU based on the ABS Census 2006 and 2016 data.

Total Fertility Rate

- Total Fertility Rate, 2004 to 2006 and 2013 to 2015
  
  Notes: Total fertility rates are not shown for areas recording fewer than 5 births.
  
  Source:


  2013 to 2015: Compiled by PHIDU based on the ABS data in Table 2: Births, Australia 2015: Births, Australia, 2015.

Education

- People who left school at Year 10 or below, or did not go to school, 2011 and 2016
  
  Notes: The data comprise people who left school at Year 10 or below, or did not go to school, expressed as an indirectly standardised rate per 100 people aged 15 years and over (usual resident population), based on the Australian standard.

Source: Compiled by PHIDU based on the ABS Census 2011 and 2016.
Participation in full-time secondary school education at age 16, 1986 and 2016

Notes: 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 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 socioeconomic status.

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 - see Learning or Earning at ages 15 to 19.

Source: Compiled by PHIDU based on the ABS Census 1986 and 2016 (unpublished) data.

Participation in vocational education and training, 2001 and 2015

Notes: 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.

Details of data presented
Separate data are presented for:
- Non-indigenous participation in VET
- Total participation in VET

Source: Compiled by PHIDU based on data from the National Centre for Vocational Education Research Ltd., 2001 and 2015; and the ABS Estimated Resident Population, 30 June 2001 and 2015, respectively.

School leavers enrolled in higher education, 2009 and 2018

Notes: The data comprise school leavers who are identified as enrolled at an Australian university at 31 March 2009 and 2018, expressed as a proportion of the Estimated Resident Population aged 17 years at 30 June 2009 and 2017, respectively.

‘School leavers’ are students who attained a Year 12 qualification in 2009 and 2017 in any State/ Territory through the completion of one or more Year 12 courses; may include (unless noted otherwise below) adult students, part-time students and students doing one or more subjects to improve their overall score (repeating students).

The Estimated Resident Population is based on the number of 17 year olds in 2009 and 2017, as this is the age of the majority of Year 12 students at 30 June 2009 and 2018.

Data have been provided by individual States and Territories, other than Queensland. The exclusion of Queensland will under-represent participation in other State and Territories to the extent that students from those jurisdictions enrol in Queensland universities.

Variations in data between States:
Definitions vary across the States, however, the impact of any differences is considered to be small.
- South Australian data is for the number of school leavers that have received and accepted an offer to a university in South Australia and the Northern Territory, however this is not indicative of the enrolment status as they may never enrol at the institution.
- Data for 2018 tertiary enrolments in Victoria is not yet available.
- School leaver applicants and enrollees self-identify as being of Aboriginal and Torres Strait Islander descent or not. Those of ‘unknown’ Indigenous status have been included in the non-Indigenous counts. WA universities also admit some Aboriginal and Torres Strait Islander school leavers directly and data from the Tertiary Institutions Service Centre may therefore under-represent their participation.
- For more information, please consult the relevant admissions centre as listed in the Source below.

Source: Compiled by PHIDU based on data from the following:
1) Universities Admissions Centre (NSW & ACT), South Australian Tertiary Admission Centre (SA & NT), Tertiary Institutions Service Centre (WA), The University of Notre Dame Australia (WA & NSW), the University of Tasmania for 2009 to 2017.
2) Queensland Tertiary Admissions Centre for 2016 to 2017.
3) Victorian Tertiary Admissions Centre for 2009 to 2015.
4) ABS Estimated Resident Population, 30 June 2009 and 2015 (Victoria); 30 June 2016 and 2017 (Queensland); and 30 June 2009 and 2017 (remaining States and Territories).

Early child development: Australian Early Development Census indicators
- Developmentally vulnerable on one or more domains, 2009 and 2015
- Developmentally vulnerable on two or more domains, 2009 and 2015
- Physical health and wellbeing domain - developmentally vulnerable, at risk and on track, 2009 and 2015
- Social competence domain - developmentally vulnerable, at risk and on track, 2009 and 2015
- Emotional maturity domain - developmentally vulnerable, at risk and on track, 2009 and 2015
- Language and cognitive (school based) domain - developmentally vulnerable, at risk and on track, 2009 and 2015
- Communication skills and general knowledge domain - developmentally vulnerable, at risk and on track, 2009 and 2015
Notes for all Early child development data: The AEDC is a full-population census of children's health and development in their first year of full-time school. The results from the AEDC provide communities and schools with information about how local children have developed by the time they start school across five areas of early childhood development: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills (schools-based), and communication skills and general knowledge.

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 is presented for children 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), at risk (11th to 25th percentile), and on track (above the 25th 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

2009 Early child development data: For the 2009 period, data are not shown for areas where there were less than 15 children tested.

2015 Early child development data: For the 2015 period, data are not shown for areas where one or more of the following have been met:
- three or fewer children had been assessed;
- 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; and
- the number of vulnerable or at risk children represented at least 90% of valid AEDC scores.

Additional minor suppressions not further specified have occurred where necessary to preserve confidentiality of related suppressed cells.

Source for the 2009 Early child development data: Compiled by PHIDU based on data from the Australian Early Development Index 2009 Research CURF Version 1, Released August 2011, DEEWR.


Learning or Earning

- Learning or Earning at ages 15 to 19, 2006 and 2011

Notes: The data comprise the number of 15 to 19 year olds who are engaged in school, work or further education/training, expressed as a proportion of all those aged 15 to 19 years.

Source: Compiled by PHIDU based on the ABS Census 2006 and 2011 data.

Families

- Single parent families with children aged less than 15 years, 2001 and 2016

Notes: The data comprise the number of single parent families with children aged less than 15 years, expressed as a proportion of all families with children under 15 years.

Source: Compiled by PHIDU based on the ABS Census 2001 and 2016 data.

- Jobless families with children aged less than 15 years, 2001 and 2016

Notes: The data comprise the number of jobless families with children aged less than 15 years, expressed as a proportion of all families with children under 15 years.

Source: Compiled by PHIDU based on the ABS Census 2001 and 2016 (unpublished) data.

- Children aged less than 15 years in jobless families, 2006 and 2016

Notes: The data comprise the number of children aged less than 15 years in jobless families, expressed as a proportion of all children aged less than 15 years.

Source: Compiled by PHIDU based on the ABS Census 2006 and 2016 (unpublished) data.

- Children in families where the mother has low educational attainment, 2006 and 2016

Notes: The data presented are children aged less than 15 years living in families where the female parent’s highest level of schooling was year 10 or below, or where the female parent did not attend school, expressed as a proportion of all children aged less than 15 years.

Source: Compiled by PHIDU based on the ABS Census 2006 and 2016 (unpublished) data.
Child care: unpaid

- Child care to own child/children (unpaid), provided by people aged 15 years and over, 2006 and 2016
- Child care to other child/children (unpaid), provided by people aged 15 years and over, 2006 and 2016
- Total (unpaid) child care, provided by people aged 15 years and over, 2006 and 2016

Notes for all Child care: unpaid data: The data include unpaid child care provided by people aged 15 years and over who, in the two weeks prior to Census Night, spent time caring for a child/children (under 15 years).

The data indicators presented are:

- Unpaid child care provided by people aged 15 years and over to their own child/children (aged under 15 years)
- Unpaid child care provided by people aged 15 years and over to other child/children (aged under 15 years); and
- Total (unpaid) child care provided by people aged 15 years and over – this includes the categories of people caring for a) their own child/children only; b) other child/children only; and c) both their own child/children and other/children combined (the data for this final group c) are not shown separately) (children aged under 15 years).

Source for all Child care: unpaid data: Compiled by PHIDU based on the ABS Census 2006 and 2016 data.

Housing/ Transport

- Households in dwellings receiving rent assistance from Australian Government, 2006 and June 2017

Notes: The Australian Government rent assistance data is provided for individual recipients, and there may be multiple individual recipients in a household: to the extent that this occurs, the proportion will be understated. However, dwellings are the most appropriate denominator available for this dataset. In addition, some recipients live in non-private dwellings, which are not included in the denominator: to the extent that this occurs, the proportion will be overstated.

Source: Compiled by PHIDU based on data from the Department of Human Services, 2006 and the Department of Social Services, June 2017; and the ABS Census: Dwellings, 2006 and 2016, respectively.

- Dwellings rented from the government housing authority, 1986 and 2016

Source: Compiled by PHIDU based on the ABS Census 1986 and 2016 data.

- Low income households with mortgage stress, 2006 and 2016

Notes: The data comprise households in the bottom 40% of income distribution (those with less than 80% of median equivalised income), spending more than 30% of income on mortgage repayments.

Income is equivalised; equivalised household income per week can be viewed as an indicator of the economic resources available to a standardised household. For a lone person household it is equal to household income. For a household comprising more than one person, it is an indicator of the household income that would be needed by a lone person household to enjoy the same level of economic wellbeing.

2006 Income varies by State/ Territory: NSW, $458; Vic, $452; Qld, $453; SA, $407; WA, $516; Tas, $400; NT, $552; ACT, $710

2016 Income varies by State/ Territory: NSW, $721; Vic, $705; Qld, $704; SA, $631; WA, $785; Tas, $589; NT, $1,004; ACT, $1,093.

NB: For caveats regarding this data, please refer to the attached Housing Costs caveats (.pdf).

Source: Compiled by PHIDU based on the ABS Census 2006 and 2016 (unpublished data).

- Low income households with rental stress, 2006 and 2016

Notes: The data comprise households in the bottom 40% of the income distribution (those with less than 80% of median income), spending more than 30% of their income on rent.

Income is equivalised; equivalised household income per week can be viewed as an indicator of the economic resources available to a standardised household. For a lone person household it is equal to household income. For a household comprising more than one person, it is an indicator of the household income that would be needed by a lone person household to enjoy the same level of economic wellbeing.

2006 Income varies by State/ Territory: NSW, $458; Vic, $452; Qld, $453; SA, $407; WA, $516; Tas, $400; NT, $552; ACT, $710

2011 Income varies by State/ Territory: NSW, $721; Vic, $705; Qld, $704; SA, $631; WA, $785; Tas, $589; NT, $1,004; ACT, $1,093.

NB: For caveats regarding this data, please refer to the attached Housing Costs caveats (.pdf).

Source: Compiled by PHIDU based on the ABS Census 2006 and 2016 (unpublished) data.

- Private dwellings with no motor vehicle, 1986 and 2016

Source: Compiled by PHIDU based on the ABS Census 1986 and 2016 data.

Income support recipients

- Age pensioners, June 1996 and 2017

Notes: The Age Pension is available from Centrelink for persons who have reached Age Pension age.

2017 Age pensioners’ data
The Age Pension is available from Centrelink for people who have reached Age Pension age. The Age Pension age depends on a person’s date of birth, as follows:
- If born before 1/7/52, Age Pension age is 65
- If born between 1/7/52 and 31/12/53, Age Pension age is 65.5
- If born between 1/1/54 and 30/6/55, Age Pension age is 66
- If born between 1/7/55 and 31/12/56, Age Pension age is 66.5
- If born from 1/1/57 or later, Age Pension age is 67.

The Department of Veterans’ Affairs (DVA) provides a Service Pension (Age) to eligible people who have reached 60 years.

Additional notes:
The data show a number of areas as having proportions in excess of 100%: these are clearly not accurate. The reason for this is not clear, although it may be the result of the address of the pension recipient data being a postcode which is not allocated to the correct small geographical area by the correspondence files available; it may also reflect inaccuracies in the denominator (the population of pensionable age), as population estimates at the small area level for age groups can be unreliable, in particular where the populations are small. It also indicates that it is possible that percentages of less than 100% may also be overstated.

The Centrelink data were provided at the Population Health Area (PHA) and Local Government Area (LGA) levels and data cells with less than 5 counts were removed (confidentialised). Due to the confidentialisation of data cells, there may be undercounting of some of the final numbers presented, where the final data are based on combining two indicator sub-sets, which may include the aggregation of confidentialised and non-confidentialised cells.

The ‘Unknown’ data are calculated from the difference between the sum of the PHA or LGA data to the State/Territory totals, and include the sum of these confidentialised data.

PHA data may be the sum of freely available SA2 data if the publication of PHA data could reveal the value of confidentialised cells at the SA2 level. For these indicators, the number of people receiving this payment may be undercounted by up to four persons or either persons if two indicators are added together such as total unemployment which is the sum of Newstart and Youth allowance.

1996 Age pensioners’ data
The 1996 Age Pension age (Centrelink) was 65 years and over for eligible males, and 60 years and over for eligible females. The 1996 Service Pension (Age) from DVA was available for eligible males aged 60 years and over, and eligible females aged 55 years and over. The final data presented is based on combining these two indicator sub-sets (Centrelink/ DVA).

Source: Compiled by PHIDU based on data from the Department of Social Services, June 1996 and 2017; Department of Veterans’ Affairs, 1 July 1996 and 2017; and the ABS Estimated Resident Population, 30 June 1996 and 2017, respectively.

- Disability support pensioners, June 1996 and 2017
  Notes: People eligible for a Disability Support Pension (DSP) paid by Centrelink, must be aged 16 years or over and have not reached age-pensionable age; be permanently blind or have a physical, intellectual or psychiatric impairment level of 20% or more and a continuing inability to work for at least 15 hours per week.
  Source: Compiled by PHIDU based on data from the Department of Social Services, June 1996 and 2017; Department of Veterans’ Affairs, 1 July 1996 and 2017; and the ABS Estimated Resident Population, 30 June 1996 and 2017, respectively.

- Female sole parent pensioners, June 1996 and 2017
  Notes: People eligible for a Parenting Payment (single) paid by Centrelink comprise female and male sole parents with at least one child under 16 years of age (who meet certain qualifications, or whose child attracts a child disability allowance). Only female sole parent pensioners have been included because females comprise the majority of sole parent pensioners.
  2016 Female sole parent pensioners’ data
  Single parent payment female data may also not be published even if it is over 5 if it can reveal confidential data from total persons single parent payment data available from Department of Social Services at the SA2 or LGA levels
  Source:
  2017: Compiled by PHIDU based on data from the Department of Social Services, June 2017; and ABS Estimated Resident Population, 30 June 2017.

- People receiving an unemployment benefit, June 1996 and 2017
  Notes: People receiving an ‘unemployment benefit’ – which includes the Newstart Allowance or Youth Allowance (other) paid by Centrelink – are shown as the proportion of the eligible population (of people aged 16 to 64 years).

1 Youth Allowance (other) is largely comprised of unemployed people aged 16 to 21 looking for full-time work or undertaking approved activities, such as part-time study or training. It excludes Youth Allowance customers who are full-time students or undertaking an apprenticeship/traineeship.
For total unemployment, this is the maximum of either youth allowance (other) plus newstart allowance or newstart allowance (180 days)/youth allowance (other)<180 days) plus newstart allowance (180 days plus)/youth allowance (other)<180 days plus

**Source:** Compiled by PHIDU based on data from the Department of Human Services, June 1996 and the Department of Social Services June 2017; and the ABS Estimated Resident Population, 30 June 1996 and 2017, respectively.

- **People receiving an unemployment benefit long-term, June 2006 and 2017**
  - **Notes:** People receiving an ‘unemployment benefit’ – which includes the Newstart Allowance or Youth Allowance (other) paid by Centrelink – for more than 182 days (approximately 6 months) are shown as the proportion of the eligible population (of people aged 16 to 64 years).
  - **Source:** Compiled by PHIDU based on data from the Department of Human Services, June 2006 and the Department of Social Services June 2017; and the ABS Estimated Resident Population, 30 June 2006 and 2017, respectively.

- **Young people aged 16 to 24 receiving an unemployment benefit, June 2008 and 2017**
  - **Notes:** Young people receiving an ‘unemployment benefit’ – which includes the Newstart Allowance (people aged 16 to 24 years) or Youth Allowance (other)1 paid by Centrelink – are shown as proportion of the population aged 16 to 24 years.
  - **Source:** Compiled by PHIDU based on data from the Department of Human Services, June 2008 and the Department of Social Services June 2017; and the ABS Estimated Resident Population, 30 June 2008 and 2017, respectively.

- **Low income, welfare-dependent families (with children), June 2006 and 2017**

- **Children in low income, welfare-dependent families, June 2006 and 2017**

  **Notes for both Low income, welfare-dependent families and Children in low income, welfare-dependent families data (above):**
  - For 2006, a) families included are those with children under 16 years; or b) children under 16 years in families – with incomes under $22,966 p.a. in receipt of the Family Tax Benefit (A) (whether receiving income support payments or not). These families would all receive the Family Tax Benefit (A) at the maximum level.
  - For 2017, a) families included are those with children under 16 years; or b) children under 16 years in families – with incomes under $36,515 p.a. in receipt of the Family Tax Benefit (A) (whether receiving income support payments or not). These families would all receive the Family Tax Benefit (A) at the maximum level.
  - The level of income used for this data was based on the Poverty Lines: Australia, June Quarter 2006 and 2017, which contains a weekly income for a single parent with two children, including housing costs. Poverty Lines: Australia is a quarterly newsletter that updates the Henderson Poverty Line as defined in the 1973 Commonwealth Commission of Inquiry into Poverty. Poverty lines are presented for a range of family sizes, in order to avoid the situation of poverty. The updated Poverty Lines take into account changes in the average income level of all Australians, reflecting the idea that poverty is relative.
  - [For further information, see: Poverty Lines: Australia (ISSN 1448-0530), Melbourne Institute of Applied Economic and Social Research, available from: http://melbourneinstitute.com/miaesr/publications/indicators/poverty-lines-australia.html]
  - **Source for both** Low income, welfare-dependent families and Children in low income, welfare-dependent families data (above): Compiled by PHIDU based on data from the Department of Social Services, June 2006 and 2017; and the ABS Census 2006 and 2017, respectively.

- **Health Care Card holders, June 2009 and 2017**
  - **Notes:** People eligible for a Health care card (HCC) issued by Centrelink are those aged 0 to 64 years who do not hold a Pensioner Concession Card and receive one of the following Centrelink payments: Carer Allowance; Carer Payment (child) (short term or episodic); Exceptional Circumstances Relief Payment; Family Tax Benefit A (maximum rate only); Mobility Allowance (if not receiving a Disability Support Pension); Newstart Allowance; Parenting Payment (partnered); Parent Allowance; Special benefit; Widow Allowance; and Youth Allowance (job seekers only). People may also be eligible for a HCC if they are a foster carer; ex-holder of a Carer Allowance (child) Health Care Card; or are a low income earner.
  - **Source:** Compiled by PHIDU based on data from the Department of Social Services, June 2009 and 2017; and the ABS Estimated Resident Population, 30 June 2009 and 2017, respectively.

- **Pensioner Concession Card holders, June 2009 and 2017**
  - **Notes:** People eligible for a Pensioner Concession Card issued by Centrelink comprise people aged 15 years and over who receive one of the following Centrelink payments: Age Pension; Bereavement Allowance; Carer Payment (adult); Carer Payment (child); Disability Support Pension; Newstart Allowance (child and Youth Allowance (job seeker) if single and caring for a dependent child; and Parenting Payment (single). People aged over 60 years may receive a Pensioner concession card if they have been receiving income support payments for more than nine months and receive: Newstart Allowance; Parenting Payment (partnered); Partner Allowance; Sickness Allowance; Special Benefit; and Widow Allowance. People may also be eligible for a Pensioner Concession Card if they have a partial capacity to work and are receiving any of the following payments: Newstart Allowance; Parenting Payment (partnered); and Youth Allowance (job seeker).
  - **Source:** Compiled by PHIDU based on data from the Department of Social Services, June 2009 and 2017; and the ABS Estimated Resident Population, 30 June 2009 and 2017, respectively.
Seniors Health Card holders, June 2014 and 2017

Notes: The Seniors Health Card gives older Australians access to cheaper prescription medicines, Australian government funded medical services, and other government concessions. People eligible for a Seniors Health Card must have reached Age Pension age but do not qualify for a payment by the Department of Human Services or the Department of Veterans’ Affairs.

PHA data may be the sum of freely available SA2 data if the publication of PHA data could reveal the value of confidentialised cells at the SA2 level. For these indicators, the number of people receiving this payment may be undercounted by up to four persons or either persons if two indicators are added together such as total unemployment which is the sum of Newstart and Youth allowance.

Source: Compiled by PHIDU based on data from the Department of Social Services, June 2014 and 2017; and the ABS Estimated Resident Population, 30 June 2014 and 2017, respectively.

Internet access at home

Notes for all Internet access at home data: The data include Internet access at private dwellings only.

Source for all Internet access at home data: Compiled by PHIDU based on the ABS Census 2006 and 2016 data.

Labour force

Notes:

2016 Unemployment data

These 2014 unemployment estimates, from the Small Area Labour Markets – Australia data series, are based on the Structure Preserving Estimation (SPREE) methodology which enables the generation of small area unemployment, unemployment rate and labour force estimates. They differ from the figures for people receiving an unemployment benefit as different rules are applied to eligibility for a welfare payment and being considered as unemployed. The estimates presented are derived from three primary data sources:

1. Centrelink data on people in receipt of Newstart or Youth Allowance (other) (see footnote1) by Statistical Area Level 2 (SA2);
2. Australian Bureau of Statistics (ABS) Labour Force Survey data by Statistical Area Level 4; and
3. 2011 Census of Population and Housing participation rate data at the SA2 level.

The 2016 unemployment/ labour force estimates presented are based on the 'smoothed' data series, where the data has been averaged over four quarters to minimise the variability inherent in the small area estimates.

Source:

1986: Compiled by PHIDU based on the ABS Census 1986 data.
2016: Compiled by PHIDU based on the Small Area Labour Markets - Australia, Department of Education, Employment and Workplace Relations, June Quarter 2016.

Labour force participation, 1986 and June 2016

Notes:

2016 Labour force participation data

See above Notes for Unemployment, June 2016

Source:

1986: Compiled by PHIDU based on the ABS Census 1986 data.
2016: Compiled by PHIDU based on the Small Area Labour Markets - Australia, Department of Education, Employment and Workplace Relations, June Quarter 2016; and the ABS Estimated Resident Population, 30 June 2015.

Female labour force participation, 2006 and 2016

Notes: Other labour force measures in this atlas (unemployment, labour force participation) have been compiled from data provided by DEEWR. As DEEWR do not produce small area estimates of female labour force participation, this indicator has been calculated from data in the ABS Population Census. As it is based on self-report, and not subject to the criteria for labour force participation applied by the ABS in the Labour Force Survey and utilised by DEEWR in their estimates, it will not necessarily be consistent with the data for total labour force participants.

Source: Compiled by PHIDU based on the ABS Census 2006 and 2016 data.

Community strength

Notes: The 'Voluntary work for an organisation or group' variable records people who spent time doing unpaid voluntary work through an organisation or group in the twelve months prior to Census Night.

Source: Compiled by PHIDU based on the ABS Census 2006 and 2016 data.
Health Status, Disability and Deaths

Mothers and babies

- Low birth weight babies
  - Earlier period: 2004 to 2006 (NSW, Vic, WA & Tas), 2003 to 2005 (SA), 2004 to 2005 (NT & ACT)
  - Later period: 2012 to 2014

  Notes: The data comprise all babies (live born) weighing less than 2500 grams at birth, expressed as a proportion of all live births (data over 3 years).
  The time series data are not available for Queensland.
  For the 2012-2014 period: The data previously published were for non-Indigenous low birth weight babies. The data shown here now include all low birth weight babies. As these data were collected from each State and Territory health agency, they may exclude people who live in one State/Territory and used a service in another. Hence, the Australian total excludes a small number of births that were recorded in a different State/ Territory as their usual residence. All ACT published figures are of non-Indigenous people. As such the Australian total will only include non-Indigenous people for ACT.
  Data are not shown for areas where there were fewer than 20 births.


- Smoking during pregnancy
  - Earlier period: 2004 to 2006 (NSW, WA & Tas), 2003 to 2005 (SA), 2004 to 2005 (NT & ACT)
  - Later period: 2012 to 2014

  Notes: The data comprise the women who reported that they smoked during a pregnancy, expressed as a proportion of the number of pregnancies. Note that the data may include women who were pregnant more than once during the time period (3 years).
  The time series data are not available for Queensland and Victoria.
  For the 2012-2014 period: The data previously published were for non-Indigenous women who smoked during their pregnancy. The data shown here now include all women who smoked during their pregnancy. As these data were collected from each State and Territory health agency, they may exclude people who live in one State/Territory and used a service in another. Hence, the Australian total excludes a small number of pregnancies that were recorded in a different State/ Territory as their usual residence. All ACT published figures are of non-Indigenous people. As such the Australian total will only include non-Indigenous people for ACT.
  Data are not shown for areas where there were fewer than 20 births.


Child and youth health

- Children fully immunised at 1 year of age, 1998 and 2017

  Notes: The data presented are of registered* children fully immunised at 1 year 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.

  1998 immunisation data
  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 their third vaccination for DTP (diphtheria, tetanus and pertussis), third dose of OPV (oral polio vaccine) and third dose of Hib (Haemophilus influenzae type b), all prior to the age of 1 year.

  2017 immunisation data
  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.

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

*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, 1998 and 2017 calendar year.

- **Children fully immunised at 2 years of age, 2015 and 2017**

  **Notes:** The data presented are of registered* children fully immunised at 2 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.

  **2015 and 2017 immunisation data**
  The definitions of fully immunised are:
  - **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.

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

  *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, 2017 calendar year.

- **Children fully immunised at 5 years of age, 2015 and 2017**

  **Notes:** The data presented are of registered* children fully immunised at 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.

  **2015 and 2017 immunisation data**
  The definitions of fully immunised are:
  - **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.

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

  *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, 2017 calendar year.

- **HPV vaccine coverage for females aged 15 years in June 2007 and 2013**

  **Data for 2007:** Females aged 12-13 years at 30 June 2007 who received Dose 3 by end 2011
  **Data for 2013:** Females aged 12-13 years at 30 June 2013 who received Dose 3 by 29 February 2016

  **Notes:** The data presented are of females who were aged 12 to 13 years as at 30 June 2007 and 30 June 2011 and received three doses of the HPV vaccination by end 2011 and 31 October 2014, respectively. Females receiving all three doses represent those fully vaccinated.

  Where there were fewer than five participants in an area, the data are not shown. In addition, data for SLAs (2007 period) and LGAs (2011 period) with fewer than 26 females aged 12 to 13 years in 2007 or 2011, respectively, have been suppressed.

  Information held by the National HPV Vaccination Program Register is provided to the Register from immunisation providers. The accuracy of the information is dependent on the quality and timeliness of the data provided. Every effort is made to ensure that the information recorded on the Register is up to date and correct.

  There are a number of instances in which percentages calculated for an area show as greater than 100% in the data. These may occur as a result of the numerator (the number of females vaccinated) being inaccurate where:
  - the data are coded to an SLA or LGA based on the postcode of a person’s address, rather than geo-coded from the full address, which can result in allocation to the wrong LGA;
  - LGAs are generally larger than postcode areas, and the conversion frequently allocates a whole postcode (or more than one postcode) area to an SLA or LGA, together with a part of another postcode (or parts of more than one postcode). The conversion is undertaken using approximate allocations of postcode populations (based on the best fit of Census Collection Districts (CDs) to postcode areas) to SLAs or LGAs, derived from data at the previous Census. In many instances this conversion represents a crude allocation of the population of any LGA. For example, in many cases the boundaries of CDs do not match the boundaries of postcodes, and whole CDs are allocated to the postcode into which the population largely falls;
  - a person’s address is recorded on the register as the place where an event occurred (e.g., a school, GP or immunisation clinic), rather than the person’s home address; or
- a client is recorded twice on a database or register. This may occur if inadequate information is provided to the register to allow the appropriate matching processes to occur.

**Source:** Compiled by PHIDU using data from the National HPV Vaccination Program Register (NHVPR), December 2011 and July 2016; and the ABS Estimated Resident Population (ERP) 2007 and ABS Census Estimated Resident Population (ERP) 2013, respectively.

- HPV vaccine coverage for males and females aged 15 years in mid-2015 and mid-2017
- **Data for 2015:** Males and Females aged 15 years at mid-2015 who received Dose 3 by 3 October 2017
- **Data for 2017:** Males and Females aged 15 years at mid-2017 who received Dose 3 by 3 October 2018

**Notes:** The data presented are for females and males who were aged 15 years as at mid-2015, and who received three doses of the HPV vaccination and reported to the HPV Register by 3 October 2017. Females and males receiving all three doses represent those fully vaccinated.

The data presented for 2017 are for females and males who were aged 15 years as at mid-2017, and who received three doses of the HPV vaccination and reported to the HPV Register by 3 October 2018. Females and males receiving all three doses represent those fully vaccinated.

Where there were fewer than ten participants in an area, the data are not shown; same level of confidentialisation applied to all geographies

Information held by the National HPV Vaccination Program Register is provided to the Register from immunisation providers. The accuracy of the information is dependent on the quality and timeliness of the data provided. Every effort is made to ensure that the information recorded on the Register is up to date and correct.

There are a number of instances in which percentages calculated for an area show as greater than 100% in the data. These may occur as a result of the numerator (the number of females vaccinated) being inaccurate where:

- the limited size of populations in some geographical areas;
- the estimated nature of the denominator populations used; or
- an inaccurate numerator due to the data having not been geo-coded. The geographic area at which the data are available is the postcode; postcode data are allocated to a PHA on the basis of the proportion of the postcode which falls into a PHA, which can result in allocation to the wrong PHA; the conversion is undertaken using approximate allocations of postcode populations (based on the best fit of Census Collection Districts (CDs) to postcode areas) to LGAs, derived from data at the previous Census. In many instances this conversion represents a crude allocation of the population of any LGA. For example, in many cases the boundaries of CDs do not match the boundaries of postcodes, and whole CDs are allocated to the postcode into which the population largely falls.

**Source:** Compiled by PHIDU using data from the National HPV Vaccination Program Register (NHVPR), February 2018 and November 2018; and the ABS Census Estimated Resident Population (ERP) 2015 and 2017, respectively.

- Infant deaths, 2003 to 2007 and 2011 to 2015

**Notes:** The data presented are of deaths that occurred before 12 months of age.

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

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. In each release, the latest year’s data is preliminary, the second latest is revised and the data for the remaining years is final. For further information about the ABS revisions process see the following and related sites:


**Source:** Data compiled by PHIDU from 2003 to 2007 and 2011 to 2015 deaths data produced as a consultancy by ABS on behalf of the State and Territory Registries of Births, Deaths and Marriages

**National Health Survey/ Australian Health Survey estimates**

**Notes for all estimates of prevalence of certain chronic diseases, risk factors:**

2007–08: The data are direct estimates from the 2007-08 National Health Survey (NHS), conducted by the ABS.

2011–12: The data are direct estimates from the 2011–12 Australian Health Survey (AHS), ABS Survey TableBuilder, and standardised using the average of the ABS Estimated Resident Population, 30 June 2011 and 30 June 2012.

2014–15: The data are direct estimates from the 2014–15 National Health Survey, ABS Survey TableBuilder, and standardised using the average of the ABS Estimated Resident Population, 30 June 2014 and 30 June 2015.

**The numbers are estimates for an area, not measured events as are, for example, death statistics. As such, they should be viewed as a tool that, when used in conjunction with local area knowledge and taking into consideration the prediction reliability, can provide useful information that can assist with decision making for small geographic regions. Of particular note is that the true value of the published estimates is also likely to vary within a range of values as shown by the upper and lower limits published in the data (xls) and viewable in the bar chart in the single maps.**

What the modelled estimates do achieve, however, is to summarise the various demographic, socioeconomic and administrative information available for an area in a way that indicates the expected level of each health indicator for an area with those characteristics. In the absence of accurate, localised information about the health indicator, such predictions can usefully contribute to policy and program development, service planning and other decision-making processes that require an indication of the geographic distribution of the health indicator.

The NHS/ AHS response rate provides a high level of coverage across the population; however, the response rate among some groups, e.g., those living in the most disadvantaged areas, is lower than among those in less...
disadvantaged areas. Although the sample includes the majority of people living in households in private dwellings, it excludes those living in the most remote areas of Australia; whereas these areas comprise less than 3% of the total population, Aboriginal people comprise up to one third of the population in these areas.

Estimates have not been published for areas with populations under 1,000, or with a high proportion of their population in:

1. non-private dwellings (hospitals, gaols, nursing homes - and also excludes members of the armed forces);
2. in Very Remote areas;
3. in discrete Aboriginal communities; and
4. where the relative root mean square errors (RRMSEs) on the estimates was 1 or more (estimate replaced with ≠).

**NB:** Estimates with RRMSEs from 0.25 and to 0.50 have been marked (~) to indicate that they should be used with caution; and those greater than 0.50 but less than 1 are marked (~~) to indicate that the estimate is considered too unreliable for general use.

**Source for all estimates of prevalence of certain chronic diseases, risk factors etc.:**


2011–12: Compiled by PHIDU based on direct estimates from the 2011–13 Australian Health Survey, ABS Survey TableBuilder; and standardised using the average of the ABS Estimated Resident Population, 30 June 2011 and 30 June 2012.

2014–15: Compiled by PHIDU based on direct estimates from the 2014–15 National Health Survey, ABS Survey TableBuilder; and standardised using the average of the ABS Estimated Resident Population, 30 June 2014 and 30 June 2015.

### Prevalence of self-assessed health, selected chronic diseases and risk factors

#### Self-assessed health (estimates)

- Estimated population, aged 15 years and over, with fair or poor self-assessed health, 2007–08 and 2014–15

  **Notes:** Refer to [Notes for all estimates and Source information](above).

  **Indicator detail:**

  2007–08: The data on which the estimates are based are self-reported data, reported to interviewers in the 2007–08 NHS. Respondents aged 15 years and over were asked to assess their health on a scale from 'poor' to 'excellent' (the scale was ‘poor’, ‘fair’, ‘good’, ‘very good’, or ‘excellent’). The data reported are the sum of responses categorised as ‘poor’ or ‘fair’.

  2014–15: The data on which the estimates are based are self-reported data, reported to interviewers in the 2014–15 AHS. Respondents aged 15 years and over were asked to assess their health on a scale from 'poor' to 'excellent' (the scale was ‘poor’, ‘fair’, ‘good’, ‘very good’, or ‘excellent’). The data reported are the sum of responses categorised as ‘poor’ or ‘fair’.

#### Chronic disease and conditions (estimates)

- Estimated population, aged 18 years and over, with diabetes, 2007–08 (Aust, NSW, Vic, Qld, SA, WA, Tas) and 2014–15

  **Notes:** Refer to [Notes for all estimates and Source information](above).

  **Indicator detail:**

  2007–08: The data are self-reported data, reported to interviewers in the 2007-08 NHS. Respondents to the NHS were asked whether they had been diagnosed with any long-term health condition (a condition which has lasted or is expected to last for 6 months or more), and were also asked whether they had been told by a doctor or nurse that they had type 2 diabetes.

  2014–15: These data refers to persons who self-reported having been told by a doctor or nurse that they had Type 1 diabetes, Type 2 diabetes or diabetes type unknown, irrespective of whether the person considered their diabetes to be current or long-term.

- Estimated population with circulatory system diseases, 2007–08 and 2011–12

  **Notes:** Refer to [Notes for all estimates and Source information](above).

  **Indicator detail:**

  2007–08: The data are self-reported data, reported to interviewers in the 2007-08 NHS. Respondents to the NHS were asked whether they had been diagnosed with any long-term health condition (a condition which has lasted or is expected to last for 6 months or more), and were also asked whether they had been told by a doctor or nurse that they had heart and circulatory conditions.

  2011–12: As part of the AHS, respondents aged two years and over were asked if they had ever been told by a doctor or nurse that they had one or more heart or other circulatory system conditions and if they considered they currently have one or more such conditions. The following conditions, however, were assumed to be current long-term conditions:

  - rheumatic heart disease;
- heart attack;
- heart failure;
- stroke;
- angina.

A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

- Estimated population with respiratory system diseases, 2007–08 (Aust, NSW, Vic, Qld, SA, WA, Tas) or 2011–12 (NT, ACT) and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:

2007–08: The data are self-reported data, reported to interviewers in the 2007-08 NHS. Respondents to the NHS were asked whether they had been diagnosed with any long-term health condition (a condition which has lasted or is expected to last for 6 months or more) and were also asked whether they had been told by a doctor or nurse that they had respiratory conditions.

2011–12: In the AHS, these data refer to persons ever told by a doctor or nurse that they have asthma, bronchitis, emphysema or other respiratory system disease; or not diagnosed but who consider their condition to be current and long-term. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

2014–15: These data refer to persons ever told by a doctor or nurse that they have asthma, bronchitis, emphysema or other respiratory system disease; or not diagnosed but who consider their condition to be current and long-term. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

- Estimated population with asthma, 2007–08 (Aust, NSW, Vic, Qld, SA, WA, Tas) or 2011–12 (NT, ACT) and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:

2007–08: The data are self-reported data, reported to interviewers in the 2007-08 NHS. Respondents to the NHS were asked whether they had been diagnosed with any long-term health condition (a condition which has lasted or is expected to last for 6 months or more), and were also asked whether they had been told by a doctor or nurse that they had asthma.

2011–12: In the AHS, these data refer to persons ever told by a doctor or nurse that they have asthma, and whose asthma is current and long-term. Whether a person's asthma is current or not was determined by whether they had had any symptoms of asthma or taken treatment for asthma in the last 12 months. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

2014–15: These data refer to persons ever told by a doctor or nurse that they have asthma, and whose asthma is current or long term. Whether a person's asthma is current or not was determined by whether they had had any symptoms of asthma or taken treatment for asthma in the last 12 months. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

- Estimated population with chronic obstructive pulmonary disease, 2007–08 (Aust, NSW, Vic, Qld, SA, WA, Tas) or 2011–12 (NT, ACT) and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:

2007–08: The data are self-reported data, reported to interviewers in the 2007-08 NHS. Respondents to the NHS were asked whether they had been diagnosed with any long-term health condition (a condition which has lasted or is expected to last for 6 months or more), and were also asked whether they had been told by a doctor or nurse that they had bronchitis or emphysema (chronic obstructive pulmonary disease [COPD]).

2011–12: In the AHS, these data refer to persons ever told by a doctor or nurse that they have bronchitis or emphysema (chronic obstructive pulmonary disease [COPD]); or not diagnosed but who consider their condition to be current and long-term. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

2014–15: These data refer to persons ever told by a doctor or nurse that they have bronchitis or emphysema (chronic obstructive pulmonary disease [COPD]); or not diagnosed but who consider their condition to be current and long-term. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

- Estimated population with musculoskeletal system diseases, 2007–08 (Aust, NSW, Vic, Qld, SA, WA, Tas) or 2011–12 (NT, ACT) and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:

2007–08: The data are self-reported data, reported to interviewers in the 2007-08 NHS. Respondents to the NHS were asked whether they had been diagnosed with any long-term health condition (a condition which has lasted or is expected to last for 6 months or more), and were also asked whether they had been told by a doctor or nurse that they had musculoskeletal system disease.
2011–12: In the AHS, these data refer to persons ever told by a doctor or nurse that they have a disease of the musculoskeletal system and connective tissue; or not diagnosed but who consider their condition to be current and long-term. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

2014–15: These data refer to persons ever told by a doctor or nurse that they have a disease of the musculoskeletal system and connective tissue; or not diagnosed but who consider their condition to be current and long-term. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

- Estimated population with arthritis, 2007–08 (Aust, NSW, Vic, Qld, SA, WA, Tas) or 2011–12 (NT, ACT) and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:
2007–08: The data are self-reported data, reported to interviewers in the 2007-08 NHS. Respondents to the NHS were asked whether they had been diagnosed with any long-term health condition (a condition which has lasted or is expected to last for 6 months or more), and were also asked whether they had been told by a doctor or nurse that they had arthritis.

2011–12: In the AHS, these data refer to respondents who were asked whether they have, or had ever had:
- gout;
- rheumatism;
- arthritis;
- osteoarthritis;
- rheumatoid arthritis;
- other types of arthritis.

If they reported either gout or rheumatism, they were then asked whether their condition was expected to last for six months or more. If they identified an arthritis condition, other than gout or rheumatism, they were asked whether they had ever been told by a doctor or nurse that they have the condition. Only persons whose arthritis was current and long-term were recorded as having arthritis. Persons who reported having arthritis, which was not current and long-term, were recorded as not having arthritis. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more.

2014–15: These data refer to respondents who were asked whether they have, or had ever had:
- gout;
- rheumatism;
- arthritis;
- osteoarthritis;
- rheumatoid arthritis;
- other types of arthritis.

If they reported either gout or rheumatism, they were then asked whether their condition was expected to last for six months or more. If they identified an arthritis condition, other than gout or rheumatism, they were asked whether they had ever been told by a doctor or nurse that they have the condition. Only persons whose arthritis was current and long-term were recorded as having arthritis. Persons who reported having arthritis, which was not current and long-term, were recorded as not having arthritis. A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more. Arthritis is defined as osteoarthritis, rheumatoid arthritis and other arthritis or type unknown, that is current and long-term.

The 2014-15 NHS differs from the 2011-12 AHS in that respondents were not immediately asked, in the first question of the module, whether they had ever been told by a doctor or nurse they have arthritis. For more information refer to the NHS Users' Guide, 2014-15.

Psychological distress (estimates)

- Estimated population, aged 18 years and over, with high or very high psychological distress based on the Kessler 10 Scale (K10), 2007–08 and 2011–12

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:
2007–08: The data have been derived from the Kessler Psychological Distress Scale-10 items (K-10), which is a scale of non-specific psychological distress based on 10 questions asked of respondents about negative emotional states in the 4 weeks prior to interview. ‘High’ and ‘Very high’ distress are the two highest levels of distress categories (of a total of four categories).

2011–12: Information was collected from respondents aged 18 years and over using the Kessler Psychological Distress Scale-10 (K10). This ten-item questionnaire yields a measure of psychological distress based on questions about negative emotional states (with different degrees of severity) experienced in the four weeks prior to interview. For each question, there is a five-level response scale based on the amount of time that a respondent experienced those particular feelings. The response options are ‘none of the time’; ‘a little of the time’; ‘some of the time’; ‘most of the time’; or ‘all of the time’. Each of the items are scored from 1 for ‘none’ to 5 for ‘all of the time’. Scores for the ten
items are summed, yielding a minimum possible score of 10 and a maximum possible score of 50, with low scores indicating low levels of psychological distress and high scores indicating high levels of psychological distress. K10 results are commonly grouped for output. Results from the 2011–13 AHS are grouped into the following four levels of psychological distress: ‘low’ (scores of 10-15, indicating little or no psychological distress); ‘moderate’ (scores of 16-21); ‘high’ (scores of 22-29); and ‘very high’ (scores of 30-50). Based on research from other population studies, a ‘very high’ level of psychological distress shown by the K10 may indicate a need for professional help. For the indicator in this atlas, data are for respondents aged 18 years and over who scored in the ‘high’ and ‘very high’ levels of psychological distress.

Health risk factors (estimates)

- Estimated male population, aged 18 years and over, who were current smokers, 2007–08 and 2014–15
- Estimated female population, aged 18 years and over, who were current smokers, 2007–08 and 2014–15
- Estimated population, aged 18 years and over, who were current smokers, 2007–08 and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:

2007–08 and 2014–15: The data on which the estimates are based are self-reported data, reported to interviewers in the 2007–08 NHS or 2014–15 AHS. A current smoker is an adult who reported at the time of interview that they smoked manufactured (packet) cigarettes, roll-your-own cigarettes, cigars, and/or pipes at least once per week. It excludes chewing tobacco and smoking of non-tobacco products. As part of the survey, respondents aged 15 years and over were asked to describe their smoking status at the time of interview as:

1. current smokers: daily, weekly, other;
2. ex-smokers;
3. never smoked (those who had never smoked 100 cigarettes, nor pipes, cigars or other tobacco products at least 20 times, in their lifetime).

For the indicator in this atlas, data are for respondents aged 18 years and over who responded that they were “a current, daily or at least once weekly smoker”.

- Estimated male population, aged 18 years and over, who were overweight (but not obese), 2007–08 and 2014–15
- Estimated female population, aged 18 years and over, who were overweight (but not obese), 2007–08 and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:

2007–08:
The data are self-reported data, reported to interviewers in the 2007-08 NHS. The BMI was calculated from self-reported height and weight information and grouped as follows to allow reporting against both WHO and NHMRC guidelines – normal range: 18.5 to less than 20.0 and 20.0 to less than 25.0; overweight: 25.0 to less than 30.0; obese: 30.0 and greater.

2014–15: The Body Mass Index (BMI) (or Quetelet's index) is a measure of relative weight based on an individual's mass and height. The height (cm) and weight (kg) of respondents, as measured during the AHS interview, were used to calculate the BMI, and overweight (but not obesity) was determined where a person’s BMI was between 25 and less than 30. The BMI is a useful tool at a population level for measuring trends in body weight, and helping to define population groups who are at higher risk of becoming obese, and therefore developing long-term medical conditions associated with a high BMI, such as type 2 diabetes and cardiovascular disease.

Note that the modelled estimates are based on the 73.2% of adults in the sample who had their height and weight measured.

- Estimated male population, aged 18 years and over, who were obese, 2007–08 and 2014–15
- Estimated female population, aged 18 years and over, who were obese, 2007–08 and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:

2007–08:
The data are self-reported data, reported to interviewers in the 2007-08 NHS. The BMI was calculated from self-reported height and weight information and grouped as follows to allow reporting against both WHO and NHMRC guidelines – normal range: 18.5 to less than 20.0 and 20.0 to less than 25.0; overweight: 25.0 to less than 30.0; obese: 30.0 and greater.

2014–15: The Body Mass Index (BMI) (or Quetelet's index) is a measure of relative weight based on an individual's mass and height. The height (cm) and weight (kg) of respondents, as measured during the AHS interview, were used to calculate the BMI, and obesity was determined where a person’s BMI was 30 or greater. The BMI is a useful tool at a population level for measuring trends in body weight, and helping to define population groups who are at higher risk of developing long-term medical conditions associated with a high BMI, such as type 2 diabetes and cardiovascular disease.

Note that the modelled estimates are based on the 73.2% of adults in the sample who had their height and weight measured.
guidelines – normal range: 18.5 to less than 20.0 and 20.0 to less than 25.0; overweight: 25.0 to less than 30.0; obese: 30.0 and greater.

2014–15: The Body Mass Index (BMI) (or Quetelet's index) is a measure of relative weight based on an individual's mass and height. The height (cm) and weight (kg) of respondents, as measured during the AHSS interview, were used to calculate the BMI, and overweight (but not obesity) was determined where a person’s BMI was between 25 and less than 30. The BMI is a useful tool at a population level for measuring trends in body weight, and helping to define population groups who are at higher risk of becoming obese, and therefore developing long-term medical conditions associated with a high BMI, such as type 2 diabetes and cardiovascular disease.

Note that the modelled estimates are based on the 73.2% of adults in the sample who had their height and weight measured.

- Estimated female population, aged 18 years and over, who were obese, 2007–08 and 2014–15

Notes: Refer to Notes for all estimates and Source information above.

Indicator detail:

2007–08: The data are self-reported data, reported to interviewers in the 2007-08 NHS. The BMI was calculated from self-reported height and weight information and grouped as follows to allow reporting against both WHO and NHMRC guidelines – normal range: 18.5 to less than 20.0 and 20.0 to less than 25.0; overweight: 25.0 to less than 30.0; obese: 30.0 and greater.

2011–13: The Body Mass Index (BMI) (or Quetelet's index) is a measure of relative weight based on an individual's mass and height. The height (cm) and weight (kg) of respondents, as measured during the AHSS interview, were used to calculate the BMI, and obesity was determined where a person’s BMI was 30 or greater. The BMI is a useful tool at a population level for measuring trends in body weight, and helping to define population groups who are at higher risk of developing long-term medical conditions associated with a high BMI, such as type 2 diabetes and cardiovascular disease.

Note that the modelled estimates are based on the 73.2% of adults in the sample who had their height and weight measured.

Disability

- Assistance to persons with a disability (unpaid), 2006 and 2016

Notes: 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.

Source: Compiled by PHIDU based on the ABS Census 2006 and 2016 data.

- People with a profound or severe disability (includes people in long-term accommodation), All ages, 2006 and 2016
- Persons with a profound or severe disability and living in the community, All ages, 2006 and 2016
- Persons with a profound or severe disability (includes people in long-term accommodation), 0 to 64 years, 2006 and 2016
- Persons with a profound or severe disability and living in the community, 0 to 64 years, 2006 and 2016
- Persons with a profound or severe disability (includes people in long-term accommodation), 65 years and over, 2011 and 2016
- Persons with a profound or severe disability and living in the community, 65 years and over, 20011 and 2016

Notes for all People with a profound or severe disability data: 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.

The ABS published figures are of people – of all ages/ aged 0 to 64 years, as appropriate – including 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: the ‘total’ figure in this atlas includes people living in these accommodation types, whereas the figure for ‘living in the community’ excludes them.

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

Source for all People with a profound or severe disability data: Compiled by PHIDU based on the ABS Census 2006 and 2016 (unpublished) data.
**Median age at death**

- Median age at death of males, 2003 to 2007 and 2010 to 2014
- Median age at death of females, 2003 to 2007 and 2010 to 2014
- Median age at death of persons, 2003 to 2007 and 2010 to 2014

**Source for all 2003 to 2007 Median age at death data:** Data compiled by PHIDU from deaths data supplied by the ABS on behalf of the State and Territory Registrars of Births, Deaths and Marriages for 2003 to 2007; and the ABS Estimated Resident Population, 30 June 2003 to 2007.

**Source for all 2010 to 2014 Median age at death data:** Data compiled by PHIDU from deaths data based on the 2010 to 2014 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**

- Deaths of males aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
- Deaths of females aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
- Total deaths, 0 to 74 years, 1987 to 1991 and 2011 to 2015

**Notes for all 1987 to 1991 Premature mortality by sex data:** The data presented are the average annual indirectly age-standardised rates per 100,000 males/females/population (aged 0 to 74 years), based on the Australian standard.

**Notes for all 2011 to 2015 Premature mortality by sex data:** The data presented are the average annual indirectly age-standardised rates per 100,000 males/females/population (aged 0 to 74 years); and/or indirectly age-standardised ratios, based on the Australian standard.

**Source for all 1987 to 1991 Premature mortality by sex data:** Data compiled by PHIDU from deaths data supplied by the ABS on behalf of the State and Territory Registrars of Births, Deaths and Marriages for 1987 to 1991; and the ABS Estimated Resident Population, 30 June 1987 to 1991.

**Source for all 2011 to 2015 Premature mortality by sex data:** 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 at the small area level is the ABS Estimated Resident Population (ERP), 30 June 2011 to 30 June 2015, Statistical Areas Level 2; the population standard is the ABS ERP for Australia, 30 June 2011 to 30 June 2015.

**Premature mortality by selected cause**

- Deaths from cancer, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
  **ICD-10 codes:** C00-D48
  - Deaths from colorectal cancer, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
    **ICD-10 codes:** C18-C20
  - Deaths from lung cancer, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
    **ICD-10 codes:** C33, C34

- Deaths from circulatory system diseases, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
  **ICD-10 codes:** I00-I99
  - Deaths from ischaemic heart disease, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
    **ICD-10 codes:** I20-25
  - Deaths from cerebrovascular disease, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
    **ICD-10 codes:** I60-I69

- Deaths from respiratory system diseases, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
  **ICD-10 codes:** J00-J99
  - Deaths from chronic obstructive pulmonary disease, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
    **ICD-10 codes:** J40-J44

- Deaths from external causes, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
  **ICD-10 codes:** V01-Y98
  - Deaths from road traffic injuries, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
    **ICD-10 codes:** V00-V06.[1], V09.2, V09.3, V10-V18.[4,5,9], V19.[4,5,6,9], V20-V28.[4,5,9], V29.[4,5,6,9], V30-V38.[5,6,7,9], V39.[4,5,6,9], V40-V48[5,6,7,9], V49[4,5,6,9], V50-V48.[5,6,7,9], V59.[4,5,6,9], V60-V68.[5,6,7,9], V69.[4,5,6,9], V70-V78.[5,6,7,9], V79.[4,5,6,9], V81.1, V82.1, V82.9, V83-V86.[0,1,2,3], V87, V89.2, V89.3
  - Deaths from suicide and self-inflicted injuries, persons aged 0 to 74 years, 1987 to 1991 and 2011 to 2015
    **ICD-10 codes:** X60-X84, Y87.0

**Notes for all 1987 to 1991 Premature mortality by selected cause data:** The data presented are the average annual indirectly age-standardised rates per 100,000 population (aged 0 to 74 years), based on the Australian standard.
Notes for all 2011 to 2015 Premature mortality by selected cause data: The data presented are the average annual indirectly age-standardised rates per 100,000 population (aged 0 to 74 years), based on the Australian standard.

Source for all 1987 to 1991 Premature mortality by selected cause data: Data compiled by PHIDU from deaths data supplied by the ABS on behalf of the State and Territory Registrars of Births, Deaths and Marriages for 1987 to 1991; and the ABS Estimated Resident Population, 30 June 1987 to 1991.

Source for all 2011 to 2015 Premature mortality by selected cause data: 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 at the small area level is the ABS Estimated Resident Population (ERP), 30 June 2011 to 30 June 2015, Statistical Areas Level 2; the population standard is the ABS ERP for Australia, 30 June 2011 to 30 June 2015.

Avoidable mortality

Background for all Avoidable mortality data: In 2010, the National Healthcare Agreement (NHA) included a performance indicator called Potentially Avoidable Deaths (PI-20). The specification for this indicator was endorsed by the Australian Health Ministers’ Advisory Council in 2009 based on advice from the National Health Information Standards and Statistics Committee (NHISSC).

On 4 December 2013, NHISSC agreed to the re-establishment of the Potentially Preventable Hospitalisations/Potentially Avoidable Deaths (PPH/PAD) Working Group to finalise specification of this performance indicator for the 2015 NHA report. Throughout 2014, work was done by the PPH/PAD Working Group, with further revisions by the Australian Institute of Health and Welfare (AIHW), and including additional NHISSC comments from several states. It also included an examination of the international work in avoidable mortality.

As a result of this work, the National Healthcare Agreement (NHA) (2015) Health, Standard 14/01/2015 now includes the PI-16 Potentially avoidable deaths, 2015, and these are presented in this dataset. Further revisions of this NHA Potentially avoidable deaths standard are proposed.

Notes for all Avoidable mortality data: Deaths are defined as avoidable in the context of the present health system, based on the PI-16 Potentially avoidable deaths, 2015.

The data presented are the average annual indirectly age-standardised rates per 100,000 males/ females/ persons (aged 0 to 74 years); and/or indirectly age-standardised ratios, based on the Australian standard.

Not all of the causes of avoidable mortality are shown in this atlas as some have too few cases to be reliable indicators at the small area level.

Additional note for all Avoidable mortality data: Some of the selected avoidable mortality indicators may comprise the same condition(s)/ ICD codes as the selected premature mortality indicators presented in the data/ maps.

Source for all Avoidable mortality data:

1997 to 2000: Data compiled by PHIDU from deaths data based on the 1997 to 2000 Cause of Death Unit Record Files supplied by the ABS on behalf of the State and Territory Registrars of Births, Deaths and Marriages. The population at the small area level (Statistical Area Level 2) is the ABS Estimated Resident Population (ERP), 30 June 1997 to 30 June 2000; the population standard is the ABS Estimated Resident Population for Australia at 30 June 1991; and the ABS Estimated Resident Population, 30 June 1987 to 1991.

2011 to 20145: 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 at the small area level is the ABS Estimated Resident Population (ERP), 30 June 2011 to 30 June 2015, Statistical Areas Level 2; the population standard is the ABS ERP for Australia, 30 June 2011 to 30 June 2015.

Avoidable mortality by sex

- Deaths from all avoidable causes, males aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
- Deaths from all avoidable causes, females aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
- Deaths from all avoidable causes, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015

Notes and Source for all Avoidable mortality by sex data: Refer to the Notes and Source for all Avoidable mortality data above.

Avoidable mortality by selected cause

- Avoidable deaths from cancer, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
  - Avoidable deaths from colorectal cancer, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
  - Avoidable deaths from breast cancer, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
- Avoidable deaths from diabetes, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
- Avoidable deaths from circulatory system diseases, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
  - Avoidable deaths from ischaemic heart disease, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
  - Avoidable deaths from cerebrovascular diseases, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
- Avoidable deaths from respiratory system diseases, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
  - Avoidable deaths from chronic obstructive pulmonary disease, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
- Avoidable deaths from selected external causes of mortality (Falls; fires, burns; Suicide and self-inflicted injuries; etc.), persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
  - Avoidable deaths from suicide and self-inflicted injuries, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
- Avoidable deaths from other external causes of mortality (Transport accidents; Accidental drowning and submersion; etc.), persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015
  - Avoidable deaths from transport accidents, persons aged 0 to 74 years, 1997 to 2000 and 2011 to 2015

Notes and Source for all Avoidable mortality by selected cause data: Refer to the Background, Notes and Source for all Avoidable mortality data above.

Use and Provision of Health and Welfare Services

MBS services
- GP services to males (MBS and DVA), 1996 and 2009/10
- GP services to females (MBS and DVA), 1996 and 2009/10
- Total GP services (MBS and DVA), 1996 and 2009/10

Source for all MBS services data (above):

Home and Community Care Program

Source for all Home and community Care Program data:

- Home and Community Care Program: Clients living alone, 2010/11 and 2014/15
  Notes: Clients whose status is recorded as living alone at the date of most recent assessment.

- Home and Community Care Program: Clients with carer, 2010/11 and 2014/15
  Notes: Clients whose status is recorded as having a carer at the date of most recent assessment. The carer may be living with the client or not.

- Home and Community Care Program: Indigenous clients (as a proportion of total clients), 2010/11 and 2014/15
  Notes: 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), 2010/11 and 2014/15
  Notes: Clients whose status is recorded as Indigenous at the date of most recent assessment.

- Home and Community Care Program: Non-English speaking clients, 2010/11 and 2014/15
  Notes: Clients whose main language spoken at home at the date of most recent assessment is not English.

- Home and Community Care Program: Total clients, 2010/11 and 2014/15
  Notes: All clients that recorded at least one instance of assistance for the time period.

- Home and Community Care Program: Allied health care instances at home, 2010/11 and 2014/15
  Notes: Includes physiotherapy, occupational therapy, podiatry, advice from a dietician or nutritionist, or speech therapy. Can be provided from a community centre or in the client’s home.

- Home and Community Care Program: Allied health care instances at centre, 2010/11 and 2014/15
  Notes: Includes physiotherapy, occupational therapy, podiatry, advice from a dietician or nutritionist, or speech therapy. Can be provided from a community centre or in the client’s home.

- Home and Community Care Program: Case management instances, 2010/11 and 2014/15
  Notes: The active assistance received by a client from a formally identified agency worker who coordinates the planning and delivery of a suite of services to the individual clients.

- Home and Community Care Program: Centre based day care instances, 2010/11 and 2014/15
  Notes: Attendance/participation in structured group activities designed to develop, maintain or support the capacity for independent living and social interaction which are conducted in a centre-based setting. It includes group excursions/activities conducted by centre staff but held away from the centre.

- Home and Community Care Program: Client care coordination instances, 2010/11 and 2014/15
  Notes: Assistance which focuses on facilitating access to HACC services and includes implementing, monitoring and reviewing the care plan, liaison with service providers and advocacy to ensure the client has access to the range of services required.
• Home and Community Care Program: Domestic assistance instances, 2010/11 and 2014/15
  Notes: House cleaning, washing and ironing, help with shopping, transport to and from banks and appointments et cetera, and general household support.
  NB: The reporting of Victorian data differs from other States and Territories for this type of assistance. For Victoria, the instances of meals at home are reported under this ‘Domestic assistance instances’ category (rather than in the ‘Meals at centre plus meals at home instances’ category).

• Home and Community Care Program: Home maintenance and modification instances, 2010/11 and 2014/15
  Notes: Assistance with the maintenance and repair of the client's home, garden or yard to keep their home in a safe and habitable condition. This also includes minor modifications such as grab rails, hand rails, ramps, and shower rails to reduce the impact of disability on the activities of daily living.

• Home and Community Care Program: Meals at centre plus meals at home instances, 2010/11 and 2014/15
  Notes: Provision of meals prepared and delivered to the client's home or provided in a community centre.
  NB: The reporting of Victorian data differs from other States and Territories for this type of assistance. For Victoria, the instances of meals at home are reported as part of the ‘Domestic assistance instances’ category.

• Home and Community Care Program: Nursing care at centre plus nursing care at home instances, 2010/11 and 2014/15
  Notes: Health care provided to a client by a registered or enrolled nurse. This care can be provided from a community centre or in the client's home.

• Home and Community Care Program: Personal care instances, 2010/11 and 2014/15
  Notes: May include help with bathing, toilet use, eating, dressing and personal grooming.

• Home and Community Care Program: Respite care instances, 2010/11 and 2014/15
  Notes: Assistance to carers by provision of a substitute carer. Can include centre-based, in-home, host family and peer support respite care.

• Home and Community Care Program: Social support instances, 2010/11 and 2014/15
  Notes: Assistance provided by a companion either within the home or while accessing community services, whose primary purpose is to meet the person’s need for social contact and/or accompaniment in order to participate in community life. This includes friendly visiting.
  NB: The reporting of Victorian data differs from other States and Territories for this type of assistance. For Victoria, ‘Transport instances’ are reported under this ‘Social support instances’ category.

• Home and Community Care Program: Transport instances, 2010/11 and 2014/15
  Notes: Assistance to provide or coordinate individual or group transport services.
  NB: The reporting of Victorian data differs from other States and Territories for this type of assistance. For Victoria, ‘Transport instances’ are reported as part of the ‘Social support instances’ category.

• Home and Community Care Program: Total instances of assistances, 2010/11 and 2014/15
  Notes: Includes all the above types of support plus:
  - other food services
  - provisions of goods and equipment such as self care and support and mobility aids, and
  - formal linen service

### Aged care places

**Notes for all Aged care places data:** These data exclude residents in state-funded facilities (also known as Long Stay or Nursing Home Type Patients) in country areas.

This data includes: Multi-Purpose Services; National Aboriginal and Torres Strait Islander Aged Care Program; and Consumer Directed Care.

Data for the Transition Care Program (TCP), which provides short-term support and active management for older people after a hospital stay in either a residential or community aged care setting, are not included here.

The data show a number of areas as having rates that are very high: these are areas with relatively high proportions of Indigenous population. As ageing and disability affect Aboriginal and Torres Strait Islander people earlier than they do non-Indigenous Australians, planning for services is based on the number of people aged 50 years and over, instead of 70 years and over as used for the rest of the population.

**Source for all Aged care places data:**

- **2004:** Compiled by PHIDU based on data from the Department of Health and Ageing, June 2004; and the ABS Estimated Resident Population, 30 June 2004.
- **2016:** Compiled by PHIDU based on data from the Department of Health and Ageing, June 2016; and the ABS Estimated Resident Population, 30 June 2015.

• Total residential aged care places, June 2004 and 2016
  Notes: These data comprise both residential high-level and low-level care places. See above Notes for Residential aged care – high-level care places and Residential aged care – low-level care places for further information.
Hospital admissions

Notes for all Hospital admissions data: 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.

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. Admitted patient care 2016-17: Australian hospital statistics. Health services series no. 84. (Cat. no. HSE 201) Canberra: AIHW; 2018.]

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 persons, and admissions by hospital sector, 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 for further details); these data are presented separately. All other same-day admissions are included.

Confidentiality of data: Counts of less than five admissions have been suppressed.

Data were not provided to PHIDU by sector (i.e., separate data for public hospitals and private hospitals) in Queensland, Tasmania, the Northern Territory or the Australian Capital Territory.

As a result, where data are published for ‘public’ and ‘all hospitals’ for other jurisdictions, only the ‘all hospitals’ data are available for these jurisdictions. The ‘all hospitals’ data in other jurisdictions have been confidentialised where publication of data and all hospitals data would allow identification of private hospital data due to small cell sizes. The decision was made to confidentialise the ‘all hospitals’ rather than the ‘public hospitals’ figures as admissions to public hospitals, which comprise the majority of admissions, both overall and from the most disadvantaged areas, were considered to be the most relevant in the context of this atlas.

Note: Therefore remoteness/ quintile data for both private hospitals and all hospitals are also not published for these areas or for the whole of Australia.

Detail of analysis: Indirectly age-standardised rate per 100,000 population; and/or indirectly age-standardised ratio, based on the Australian standard. A standardised ratio (SR) provides a comparison to the Australian rate which is assigned a value of 100. Ratios below 100 are proportionally less than the national rate, while ratios above 100 are proportionally higher than the national rate. The SR is the ratio of the observed value to the expected value (the expected value is age-standardised).

Source for all Hospital admissions data:


Admissions by hospital type and sex, various time periods

- Total admissions (excluding dialysis) - Public hospitals
- Total admissions (excluding dialysis) - Private hospitals
- Total admissions (excluding dialysis) - All hospitals
- Male total admissions (excluding dialysis) - Public hospitals
- Male total admissions (excluding dialysis) - All hospitals
- Female total admissions (excluding dialysis) - Public hospitals
- Female total admissions (excluding dialysis) - All hospitals

Notes and Source for all Admissions by hospital type and sex data: Refer to the Notes and Source for all Hospital admissions data above.

Hospital admissions by diagnosis, Males/ Females, various time periods

- Admissions for infectious and parasitic diseases - Public hospitals
  ICD-10-AM codes: A00-B99
- Admissions for infectious and parasitic diseases - All hospitals
  ICD-10-AM codes: A00-B99
- Admissions for all cancers - Public hospitals
  ICD-10-AM codes: C00-D48
- Admissions for all cancers - All hospitals
  ICD-10-AM codes: C00-D48
- Admissions for endocrine, nutritional and metabolic diseases - Public hospitals
  ICD-10-AM codes: E00-E90
- Admissions for endocrine, nutritional and metabolic diseases - All hospitals
  ICD-10-AM codes: E00-E90
- Admissions for mental health related conditions - Public hospitals
  ICD-10-AM codes: F00-F99
- Admissions for mental health related conditions - All hospitals
  ICD-10-AM codes: F00-F99
- Admissions for nervous system diseases - Public hospitals
  ICD-10-AM codes: G00-G99
- Admissions for nervous system diseases - All hospitals
  ICD-10-AM codes: G00-G99
- Admissions for eye and adnexa diseases - Public hospitals
  ICD-10-AM codes: H00-H59
- Admissions for eye and adnexa diseases - All hospitals
  ICD-10-AM codes: H00-H59
- Admissions for ear and mastoid process disease - Public hospitals
  ICD-10-AM codes: H60-H95
- Admissions for ear and mastoid process disease - All hospitals
  ICD-10-AM codes: H60-H95
- Admissions for circulatory diseases - Public hospitals
  ICD-10-AM codes: I00-I99
- Admissions for circulatory diseases - All hospitals
  ICD-10-AM codes: I00-I99
- Admissions for respiratory diseases - Public hospitals
  ICD-10-AM codes: J00-J99
- Admissions for respiratory diseases - All hospitals
  ICD-10-AM codes: J00-J99
- Admissions for digestive diseases - Public hospitals
  ICD-10-AM codes: K00-K93
- Admissions for digestive diseases - All hospitals
  ICD-10-AM codes: K00-K93
- Admissions for skin and subcutaneous tissue diseases - Public hospitals
  ICD-10-AM codes: L00-L99
- Admissions for skin and subcutaneous tissue diseases - All hospitals
  ICD-10-AM codes: L00-L99
- Admissions for musculoskeletal system and connective tissue diseases - Public hospitals
  ICD-10-AM codes: M00-M99
- Admissions for musculoskeletal system and connective tissue diseases - All hospitals
  ICD-10-AM codes: M00-M99
- Admissions for genitourinary system diseases - Public hospitals
  ICD-10-AM codes: N00-N99
- Admissions for genitourinary system diseases - All hospitals
  ICD-10-AM codes: N00-N99
- Admissions for pregnancy and childbirth 15 to 44 years (female only) - Public hospitals
  ICD-10-AM codes: O00-O99
- Admissions for pregnancy and childbirth 15 to 44 years (female only) - All hospitals
  ICD-10-AM codes: O00-O99
- Admissions for injury and poisoning - Public hospitals
  ICD-10-AM codes: SOO-T98
Hospital admissions by diagnosis, Persons, various time periods

- Admissions for injury and poisoning - All hospitals
  ICD-10-AM codes: SOO-T98

Notes and Source for all Admissions by diagnosis data: Refer to the Notes and Source for all Hospital admissions data above.

- Admissions for infectious and parasitic diseases - Public hospitals
  ICD-10-AM codes: A00-B99

- Admissions for infectious and parasitic diseases - All hospitals
  ICD-10-AM codes: A00-B99

- Admissions for all cancers - Public hospitals
  ICD-10-AM codes: C00-D48

- Admissions for all cancers - All hospitals
  ICD-10-AM codes: C00-D48

- Admissions for endocrine, nutritional and metabolic diseases - Public hospitals
  ICD-10-AM codes: E00-E90

- Admissions for endocrine, nutritional and metabolic diseases - All hospitals
  ICD-10-AM codes: E00-E90

- Admissions for mental health related conditions - Public hospitals
  ICD-10-AM codes: F00-F99

- Admissions for mental health related conditions - All hospitals
  ICD-10-AM codes: F00-F99

- Admissions for nervous system diseases - Public hospitals
  ICD-10-AM codes: G00-G99

- Admissions for nervous system diseases - All hospitals
  ICD-10-AM codes: G00-G99

- Admissions for eye and adnexa diseases - Public hospitals
  ICD-10-AM codes: H00-H59

- Admissions for eye and adnexa diseases - All hospitals
  ICD-10-AM codes: H00-H59

- Admissions for ear and mastoid process disease - Public hospitals
  ICD-10-AM codes: H60-H95

- Admissions for ear and mastoid process disease - All hospitals
  ICD-10-AM codes: H60-H95

- Admissions for circulatory diseases - Public hospitals
  ICD-10-AM codes: I00-I99

- Admissions for circulatory diseases - All hospitals
  ICD-10-AM codes: I00-I99

- Admissions for respiratory diseases - Public hospitals
  ICD-10-AM codes: J00-J99

- Admissions for respiratory diseases - All hospitals
  ICD-10-AM codes: J00-J99

- Admissions for digestive diseases - Public hospitals
  ICD-10-AM codes: K00-K93

- Admissions for digestive diseases - All hospitals
  ICD-10-AM codes: K00-K93

- Admissions for skin and subcutaneous tissue diseases - Public hospitals
  ICD-10-AM codes: L00-L99

- Admissions for skin and subcutaneous tissue diseases - All hospitals
  ICD-10-AM codes: L00-L99

- Admissions for musculoskeletal system and connective tissue diseases - Public hospitals
  ICD-10-AM codes: M00-M99

- Admissions for musculoskeletal system and connective tissue diseases - All hospitals
  ICD-10-AM codes: M00-M99
- Admissions for genitourinary system diseases - Public hospitals  
  **ICD-10-AM codes:** N00-N99
- Admissions for genitourinary system diseases - All hospitals  
  **ICD-10-AM codes:** N00-N99
- Admissions for certain conditions originating in the perinatal period - Public hospitals  
  **ICD-10-AM codes:** P00-P96
- Admissions for certain conditions originating in the perinatal period - All hospitals  
  **ICD-10-AM codes:** P00-P96
- Admissions for injury and poisoning - Public hospitals  
  **ICD-10-AM codes:** SO0-T98
- Admissions for injury and poisoning - All hospitals  
  **ICD-10-AM codes:** SO0-T98

**Notes and Source for all Admissions by diagnosis data:** Refer to the [Notes and Source for all Hospital admissions data](#) above.

**Hospital admissions by procedure, various time periods**

- Admissions for a tonsillectomy, all ages - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 41789-00, 41789-01, 41789-02 and/or 41789-03
- Admissions for a myringotomy, 0 to 9 years - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 41632-00 and/or 41632-01
- Admissions for a hysterectomy, females aged 30 to 59 years - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** Block 12688 or 1269 or a reported procedure code of 90450-00, 90450-01 and/or 90450-02
- Admissions for a Caesarean section, females aged 15 to 44 years - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** Block 1340
- Admissions for a birth with an outcome of delivery, females aged 15 to 44 years - Public hospitals/ All hospitals
- Admissions for a coronary artery bypass graft - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 38497-04, 38497-05, 38497-06, 38497-07, 38500-04, 38500-05, 90201-00, 90201-01, 90201-02, 90201-03, 38497-00, 38500-02, 38500-03, 38497-01, 38503-02, 38497-02, 38497-03, 38500-00, 38500-01, 38503-00, 38503-01, 38503-05 and/or 38503-05
- Admissions for a coronary angioplasty - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 38505-00, 38306-00, 38306-01, 38306-02, 38306-03, 38306-04, 38306-05, 38300-00, 38300-01, 38303-00, 38303-01, 38309-00, 38312-00, 38312-01, 38315-00, 38318-00 and/or 38318-01
- Admissions for a cardiac catheterisation - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 38200-00, 38218-01, 38203-00, 38218-00, 38206-00 and/or 38218-02
- Admissions for a hip fracture - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** M84.45, S72.00-S72.05, S72.08, S72.10-S72.11, S72.2
- Admissions for a knee replacement - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 49527-00, 49554-00, 49530-00, 49533-00, 49530-01, 49517-00, 49518-00, 49519-00, 49534-01, 49521-00, 49521-01, 49521-02, 49521-03, 49524-00 and/or 49524-01
- Admissions for a knee arthroscopy - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 49557-00, 49503-00, 49560-03, 49562-01, 49561-01 and/or 49557-02
- Admissions for fibre optic colonoscopy - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 32090-00, 32084-00, 32084-02 and/or 32090-02
- Admissions for fibre optic colonoscopy excision - Public hospitals/ All hospitals  
  **ICD-10-AM codes:** 32090-01, 32093-00, 32087-00 and/or 32084-01

**Notes and Source for all Admissions by procedure data:** Refer to the [Notes and Source for all Hospital admissions data](#) above.

**Same-day admissions for renal dialysis, various time periods**

- Admissions for same-day dialysis for kidney disease – Public hospitals
- Admissions for same-day dialysis for kidney disease – All hospitals

**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.

**Confidentiality of data:** Counts of fewer than five admissions have been suppressed.

Data were not available for private dialysis units in Queensland, Tasmania, the Northern Territory or the Australian Capital Territory, to protect the confidentiality of the small number of private facilities in these jurisdictions. As a result, where data are published for public dialysis units and all dialysis units, the ‘all units’ data for these jurisdictions have also been confidentialised, as their publication would allow identification of the confidentialised private dialysis units. The ‘all units’ data in other jurisdictions have also been confidentialised where publication of public and all units data would allow identification of private hospital data confidentialised due to small cell sizes. The decision was made to confidentialise the ‘all units’ rather than the ‘public’ figure as admissions to public dialysis units comprise the majority of admissions, both overall and from the most disadvantaged areas.

For additional notes and Source for all Same-day admissions data: Refer to the [Notes and Source for all Hospital admissions data](#) above.

### Potentially preventable hospitalisations - All conditions, various time periods

- Admissions for all potentially preventable conditions – Public hospitals
- Admissions for all potentially preventable conditions – All hospitals

Notes and Source for all potentially preventable admissions data: Refer to the [Notes and Source for all Hospital admissions data](#) above.

### Potentially preventable hospitalisations - Acute conditions, various time periods

- Admissions for acute cellulitis – Public hospitals
- Admissions for acute cellulitis – All hospitals
- Admissions for acute convulsions and epilepsy – Public hospitals
- Admissions for acute convulsions and epilepsy – other – All hospitals
- Admissions for acute dental conditions – Public hospitals
- Admissions for acute dental condition – All hospitals
- Admissions for acute ear, nose and throat infections – Public hospitals
- Admissions for acute ear, nose and throat infections – All hospitals
- Admissions for acute urinary tract infections, including pyelonephritis – Public hospitals
- Admissions for acute urinary tract infections, including pyelonephritis – All hospitals
- Admissions for other acute conditions – Public hospitals
- Admissions for other acute conditions – All hospitals
- Admissions for total acute conditions – Public hospitals
- Admissions for total acute conditions – All hospitals

Notes and Source for all potentially preventable admissions data: Refer to the [Notes and Source for all Hospital admissions data](#) above.

### Potentially preventable hospitalisations - Chronic conditions, various time periods

- Admissions for chronic angina – Public hospitals
- Admissions for chronic angina – All hospitals
- Admissions for chronic asthma – Public hospitals
- Admissions for chronic asthma – All hospitals
- Admissions for chronic congestive cardiac failure – Public hospitals
- Admissions for chronic congestive cardiac failure – All hospitals
- Admissions for Chronic Obstructive Pulmonary Disease (COPD) – Public hospitals
- Admissions for Chronic Obstructive Pulmonary Disease (COPD) – All hospitals

Notes and Source for all potentially preventable admissions data: Refer to the [Notes and Source for all Hospital admissions data](#) above.
- Admissions for chronic diabetes complications – Public hospitals
- Admissions for chronic diabetes complications – All hospitals
- Admissions for chronic iron deficiency anaemia – Public hospitals
- Admissions for chronic iron deficiency anaemia – All hospitals
- Admissions for other chronic conditions – Public hospitals
- Admissions for other chronic conditions – All hospitals
- Admissions for total chronic conditions – Public hospitals
- Admissions for total chronic conditions – All hospitals

**Notes and Source for all potentially preventable admissions data:** Refer to the [Notes and Source for all Hospital admissions data](#) above.