



PHIDU

Social Health Atlas of Australia: Notes on the Data Published 2012

Notes on the Data: General information contents

Geographical areas: outlines the PHIDU Social Health Atlas/es of Australia geographical areas

Statistical information: provides some statistical and data processing information relevant to the PHIDU data indicators

Notes on the Data: List of Indicators contents

Please click on the heading/s below to go to the **Data source/s** and **Notes on the Data** information for each data indicator.

Age distribution – Males/ Females/ Persons, 2011 (Usual Resident Population)

[Medicare Local only]

- Age in 5 year groups: 0 to 85+ years/ 65+ years sub-total

Age distribution – Males/ Females/ Persons, 2011 (Estimated Resident Population)

- Age in 5 year groups: 0 to 85+ years/ 65+ years sub-total

Age distribution – Aboriginal males/ females/ persons, 2011

- Age in 5 year groups: 0 to 65+ years

Indigenous status, 2006 and 2011

- Aboriginal population as per cent of total population, Experimental Estimated Resident Population, 2006
- Aboriginal population as per cent of total population, Usual Resident Population, 2011

Population projections – Males/ Females/ Persons, 2010, 2015, 2020 and 2025

- Age in 5 year groups: 0 to 85+ years

Birthplace & non-English speaking residents, 2011

- Australian-born population
- People born (overseas) in predominately English speaking countries
- People born in predominately non-English speaking (NES) countries
- People born in NES countries resident in Australia for five years or more
- People born in NES countries resident in Australia for less than five years
- People born in overseas countries who speak English 'not well', or 'not at all'

Non-English speaking counties of birth, 2011

- Top ten birthplaces of people from non-English speaking countries

Total Fertility Rate, 2005 to 2007

- Total Fertility Rate

Education, 2010, 2011 and 2012

- Full-time participation in secondary school education at age 16, 2011
- Participation in vocational education and training, 2010
- School leaver participation in higher education, 2012 (excludes Qld)

Early child development: AEDI, 2009

- Developmentally vulnerable on 1 or more domains
- Developmentally vulnerable on 2 or more domains
- Physical health and wellbeing domain - developmentally vulnerable, at risk and on track

- Social competence domain - developmentally vulnerable, at risk and on track
- Emotional maturity domain - developmentally vulnerable, at risk and on track
- Language and cognitive (school based) domain - developmentally vulnerable, at risk and on track
- Communication skills and general knowledge domain - developmentally vulnerable, at risk and on track

Learning or Earning, 2011

- Learning or earning at ages 15 to 19

Families, 2011

- Single parent families with children aged less than 15 years, 2011
- Jobless families with children aged less than 15 years, 2011
- Children aged less than 15 years in jobless families, 2011

Housing/ Transport, 2009 and 2011

- Households in dwellings receiving rent assistance from Centrelink, 2009
- Dwellings rented from the government housing authority, 2011
- Low income households with mortgage stress, 2011
- Low income households with rental stress, 2011
- Private dwellings with no motor vehicle, 2011

Income support recipients, June 2009

- Age pensioners
- Disability support pensioners
- Female sole parent pensioners
- Unemployment beneficiaries
- Long-term unemployment beneficiaries
- Youth unemployment beneficiaries
- Low income, welfare-dependent families (with children)
- Children in low income, welfare-dependent families
- Health care card holders
- Pensioner concession card holders
- Total concession card holders

Internet access at home, 2011

- No Internet connection
- Total with Internet connections
 - Broadband Internet connection
 - Dial-up Internet connection
 - Other Internet connection

Labour force, 2006 and 2011

- Unemployment, June 2011
- Labour force participation, June 2011
- Female labour force participation, 2011
- Unskilled and semi-skilled workers, 2006 [Quintiles of socioeconomic disadvantage of area/ Remoteness data only]
- Managers and administrators; and professionals, 2006 [Quintiles of socioeconomic disadvantage of area/ Remoteness data only]

Summary measure of disadvantage, 2006

- Index of Relative Socio-economic Disadvantage – 2011 data n.y.a.

Child care: unpaid, 2011

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

Community strengths, 2010 and 2011

ABS Census data, 2011

- Voluntary work for an organisation or group, people aged 15 years and over

Modelled estimates, 2010

- Persons aged 18 years and over who did unpaid voluntary work in the last 12 months through an organisation
- Persons aged 18 years and over who are able to get support in times of crisis from persons outside the household
- Persons aged 18 years and over (or their partner) who provide support to other relatives living outside the household
- Persons aged 18 years and over who feel very safe/safe walking alone in local area after dark
- Persons aged 18 years and over who disagree/strongly disagree with acceptance of other cultures

Personal and financial stressors (modelled estimates), 2010

- Persons aged 18 years and over whose household could raise \$2,000 within a week
- Persons aged 18 years and over whose household had at least one cash flow problem in the last 12 months
- Persons aged 18 years and over whose household took at least one dissaving action in the last 12 months
- Persons aged 18 years and over who had government support as their main source of income in the last 2 years
- Persons aged 18 years and over who had government support as their main source of income, for 12 months or more, within the past 24 months

Health status and disability (modelled estimates), 2010

- Persons aged 18 years and over with self-assessed health status of fair/poor
- Persons aged 18 years and over with profound/severe/moderate/mild core activity restriction

Access to services: financial and transport barriers (modelled estimates), 2010

- Persons aged 18 years and over who delayed medical consultation because they could not afford it
- Persons aged 18 years and over who delayed purchasing prescribed medication because they could not afford it
- Persons aged 18 years and over who often has a difficulty or can't get to places needed with transport
- Persons aged 18 years and over who had difficulty accessing services
- Persons aged 18 years and over who accessed the Internet at home in the past 12 months

Mothers and babies, 2005 to 2007 and 2006 to 2008

- Low birth weight babies, 2006 to 2008 (NSW, Vic, SA, WA, Tas and NT); 2005 to 2007 (ACT)
- Smoking during pregnancy, 2006 to 2008 (NSW, SA, WA, Tas and NT); 2005 to 2007 (ACT)

Child health, 2003 to 2007 and 2008

- Children fully immunised at 12 to <15 months of age, 2008
- Infant deaths, 2003 to 2007
- Child mortality (under five years), 2003 to 2007

Screening, mid to late 2000s

Bowel screening data

- Participation in the National Bowel Screening program (NBCSP), males, 2010
- Participation in the NBCSP, females, 2010
- Participation in the NBCSP, persons, 2010
- NBCSP: positive test result, persons, 2010

Breast screening data

- Breast screening participation, females aged 50 to 69 years, 2006 and 2007 (Vic); 2007 and 2008 (Qld, WA and ACT); 2009 and 2010 (SA)
- Breast screening outcomes: cancer, females aged 50 to 69 years, 2006 and 2007 (Vic); 2007 and 2008 (Qld, WA and ACT); 2009 and 2010 (SA)

Cervical screening data

- Cervical screening participation, females aged 20 to 69 years, 2006 and 2007 (Vic, Qld and ACT); 2008 and 2009 (SA and WA)
- Cervical screening outcomes: low grade abnormality, females aged 20 to 69 years, 2006 and 2007 (Vic, Qld and ACT); 2008 and 2009 (SA and WA)

- Cervical screening participation: high grade abnormality, females aged 20 to 69 years, 2006 and 2007 (Vic, Qld and ACT); 2008 and 2009 (SA and WA)

Modelled estimates of prevalence of certain chronic diseases, risk factors etc., 2007–08

Self-assessed health (modelled estimates), 2007–08

- Fair or poor health, persons aged 15 years and over
- Current long-term condition and reporting good, very good or excellent health, persons aged 15 years and over

Chronic disease and conditions (modelled estimates), 2007–08

- Type 2 diabetes
- High cholesterol
- Males with mental and behavioural problems
 - Males with mood (affective) problems
- Females with mental and behavioural problems
 - Females with mood (affective) problems
- Circulatory system diseases
- Hypertensive disease
- Respiratory system diseases
 - Asthma
 - Chronic Obstructive Pulmonary Disease (COPD)
- Musculoskeletal system diseases
 - Arthritis
 - Rheumatoid arthritis
 - Osteoarthritis
 - Females with osteoporosis

Psychological distress (modelled estimates), 2007–08

- High or very high levels of psychological distress, persons aged 18 years and over

Health risk factors (modelled estimates), 2007–08

- Male current smokers, 18 years and over
- Female current smokers, 18 years and over
- Harmful use of alcohol, persons aged 18 years and over
- Physical inactivity, persons aged 15 years and over
- Overweight (not obese) males, 18 years and over
- Obese males, 18 years and over
- Overweight (not obese) females, 18 years and over
- Obese females, 18 years and over
- Overweight (not obese) persons, 18 years and over
- Obese persons, 18 years and over
- Males in normal weight range, 18 years and over
- Females in normal weight range, 18 years and over
- Usual daily intake of two or more serves of fruit, persons aged 5 to 17 years
- Usual daily intake of two or more serves of fruit, persons aged 18 years and over
- Persons with at least one of four major health risk factors – smoking, harmful use of alcohol, physical inactivity or obesity – 18 years and over

Composite indicators – a chronic disease and an associated risk factor (modelled estimates), 2007–08

- Had type 2 diabetes and were overweight/ obese, persons aged 18 years and over
- Had asthma and were smokers, persons aged 18 years and over

Disability, 2011

- Assistance to persons with a disability (unpaid)
- Persons with a profound or severe disability, All ages
- Persons with a profound or severe disability living in the community, All ages
- Persons with a profound or severe disability, 0 to 64 years

- Persons with a profound or severe disability living in the community, 0 to 64 years
- Persons with a profound or severe disability, 65 years and over
- Persons with a profound or severe disability living in the community, 65 years and over

Median age at death, 2003 to 2007

- Median age at death of males
- Median age at death of females
- Median age at death of persons

Premature mortality by sex, 2003 to 2007

- Deaths of males aged 15 to 64 years
- Deaths of females aged 15 to 64 years
- Deaths of persons aged 15 to 64 years
- Deaths of males aged 0 to 74 years
- Deaths of females aged 0 to 74 years
- Deaths of persons aged 0 to 74 years

Premature mortality by selected cause, 2003 to 2007

- Deaths from cancers, persons aged 15 to 64 years
- Deaths from circulatory system diseases, persons aged 15 to 64 years
- Deaths from respiratory system diseases, persons aged 15 to 64 years
- Deaths from external causes, persons aged 15 to 64 years
- Deaths from all other causes, persons aged 15 to 64 years
- Deaths from cancers, persons aged 0 to 74 years
 - Deaths from colorectal cancer, persons aged 0 to 74 years
 - Deaths from lung cancer, persons aged 0 to 74 years
- Deaths from circulatory system diseases, persons aged 0 to 74 years
 - Deaths from ischaemic heart disease, persons aged 0 to 74 years
 - Deaths from cerebrovascular disease, persons aged 0 to 74 years
- Deaths from respiratory system diseases, persons aged 0 to 74 years
 - Deaths from chronic obstructive pulmonary disease, persons aged 45 to 74 years
- Deaths from external causes, persons aged 0 to 74 years
 - Deaths from road traffic injuries, persons aged 0 to 74 years
 - Deaths from suicide and self-inflicted injuries, persons aged 0 to 74 years
- Deaths from all other causes, persons aged 0 to 74 years

Avoidable mortality, 2003 to 2007

Potentially avoidable deaths at ages 0 to 74 years

- Deaths at ages 0 to 74 years: all causes
- Deaths at ages 0 to 74 years: cancer
 - Colorectal cancer
 - Lung cancer
- Deaths at ages 0 to 74 years: cardiovascular diseases
 - Ischaemic heart disease
 - Cerebrovascular disease
- Deaths at ages 0 to 74 years: respiratory system diseases
 - Chronic obstructive pulmonary disease (45 to 74 years)
- Deaths at ages 0 to 74 years: road traffic injuries
- Deaths at ages 0 to 74 years: suicide and self-inflicted injuries

Amenable (treatable) mortality, 2003 to 2007

- Amenable (treatable) mortality at ages 0 to 74 years

Preventable mortality, 2003 to 2007

- Preventable mortality at ages 0 to 74 years

Private health insurance, 2001 and 2007–08

- Private health insurance, 2001
- Private health insurance (modelled estimate), persons aged 15 years and over, 2007-2008

MBS services, 2009/10

- GP services to males (MBS and DVA)
- GP services to females (MBS and DVA)
- Total GP services (MBS and DVA)
- 45 Year Old Health Checks by GPs, males aged 45 to 49 years
- 45 Year Old Health Checks by GPs, females aged 45 to 49 years
- 45 Year Old Health Checks by GPs, persons aged 45 to 49 years
- Annual health assessments by GPs, persons aged 75 years and over
- Other services by GPs for Enhanced Primary Care items
- Total services by GPs for Enhanced Primary Care items
- Practice Nurse services under the MBS
- Better Access Care Program: Preparation of Mental Health Care Plan by GPs
- Better Access Care Program: Psychiatrists
- Better Access Care Program: Psychologists
 - Better Access Care Program: General Psychologists
 - Better Access Care Program: Clinical Psychologists
- Better Access Care Program: Social Workers
- Better Access Care Program: Occupational Therapists

Home and Community Care

- Clients living alone
- Clients with carer
- Indigenous clients (as a proportion of total clients)
- Indigenous clients (as a proportion of the Indigenous population)
- Non-English speaking clients
- Total clients
- Allied health care instances at home
- Allied health care instances at centre
- Care counselling instances
- Case management instances
- Centre based day care instances
- Client care coordination instances
- Domestic assistance instances
- Home maintenance and modification instances
- Meals at centre plus meals at home instances
- Nursing care at centre plus nursing care at home instances
- Personal care instances
- Respite care instances
- Social support instances
- Transport instances
- Total instances of assistance

Aged care places, June 2011

- Residential aged care - high-level care places
- Residential aged care - low-level care places
- Total residential aged care places
- Community aged care places

Notes on the Data: General information

© 2012 PHIDU  Except where otherwise noted, content on the PHIDU website is licensed under a Creative Commons Attribution-NonCommercial 3.0 Licence.

Geographical areas

The PHIDU *Social Health Atlas* data is generally available by the following geographical areas:

- Statistical Local Areas (SLAs), Australian Bureau of Statistics (ABS) Australian Standard Geographical Classification (ASGC) 2006 (and Statistical Local Area groups, PHIDU)
- Local Government Areas (LGAs), ABS ASGC 2006
- Medicare Locals, Australian Government
- Quintiles of socioeconomic disadvantage of area (Inequality graphs), based on ABS Socio-Economic Indexes for Areas (SEIFA) 2006
Note: the 2011 Census data will be re-produced following the release of the ABS Socio-Economic Indexes for Areas (SEIFA) 2011 – ABS release date: March 2013
- Remoteness areas (Remoteness graphs), ABS ASGC Remoteness Areas 2006
Note: the 2011 Census data will be re-produced following the release of the Remoteness Areas 2011 – ABS release date: March 2013

In addition, the 2011 Census data is available by the new ABS Australian Statistical Geographical Standard (ASGS) Statistical Areas Level 2.

Note: Not all the indicators included in this **Notes on the Data** summary are available by all geographical areas – refer to the **Contents** worksheet provided at the front of each data workbook for details.

Statistical information

Data adjustment

For the Census data, the ABS uses a method of 'introduced random error' to ensure that no data are released which could risk the identification of individuals in the statistics. The technique slightly adjusts all cells, resulting in small introduced random errors. Whilst the totals and subtotals in the Census summary tables are subjected to small adjustments to preserve the additivity within the tables, data at the higher geographic level may not be equal to the sum of the data for the component geographic units.

For further information, please refer to the ABS *Census Dictionary 2011 (ABS Cat. No. 2901.0)* on the following topics:

Introduced random error:

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2901.0Chapter38202011>

Confidentiality:

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2901.0Chapter26802011>

'Unknown/ ABS cell adjustment' [Census data] cell in PHIDU data worksheets: The 'Unknown/ ABS cell adjustment' cell shown for the Census data is the difference between the State/ Territory total and the sum of the SLA data for the indicator of interest: it includes data with 'no usual address', data where the SLA was unknown or not provided and the randomly adjusted counts (which may in some cases result in a negative number).

'Unknown/ ABS cell adjustment' [non-Census data] cell in PHIDU data worksheets:** The 'Unknown' cell shown for the non-Census data includes data where the SLA was unknown or not provided (e.g. some data are confidentialised by removal of cells with values of <5 or <20 before being provided to PHIDU); or, where the SLA data was produced from postcodes, the 'Unknown' cell includes data which is non-mappable, such as Post Office Boxes.

****Labelled 'Unknown/ ABS cell adjustment' in all Excel worksheets, as, in some cases, the worksheets include both ABS and non-ABS data indicators.**

Standardisation of rates

The rates presented are indirectly standardised. Indirectly standardised rates compare the actual number of events in an area (e.g. the LGA of Bankstown) with the expected number of events based on rates of a reference population (e.g. Australia), generally based on the five year age group and sex data in this reference population. The standardised ratios are the ratio of the observed (actual) to expected number of events. The observed figures comes from the local area, and the expected from applying the rate in the reference population to the local population.

The use of the indirect age-standardised method is adopted as comparisons between areas for an indicator are likely to be affected by variations in the age profile of the area. This effectively means any differences in age-standardised rates between areas are reflecting the influence of factors other than age. For example, the standardised ratios (SRs) (or standardised death ratios – SDRs) for Australia (or respective standard population) are 100. A SR of 110 in an area means the standardised ratio is 10% higher (for an area of its population size and structure) in the area than expected from the Australian (or respective standard population) rates. An index of 85 means the SR is 15% lower (for an area of its population size and structure) in the area than expected from the Australian rates.

Statistical significance

The statistical significance was calculated using a Z score calculation, which gives a significance score for the observed number around the expected number for the local population. The expected number is calculated using the indirect method of age standardisation.

The Z score enables a user to assess the statistical significance of the difference between the observed and expected numbers. Z scores are significant at the 95% level if their absolute value is greater than or equal to ± 1.96 , and at the 99% level if their absolute value is greater than or equal to ± 2.58 .

Z score (labelled 'Sig.') in PHIDU data worksheets: Data which are statistically significant, at the 95% confidence level, have been marked *; data which are statistically significant, at the 99% confidence level, have been marked **.

95% Confidence Intervals (95% C.I.s)

A confidence interval is a range in which it is estimated the true population value lies. Confidence intervals of different sizes can be created to represent different levels of confidence that the true population value will lie within a particular range. A common confidence interval used in statistics is the 95% confidence interval. In a 'normal distribution', the 95% confidence interval is measured by approximately two standard errors either side of the estimate.

A confidence interval can be used to describe how reliable the data. The greater the level of confidence required, the wider the range between the lower and upper confidence intervals. A major factor determining the range of a confidence interval is the **size of the population**.

95% C.I.s in PHIDU data worksheets: The indirectly standardised rates and associated ratios show upper and lower confidence intervals at the 95% level.

Relative Root Mean Squared error (RRMSE)

The RRMSE is a measure of the propensity for the synthetic predictions to give a different value to that which would be found for a region if it were possible to do an accurate census collecting that health indicator. Where the RRMSE values are high for some health indicators, it would be inappropriate to interpret the synthetic predictions as the actual proportion in a region at a given time.

The RRMSE is primarily a measure of prediction error but in its calculation it may also include some aspects of modelling and sampling error. The RRMSE generally decreases as the population size increases, and is used to assess the reliability of predictions.

RRMSE in PHIDU data worksheets: Predictions 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 prediction is considered too unreliable for general use.

Age distribution – Males/ Females/ Persons, 2011 (Usual Resident Population)

- Age in 5 year groups: 0 to 85+ years/ 65+ years sub-total

Notes: The usual resident population, which is the population in each area on Census night who usually live in that area (i.e. excluding visitors, people away from home etc).

Source: Compiled by PHIDU from ABS Census Usual Resident Population (URP), 2011

Age distribution – Males/ Females/ Persons, 2011 (Estimated Resident Population)

- Age in 5 year groups: 0 to 85+ years/ 65+ years sub-total

Notes: The estimated resident population is derived by applying the following adjustments to the usual residence Census counts:

- removing overseas visitors who were in Australia on Census night from the Census counts;
- adjusting the Census counts for undercounting using results of the Post Enumeration Survey;
- including Australian residents who were temporarily absent overseas on Census night; and
- backcasting the resulting estimates which relate to 8 August 2006 to 30 June 2006 using births, deaths and migration data.

NB: These ERP data are preliminary rebased estimates, and reflect information from the 2011 Census. Final estimates for 2011 will be released in August 2013, based on further refinements to components used to rebase population estimates.

Source: Compiled by PHIDU from ABS Estimated Resident Population (ERP), 30 June 2011

Age distribution – Aboriginal males/ females/ persons, 2011

'Aboriginal' as used in the Social Health Atlas Data workbook and Notes on the Data refers to Aboriginal and Torres Strait Islander peoples.

- Age in 5 year groups: 0 to 65+ years

Notes: The data exclude the 4.9% of people (5.3% for males; 4.5% for females) whose Indigenous status was not recorded (the proportion excluded was calculated based on the Australian data).

Source: Compiled by PHIDU from ABS Census Usual Resident Population, 2011

Indigenous status, 2006 and 2011

- Aboriginal population as per cent of total population, Experimental Estimated Resident Population

Notes: The Experimental Estimated Resident Population has a total of 517,043 Aboriginal persons compared with the 2006 Census-based Usual Resident Population of 455,016. This data has been retained until similar estimates have been produced for 2011.

Source: Compiled by PHIDU from ABS Experimental Estimated Resident Population, 2006

- Aboriginal population as per cent of total population, Usual Resident Population

Notes: This is the latest estimate from the 2011 Census. The ABS 2011 Census Usual Resident Population has a total of 548,371 Aboriginal persons (2.5% of total population).

The data exclude the 4.9% of people whose Indigenous status was not recorded, based on Australian totals (the proportion excluded was calculated based on the Australian data).

Source: Compiled by PHIDU from ABS Census Usual Resident Population, 2011

Population projections – Males/ Females/ Persons, 2010, 2015, 2020, 2025

- Age in 5 year groups: 0 to 85+ years

Notes: These population projections were prepared by the ABS as consultant to the Australian Government Department of Health and Ageing. The projections are not official ABS data. The base Estimated Resident Population (ERP) is preliminary for 2007, based on final 2006 Census-year ERP; later years are projected. ERP age/sex cells have been confidentialised through perturbation, though this does not affect SLA totals. SLAs with total ERP under 500 have generally been held constant as reliable projections are not possible for the very small age/sex cells involved.

These projections are a revised set using preliminary 2007 Census-based ERP and assumptions from the 2006-2101 issue of Population Projections, Australia (ABS Cat. No. 3222.0). The 2006-based SLA projections were a preliminary version and are now superseded.

The assumptions of fertility (birth rates), mortality (death rates) and migration underpinning the projections are primarily based on historical patterns and trends specific to each area.

Conditions of Use: Specific **Conditions of Use** apply in respect of the use of the data and information prepared here as it was based, in part on, customised Population Projections for Statistical Local Areas prepared for the Australian Government Department of Health and Ageing. Accordingly, terms and conditions must be acknowledged, understood and accepted **before** the material presented at this site is used for any purpose. Refer to:

<http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-stats-lapp.htm>

Source: Compiled by PHIDU from ABS Population Projections, 2010, 2015, 2020 and 2025; Customised Population Projections for Statistical Local Areas prepared for the Australian Government Department of Health and Ageing by the Australian Bureau of Statistics

Birthplace & non-English speaking residents, 2011

Source for all Birthplace & non-English speaking residents data: Compiled by PHIDU from ABS Census 2011

- Australian-born population
- People born (overseas) in predominately English speaking countries
- People born in NES countries resident in Australia for five years or more
- People born in NES countries resident in Australia for five years or more
- People born in NES countries resident in Australia for less than five years

Notes for all People born in predominately 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 2007.

Resident in Australia for less than five years: Data comprise NES residents arriving from 2007 to 2011. The year 2011 is the period 1 January 2011 to 9 August 2011 (Census Night), therefore, the data presented represents a total time of approximately 4 years and 7 months.

The data exclude the 5.6% of the population who did not state their country of birth. In addition, the '*Resident in Australia for five years or more/ less than five years*' data exclude the 4.5% of people born overseas who did not state their year of arrival. (The proportions excluded were calculated based on the Australian data).

- People born overseas with poor proficiency in English

Notes: The data comprise people born overseas who reported speaking English 'not well' or 'not at all'.

The data exclude the 0.5% of people born overseas who did not state their proficiency in English, as well as the 5.6% of the population who did not state their country of birth (the proportions excluded were calculated based on the Australian data).

Non-English speaking counties of birth, 2011

- Top ten birthplaces from non-English speaking countries

Notes: The data comprise residents of Australia who were born overseas in one of the predominantly non-English speaking countries which are in the top ten for Australia in terms of high numbers of migrants. These are, from highest to lowest: China (excluding Special Administrative Regions of Hong Kong & Macau, and Taiwan), India, Italy, Vietnam, Philippines, Malaysia, Germany, Greece, Sri Lanka and Lebanon.

Source: Compiled by PHIDU from ABS Census 2011

Total Fertility Rate, 2005 to 2007

- Total Fertility Rate

Notes: Data are not shown for areas recording fewer than 20 births.

Source: Compiled by PHIDU from births data, 2005 to 2007 (ABS unpublished); and ABS Estimated Resident Population, 30 June 2005 to 30 June 2007

Education, 2010, 2011 and 2012

- Full-time participation in secondary school education at age 16, 2011

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 2011 Australian Bureau of Statistics (ABS) Population Census. As such they are not official estimates of participation at age 16 in full-time secondary education. However, they are useful in showing the extent of variations between areas, by socioeconomic status and by remoteness.

The data exclude the 4.1% of people whose participation in secondary school education at age 16 was not stated (the proportion excluded was calculated based on the Australian data).

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* (data coming in December 2012).

Source: Compiled by PHIDU from ABS Census 2011 (unpublished)

- Participation in vocational education and training, 2010

Source: Compiled by PHIDU using data from the National Centre for Vocational Education Research Ltd., 2010; and ABS Estimated Resident Population, 30 June 2010

- School leaver participation in higher education, 2012 (excludes Qld)

Notes: The data comprise school leavers who are identified as enrolled at an Australian university at 31 March 2012.

The Estimated Resident Population is based on the number of 17 year olds in 2011, as this is the age of the majority of Year 12 students at 30 June 2011.

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, other than for WA data which include school leavers who have accepted an offer to enrol although such 'acceptances' may not necessarily translate to 'enrolments' (other States and Territories count enrolments). Other differences of note are:

- WA data comprise normal school leavers and those who are repeaters, but exclude mature age students; and, for Notre Dame University campuses in WA and NSW, comprise students who are under 20 years of age on 1 March in their year of admission and who have not attempted any post-secondary (TAFE or University) study.
- NSW include those students who have applied, having successfully completed at least one formally examined Board Developed or Board Determined Joint School/TAFE (BDCHS or BDJST) course in 2010, but exclude International Baccalaureate candidates.
- ACT data comprise details for all students who have applied and who have achieved 17 standard units in the ACT Higher School Certificate results, but exclude International Baccalaureate candidates.
- Tasmanian data include those who apply and are assessed as a Year 12 student (whether in previous year, or earlier).
- 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 using data from the:

- 1) Universities Admissions Centre (NSW & ACT), Victorian Tertiary Admissions Centre, South Australian Tertiary Admission Centre (SA & NT), Tertiary Institutions Service Centre (WA), Notre Dame University (WA & NSW), the University of Tasmania – 2012; and
- 2) ABS Estimated Resident Population, 30 June 2011

Early child development: AEDI, 2009

- Developmentally vulnerable on 1 or more domains
- Developmentally vulnerable on 2 or more domains
- Physical health and wellbeing domain - developmentally vulnerable, at risk and on track
- Social competence domain - developmentally vulnerable, at risk and on track
- Emotional maturity domain - developmentally vulnerable, at risk and on track
- Language and cognitive (school based) domain - developmentally vulnerable, at risk and on track
- Communication skills and general knowledge domain - developmentally vulnerable, at risk and on track

Notes for all Early child development data: In 2009, the Australian Early Development Index (AEDI), which provides a picture of early childhood development outcomes for Australia, was undertaken nationwide. In the 2009 data collection, information was collected on 261,147 Australian children (97.5 per cent of the estimated five-year-old population) in their first year of full-time school between 1 May and 31 July. A follow-up data collection occurred in some small areas in 2010. In addition, small numbers of children were combined so that more communities could have their results released.

The initial results from the AEDI 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 AEDI 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), 26th to 50th (on track lower range) and above the 50th percentile (on track higher range).

The data shown include children who were developmentally vulnerable (0 to 10th percentile) in one or more/ two or more domains; children in each domain who were assessed as being developmentally vulnerable (0 to 10th percentile), developmentally at risk (11th to 25th percentile) or developmentally on track (above the 25th percentile).

Data are not shown for areas where there were less than 15 children tested.

Source for all Early child development data: Compiled by PHIDU from AEDI 2009 Research CURF Version 1, Released April 2011, DEEWR

Learning or Earning, 2011

- Learning or earning at ages 15 to 19

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

Source: Compiled by PHIDU from ABS Census 2011

Families, 2011

- Single parent families with children aged less than 15 years

Notes: The denominator for this indicator has changed from the data PHIDU published for the 2006 Census. The denominator is now 'Families with children under 15 years', not 'Total families'.

Source: Compiled by PHIDU from ABS Census 2011

- Jobless families with children aged less than 15 years

Source: Compiled by PHIDU from ABS Census 2011 (unpublished)

- Children aged less than 15 years in jobless families

Source: Compiled by PHIDU from ABS Census 2011 (unpublished)

Housing/ Transport, 2009 and 2011

- Households in dwellings receiving rent assistance from Centrelink, 2009

Notes: The Centrelink 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.

The Centrelink data were provided at the Statistical Local Area (SLA) level and data cells with less than 20 counts were removed (confidentialised). Due to the confidentialisation of data cells, there may be undercounting of some of the final numbers presented where the geographies (Local Government Area or Medicare Local) were aggregated based on confidentialised (SLA) cells. The 'Unknown' data are calculated from the difference between the sum of the SLA data to the State/Territory totals, and include the sum of these confidentialised data.

Source: Compiled by PHIDU from:

- 1) Renters: Centrelink as an agent for Families, Housing, Communities and Indigenous Affairs, June 2009; and
- 2) Dwellings: ABS Census 2006

- Dwellings rented from the government housing authority, 2011

Notes: The data exclude the population in the 2.5% of dwellings for which the tenure type was not stated (the proportion excluded was calculated based on the Australian data).

Source: Compiled by PHIDU from ABS Census 2011

- Low income households with mortgage stress, 2011

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.

Income varies by State/ Territory: NSW, \$633; Vic, \$640; Qld, \$649; SA, \$551; WA, \$699; Tas, \$488; NT, \$853; ACT, \$987.

The data exclude the population in the 10.8% of private dwellings for which mortgage stress data was not recorded (the proportion excluded was calculated based on the Australian data).

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

Source: Compiled by PHIDU from ABS Census 2011 (unpublished)

- Low income households with rental stress, 2011

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.

Income varies by State/ Territory: NSW, \$633; Vic, \$640; Qld, \$649; SA, \$551; WA, \$694; Tas, \$488; NT, \$853; ACT, \$987.

The data exclude the population in the 9.3% of private dwellings for which rental stress data was not recorded (the proportion excluded was calculated based on the Australian data).

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

Source: Compiled by PHIDU from ABS Census 2011 (unpublished)

- Private dwellings with no motor vehicle, 2011

Notes: The data exclude the population in the 3.0% of dwellings for which the number of motor vehicles was not stated (the proportion excluded was calculated based on the Australian data).

Source: Compiled by PHIDU from ABS Census 2011

Income support recipients, June 2009

Note for all Income support recipients data: The Centrelink data were provided at the Statistical Local Area (SLA) level and data cells with less than 20 counts were removed (confidentialised). Due to the confidentialisation of data cells, there may be undercounting of some of the final numbers presented, where:

- a) the geographies (Local Government Area or Medicare Local) were aggregated based on confidentialised (SLA) cells; and/or
- b) the final data presented is 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 SLA data to the State/Territory totals, and include the sum of these confidentialised data.

- Age pensioners

Notes: Those eligible for an Age Pension from Centrelink (at 30 June 2009) comprise persons (males) aged 65 years and over and females aged 63.5 years and over; the Department of Veterans' Affairs (DVA) provides a Service Pension (Age) to eligible persons at age 60 years. The data shown are the sum of people in receipt of one or the other of these pension types, referred to generally as age pensioners, expressed as a percentage of all persons aged 65 years and over at 30 June 2009.

The data show a number of areas as having proportions in excess of 100 per cent: these are clearly not accurate. The reason for this is not clear, but this indicates that it is possible that other percentages of less than 100 per cent may also be overstated. It is unlikely to be the result of people claiming both the Age Pension and a DVA Service Pension (Age), as checks are made each year to ensure that such events do not occur.

Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; Department of Veterans' Affairs, 1 July 2009; and ABS Estimated Resident Population, 30 June 2009

- **Disability support pensioners**

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. Details of people under 60 years of age receiving the Department of Veterans' Affairs (DVA) Service Pension (permanently incapacitated) – an income support pension – have been combined with the Centrelink DSP data; people above these ages receive an Age Pension or DVA Service Pension (Age).

Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; Department of Veterans' Affairs, 1 July 2009; and ABS Estimated Resident Population, 30 June 2009

- **Female sole parent pensioners**

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.

Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Education, Employment and Workplace Relations, June 2009; and ABS Estimated Resident Population, 30 June 2009

- **Unemployment beneficiaries**

Notes: People receiving an 'unemployment benefit' – which includes the Newstart Allowance or Youth Allowance (other)¹ paid by Centrelink – are shown as proportion of the eligible population (of persons aged 16 to 64 years).

Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Education, Employment and Workplace Relations, June 2009; and ABS Estimated Resident Population, 30 June 2009

- **Long-term unemployment beneficiaries**

Notes: People receiving an 'unemployment benefit' – which includes the Newstart Allowance or Youth Allowance (other)¹ paid by Centrelink – for more than 180 days are shown as proportion of the eligible population (of persons aged 16 to 64 years).

Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Education, Employment and Workplace Relations, June 2009; and ABS Estimated Resident Population, 30 June 2009

- **Youth unemployment beneficiaries**

Notes: Young people receiving an 'unemployment benefit' – which includes the Newstart Allowance (people aged 15 to 24 years) or Youth Allowance (other)¹ paid by Centrelink – are shown as proportion of the population aged 15 to 24 years.

Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Education, Employment and Workplace Relations, June 2009; and ABS Estimated Resident Population, 30 June 2009

- **Low income, welfare-dependent families (with children)**

Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; and ABS Estimated Resident Population, 30 June 2009

- **Children in low income, welfare-dependent families**

Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; and ABS Census 2006

Notes for both *Low income, welfare-dependent families* and *Children in low income, welfare-dependent families* data (above):

For 2009, families included are those with children under 16 years and with incomes under \$28,871 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 for this analysis was based on the Poverty Lines: Australia quarterly newsletter which updates the Henderson Poverty Line as defined in the 1973 Commonwealth Commission of Inquiry into Poverty. The updated poverty lines take into account changes in the average income level of all Australians, reflecting the idea that poverty is relative. The newsletter provides minimum income levels that are needed to avoid poverty, for a range of family types and sizes. The data presented here are of the weekly income for a single parent with two children, including housing costs, for the June quarter 2009.

[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>]

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.

- **Health care card holders**

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); Partner 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 using data from Centrelink, as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; and ABS Estimated Resident Population, 30 June 2009

- **Pensioner concession card holders**

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 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 using data from Centrelink, as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; and ABS Estimated Resident Population, 30 June 2009

- **Total concession card holders**

Notes: Total concession card holders is the sum of those who hold either a Health Care Card or a Pensioner Concession Card. For details on the eligibility criteria for these cards see the above **Notes for Health care card holders and Pensioner concession card holders**.

NB: The Centrelink card holders' data were provided at the Statistical Local Area (SLA) level and data cells with less than 20 counts were removed (confidentialised). In addition, where the cells were less than 20 for either group, the corresponding cell for the presentation of the 'total' concession card holders data was removed (confidentialised).

Source: Compiled by PHIDU using data from Centrelink, as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; and ABS Estimated Resident Population, 30 June 2009

Internet access at home, 2011

- No Internet connection
- Total with Internet connections
 - Broadband Internet connection
 - Dial-up Internet connection
 - Other Internet connection

Notes for all Internet access at home data: The data include Internet access at private dwellings only; the data for the population in the 3.5% of dwellings for which Internet access was not stated are excluded (the proportion excluded was calculated based on the Australian data).

Source for all Internet access at home data: Compiled by PHIDU from ABS Census 2011

Labour force, 2006 and 2011

- **Unemployment, June 2011**

Notes: These 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 1 above}, by postcode
2. ABS Labour Force Survey data at the ABS Labour Force Region level; and
3. 2006 Census of Population and Housing labour force data at the Statistical Local Area (SLA) level.

Source: Compiled by PHIDU from Small Area Labour Markets - Australia, Department of Employment and Workplace Relations, June Quarter 2011

- **Labour force participation, June 2011**

Notes: The purpose of SPREE is to produce small area labour market estimates that reflect the regional disparities of the Centrelink data, while being consistent with the ABS Labour Force Survey estimates.

The unemployment/ labour force estimates presented are based on the 'smoothed' data series, where the data has been averaged over four quarters to dampen the variability, and provide a more stable impression of labour market conditions at the SLA level.

As per the *Small Area Labour Market – June Quarter 2011* publication (DEEWR²) 2011, due to some of the small sizes of the labour force, particular care should be exercised when interpreting the estimates with small numbers.

Source: Compiled by PHIDU from 1) Small Area Labour Markets - Australia, Department of Employment and Workplace Relations, June Quarter 2011; and ABS Estimated Resident Population, 30 June 2011

- **Female labour force participation, 2011**

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 from ABS Census 2011

- **Unskilled and semi-skilled workers, 2006** [Quintiles of socioeconomic disadvantage of area/ Remoteness data only]

Notes: The 2006 Census uses the Australian and New Zealand Standard Classifications of Occupation (ANZSCO), First Edition, 2005 (ABS Cat. No. 1221.0) for coding of workforce data. However, for time series comparisons, the data presented here are based on the Australian Standard Classification of Occupations (ASCO), Second Edition, 1997 (ABS Cat. No. 1220.0). Unskilled and semi-skilled workers include 'intermediate production and transport workers' and 'labourers and related workers', occupation types which cannot be identified in ANZSCO.

Source: Compiled by PHIDU from:

- 1) Unskilled and semi-skilled workers: ABS Census 2006 (unpublished); and
- 2) Labour force: ABS Census 2006

NB: The 2011 Census data for this indicator is not available: we have included the 2006 data in the Quintiles and Remoteness data only)

- **Managers and administrators; and professionals, 2006** [Quintiles of socioeconomic disadvantage of area/ Remoteness data only]

Notes: The 2006 Census uses the Australian and New Zealand Standard Classifications of Occupation (ANZSCO), First Edition, 2005 (ABS Cat. No. 1221.0) for coding of workforce data. However, for time series comparisons, the data presented here are based on the Australian Standard Classification of Occupations (ASCO), Second Edition, 1997 (ABS Cat. No. 1220.0). This data includes 'managers and administrators' and 'professionals', which cannot be identified in ANZSCO.

Source: Compiled by PHIDU from:

- 1) Managers and administrators; and professionals: ABS Census 2006 (unpublished); and
- 2) Labour force: ABS Census 2006

NB: The 2011 Census data for this indicator is not available: we have included the 2006 data in the Quintiles and Remoteness data only)

Summary measure of disadvantage, 2006

- **Index of Relative Socio-economic Disadvantage**

Notes: The index has a base of 1000 for Australia: scores above 1000 indicate relative advantage and those below, disadvantage.

Source: Compiled by PHIDU from ABS Socio -Economic Indexes for Areas (SEIFA) 2006 – 2011 data n.y.a.

Child care: unpaid, 2011

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

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)

The data exclude the 7.8% of persons aged 15 years and over whose engagement in unpaid child care was not stated (the proportion excluded was calculated based on the Australian data).

Source for all Child care: unpaid data: Compiled by PHIDU from ABS Census 2011

² Reference: Department of Education, Employment and Workplace Relations (DEEWR) 2009. *Small Area Labour Markets Australia – June Quarter 2009*. Canberra: DEEWR.

Community strengths, 2010 and 2011

ABS Census data, 2011

- Voluntary work for an organisation or group - people aged 15 years and over

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.

The data exclude the 8.2% of persons aged 15 years and over whose participation in voluntary work was not stated (the proportion excluded was calculated based on the Australian data).

Source: Compiled by PHIDU from ABS Census 2011

Modelled estimates, 2010

- Persons aged 18 years and over who did unpaid voluntary work in the last 12 months through an organisation
- Persons aged 18 years and over who are able to get support in times of crisis from persons outside the household
- Persons aged 18 years and over (or their partner) who provide support to other relatives living outside the household
- Persons aged 18 years and over who feel very safe/safe walking alone in local area after dark
- Persons aged 18 years and over who disagree/strongly disagree with acceptance of other cultures

Notes for all Community strengths (modelled estimates) data: The ABS 2010 General Social Survey (GSS) includes a range of questions which aim to assess community strength, both in terms of its positive aspects (such as volunteering, tolerance of other cultures and availability of personal supports) and the negative effects on people when community strength is less apparent (such as feeling unsafe in the community, social isolation and the consequences of financial stress and disadvantage). The GSS collected data on the range of social dimensions from the same individual to enable analysis of the interrelationships in social circumstances and outcomes, including the exploration of multiple advantage and disadvantage experienced by that individual. For further information on the indicators, please refer to the *General Social Survey: User Guide, Australia, 2010 (ABS Cat. No. 4159.0.55.002) - Glossary*, available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4159.0.55.002Glossary12010?OpenDocument>.

The ABS survey was conducted by personal interview (using a Computer Assisted Interviewing questionnaire) and included people aged 18 years and over resident in private dwellings, throughout the not very remote areas of Australia, from August to November 2010.

The 2010 GSS achieved a response rate of 87.6%, with a total sample from the survey of 15,028 dwellings. Approximately 2,551 respondents (15%) did not provide one or more required answers but were deemed to have responded adequately to be included in the survey.

The modelled estimates presented have been synthetically predicted at the Statistical Local Area (SLA) level from the 2010 GSS.

Through the use of synthetic estimation techniques it is possible to produce SLA level statistics. Synthetic estimation predicts a value for an area with a small population based on modelled survey data and known characteristics of the area. A modelled estimate can be interpreted as the likely value for a 'typical' area with those characteristics. The model used for predicting small area data is determined by analysing data at a higher geographic level, in this case Australia. The relationship observed at the higher geographic level between the characteristic of interest and known characteristics is assumed to also hold at the small area level. The estimates are made by applying the model to data on the known characteristics that can be reliably estimated at the small area level. This modelling technique can be considered as a sophisticated prorating of Australian estimates to the small area level.

The ABS has used various methods to produce small area predictions from a number of surveys. The methods are described in the *Small Area Estimates Manual version 1.0* which was released in May 2006 and is available on the National Statistical Service website at: <http://www.nss.gov.au/nss/home.NSF/pages/Small+Areas+Estimates?OpenDocument>

Users of these modelled estimates should note that they do not represent data collected in administrative or other data sets. As such, they should be used with caution, and treated as indicative of the likely social dimensions present in an area with these demographic and socioeconomic characteristics.

What the 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 social dimensions for a typical area in Australia with the same characteristics. In the absence of accurate, localised information about these indicators, 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 social indicator.

The published GSS data and these small area estimates differ in scope. The 2010 GSS covered persons residing in urban and rural areas and excluded persons residing in collection districts (CDs) in Very Remote areas under the ABS remoteness classification. As such estimates were not produced for SLAs with more than 50% of their populations residing in Very Remote CDs. Due to the exclusion of persons living in CDs in Very Remote areas of Australia, survey estimates for the majority of SLAs in the Northern Territory are unreliable.

This and other limitations of the method mean that predictions have not been published for SLAs:

- 1) with populations under 1,000;
- 2) in which 50% or more of the population lives in Very Remote areas, as determined by ABS;
- 3) in which Aboriginal people comprise 75% or more of the population; and
- 4) where the relative root mean square errors (RRMSEs) on the predictions was 1 or more.

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 prediction is considered too unreliable for general use.

Note re additional data (Victoria only): In Victoria, indicators of community strength are collected via computer-assisted telephone interviewing as part of the Victorian Population Health Survey conducted by the Department of Health. Data estimates are available at the Local Government Area. See:

<http://www.health.vic.gov.au/healthstatus/survey/vphs.htm>

Source for all *Community strengths (modelled estimates)* data: Compiled by PHIDU using modelled estimates from the 2010 General Social Survey, ABS (unpublished); and ABS Estimated Resident Population, 30 June 2010

<http://www.health.vic.gov.au/healthstatus/survey/vphs.htm>

Personal and financial stressors (modelled estimates), 2010

- Persons aged 18 years and over whose household could raise \$2,000 within a week
- Persons aged 18 years and over whose household had at least one cash flow problem in the last 12 months
- Persons aged 18 years and over whose household took at least one dissaving action³ in the last 12 months
- Persons aged 18 years and over who had government support as their main source of income in the last 2 years
- Persons aged 18 years and over who had government support as their main source of income, for 12 months or more, within the past 24 months

Notes for all *Personal and financial stressors (modelled estimates)* data: Refer to above **Notes on the Data for *Community strengths – Modelled estimates***.

Source for all *Personal and financial stressors (modelled estimates)* data: Compiled by PHIDU using modelled estimates from the 2010 General Social Survey, ABS (unpublished); and ABS Estimated Resident Population, 30 June 2010

Health status and disability (modelled estimates), 2010

- Persons aged 18 years and over with self-assessed health status of fair/poor
- Persons aged 18 years and over with profound/severe/moderate/mild core activity restriction

Notes for all *Health status and disability (modelled estimates)* data: Refer to above **Notes on the Data for *Community strengths – Modelled estimates***.

Source for all *Health status and disability (modelled estimates)* data: Compiled by PHIDU using modelled estimates from the 2010 General Social Survey, ABS (unpublished); and ABS Estimated Resident Population, 30 June 2010

Access to services: financial and transport barriers (modelled estimates), 2010

- Persons aged 18 years and over who delayed medical consultation because they could not afford it
- Persons aged 18 years and over who delayed purchasing prescribed medication because they could not afford it
- Persons aged 18 years and over who often has a difficulty or can't get to places needed with transport
- Persons aged 18 years and over who had difficulty accessing services
- Persons aged 18 years and over who accessed the Internet at home in the past 12 months

Notes for all *Access to services: financial and transport barriers (modelled estimates)* data: Refer to above **Notes on the Data for *Community strengths – Modelled estimates***.

Source for all *Access to services: financial and transport barriers (modelled estimates)* data: Compiled by PHIDU using modelled estimates from the 2010 General Social Survey, ABS (unpublished); and ABS Estimated Resident Population, 30 June 2010

Mothers and babies, 2005 to 2007 and 2006 to 2008

- Low birth weight babies, 2006 to 2008 (NSW, Vic, SA, WA, Tas and NT); 2005 to 2007 (ACT)

Notes: The data includes babies (live born) weighing less than 2500 grams at birth.

Data are not available for Queensland.

Source: Compiled by PHIDU using data from Australian Health Departments, 2006 to 2008 (NSW, Vic, SA, WA and Tas); 2005 to 2007 (ACT)

- Smoking during pregnancy, 2006 to 2008 (NSW, SA, WA, Tas and NT); 2005 to 2007 (ACT)

Notes: The data presented include the women who reported that they smoked during a pregnancy, 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).

Data are not available for Victoria and Queensland.

Source: Compiled by PHIDU using data from Australian Health Departments, 2006 to 2008 (NSW, SA, WA and Tas); 2005 to 2007 (ACT)

³ Any action where spending is greater than income thereby reducing already accumulated savings or leading to borrowing to finance the expenditure. Examples of dissaving actions include: reducing home loan repayments, increasing balance owed on credit cards, selling shares or other assets, taking out a personal loan etc.

Child health, 2003 to 2007 and 2008

- **Children fully immunised at 12 to <15 months of age, 2008**

Notes: The data presented are of infants fully immunised at 12 to <15 months of age. Such infants are classified as fully immunised at 12 to <15 months of age if they have received all the recommended doses of the DTP vaccine, which provides immunisation against diphtheria, tetanus and pertussis (whooping cough), and of the individual vaccines for polio, Haemophilus influenzae type B (HIB), and hepatitis B. Only those immunisation services a child has received up to 12 months of age are included in the report.

Source: Compiled by PHIDU using data supplied by the National Centre for Immunisation Research and Surveillance, 2008

- **Infant deaths, 2003 to 2007**

Notes: The data are the number of deaths before 12 months of age, per 1,000 live births.

Source: Compiled by PHIDU using deaths and births data for 2003 to 2007, purchased from ABS

- **Child mortality (under five years), 2003 to 2007**

Notes: The data are the number of deaths before five years of age, per 100,000 population.

Source: Data produced by PHIDU from deaths data supplied by ABS on behalf of State and Territory Registrars of deaths for 2003 to 2007; and ABS Estimated Resident Population, 30 June 2003 to 30 June 2007

Screening, mid to late 2000s

Bowel screening data

Conditions of Use for all bowel screening data: Users of the National Bowel Cancer Screening Program (NBCSP) data must acknowledge the Department of Health and Ageing as the original source of the data and include the following disclaimer:

1. *Formal publication and reporting of the NBCSP data is undertaken by the Australian Institute of Health and Welfare on behalf of the Department of Health and Ageing. NBCSP data included in this report provided by the Department of Health and Ageing is not part of the formal publication and reporting process for NBCSP data.*
2. *Cautionary note about small numbers - Due to a larger degree of statistical fluctuation in small numbers, great care should be taken when assessing apparent differences involving small numbers and measures based on small numbers.*

Source for all bowel screening data: Compiled by PHIDU using data provided by the Department of Health and Ageing from the National Bowel Cancer Screening Program, 2010

- **Bowel screening participation, males, 2010**
- **Bowel screening participation, females, 2010**
- **Bowel screening participation, persons, 2010**

Notes for all bowel screening participation data: The data comprise the number of people aged 50, 55 or 65 years who participated in the National Bowel Cancer Screening Program in 2010, expressed as a proportion of the number of people aged 50, 55 or 65 years who were invited to participate in the National Bowel Cancer Screening Program in 2010.

Zeros represent either a true zero or where participants are less than five due to confidentiality.

- **Bowel screening outcomes: positive test result, persons, 2010**

Notes: The outcome indicator presented is referred to as a 'positive test result'; a positive FOBT result indicates that blood has been found in the sample provided.

Zeros represent either a true zero or where there are less than five people with a positive test result in an area due to confidentiality. It is estimated that around 10 per cent of positive test results have been confidentialised.

The data comprise the number of people aged 50, 55 or 65 years who received a positive test result from the Faecal Occult Blood Test (FOBT) in the National Bowel Cancer Screening Program in 2010, expressed as an age-standardised rate per 100 population aged 50, 55 or 65 years who participated in the National Bowel Cancer Screening Program in 2010.

Breast screening data

- **Breast screening participation, females aged 50 to 69 years, 2006 and 2007 (Vic); 2007 and 2008 (Qld, WA and ACT); and 2009 and 2010 (SA)**

Notes: The participation rate for the 24 month period to the end of each calendar year is based on the actual number of women screened as a percentage of the average of the ABS Estimated Resident Population for the two corresponding calendar years. If a woman has attended more than once in the 24 months, she is counted once only, and the age is taken from the first visit.

The data do not include women who undergo private screening; the impact of such services is estimated to be quite small – see: Department of Health and Ageing (2009) *BreastScreen Australia evaluation: Medicare Benefits Schedule (MBS) Mammography Analysis Project*. Screening monograph no. 11/2009. Canberra: Commonwealth of Australia.

The South Australian SLAs of Cleve, Franklin Harbor, Kangaroo Island, Kimba and Le Hunte have been confidentialised as the Mobile Breast Screening Units in these regions were operating on a 25-26 month cycle. This means the data would not truly reflect the participation of women in these areas. In addition, the values for the LGAs, Statistical Divisions and Subdivisions containing these SLAs will be understated.

The data for the Western Australian SLAs of Fremantle (C) - Inner and Fremantle (C) - Remainder have been pooled together; as have data for Narrogin (S) and Narrogin (T); and Perth (C) - Inner and Perth (C) - Remainder.

In some instances, percentages are calculated at greater than 100%; this may be the result of:

- the address data being a postcode which is not allocated to the correct SLA by the concordances available; or
- the address of the facility where the consultation is held or the service is provided being used, rather than the address of the client/ patient.

In time, with more reliable recording of address details, these occurrences should be reduced.

Data are not available for New South Wales, Tasmania and the Northern Territory.

Source: Compiled by PHIDU using data from:

1) BreastScreen Victoria, 2006 and 2007; BreastScreen Qld, 2007 and 2008; BreastScreen WA, 2007 and 2008; BreastScreen ACT, 2007 and 2008; and BreastScreen SA, 2009 and 2010

2) ABS Estimated Resident Population, average of 30 June 2006 and 30 June 2007 (Vic); average of 30 June 2007 and 30 June 2008 (Qld, WA and ACT); and average of 30 June 2009 and 30 June 2010 (SA)

- **Breast screening outcomes: cancer, females aged 50 to 69 years, 2006 and 2007 (Vic); 2007 and 2008 (Qld, WA and ACT); and 2009 and 2010 (SA)**

Notes: The breast screening outcomes for the 24 month period to the end of each calendar year is based on the actual number of women diagnosed with breast cancer as an age-standardised rate of the actual number of women screened for the two corresponding calendar years. If a woman has attended more than once in the 24 months, she is counted once only, and the age is taken from the first visit.

Breast cancers include both invasive and ductal carcinoma in situ (DCIS).

The indirectly age-standardised rate per 10,000 women screened is based on the standard population of each respective jurisdiction.

The data do not include women who undergo private screening; the impact of such services is estimated to be quite small – for reference, see **Breast screening participation** note above.

The South Australian SLAs of Cleve, Franklin Harbor, Kangaroo Island, Kimba and Le Hunte have been confidentialised as the Mobile Breast Screening Units in these regions were operating on a 25-26 month cycle. This means the data would not truly reflect the participation of women in these areas. In addition, the values for the LGAs, Statistical Divisions and Subdivisions containing these SLAs will be understated.

The data for the Western Australian SLAs of Fremantle (C) - Inner and Fremantle (C) - Remainder have been pooled together; as have data for Narrogin (S) and Narrogin (T); and Perth (C) - Inner and Perth (C) - Remainder.

Data are not available for New South Wales, Tasmania and the Northern Territory.

Source: Compiled by PHIDU using data from BreastScreen Victoria, 2006 and 2007; BreastScreen Qld, 2007 and 2008; BreastScreen WA, 2007 and 2008; BreastScreen ACT, 2007 and 2008; and BreastScreen SA, 2009 and 2010

Cervical screening data

- **Cervical screening participation, females aged 20 to 69 years, 2006 and 2007 (Vic, Qld and ACT); 2008 and 2009 (SA and WA)**

Notes: The participation rate for the 24 month period to the end of each calendar year is based on the actual number of women screened as a per cent of the average of the ABS Estimated Resident Population for the two corresponding calendar years, excluding an estimate of those who had undergone a full hysterectomy. If a woman has attended more than once in the 24 months, she is counted once only, and the age is taken from the first visit.

In some instances, percentages are calculated at greater than 100%; this may be the result of:

- the address data being a postcode which is not allocated to the correct SLA by the concordances available; or
- the address of the facility where the consultation is held or the service is provided being used, rather than the address of the client/ patient.

In time, with more reliable recording of address details, these occurrences should be reduced.

Data are not available for New South Wales, Tasmania and the Northern Territory.

Source: Compiled by PHIDU using data from the:

1) Victorian Cervical Cytology Registry, 2006 and 2007; Queensland Health Cancer Services Screening Branch, 2006 and 2007; South Australian Cervix Screening Program, 2008 and 2009; Western Australia Cervical Cytology Register, 2008 and 2009; and the ACT Cytology Register, 2006 and 2007; and

2) ABS Estimated Resident Population, average of 30 June 2006 and 30 June 2007 (Vic, Qld and ACT); average of 30 June 2008 and 30 June 2009 (SA and WA); with hysterectomy fraction data derived from the ABS 2001 National Health Survey or 2007-08 National Health Survey, as appropriate

- **Cervical screening outcomes: low grade abnormality, females aged 20 to 69 years, 2006 and 2007 (Vic, Qld and ACT); 2008 and 2009 (SA and WA)**

- **Cervical screening outcomes: high grade abnormality, females aged 20 to 69 years, 2006 and 2007 (Vic, Qld and ACT); 2008 and 2009 (SA and WA)**

Notes for all Cervical screening outcomes data: Cervical screening outcomes for the 24 month period to the end of each calendar year are based on the number of women with an abnormal pap smear as an age-standardised rate of the number of women screened in the corresponding calendar years. If a woman has attended more than once in the 24 months, she is counted once only, and the age is taken from the first visit.

For Victoria and the ACT, the indirectly age-standardised rate per 1,000 women screened is based on the sum of the standard populations of these two jurisdictions; for SA, WA and Qld, the indirectly age-standardised rate is based on the standard population of each respective jurisdiction.

Data are not currently available for New South Wales, Tasmania and the Northern Territory.

Source for Cervical screening outcomes data: Compiled by PHIDU using data from the Victorian Cervical Cytology Registry, 2006 and 2007; Queensland Health Cancer Services Screening Branch, 2006 and 2007; South Australian Cervix Screening Program, 2008 and 2009; Western Australia Cervical Cytology Register, 2008 and 2009; and the ACT Cytology Register, 2006 and 2007

Modelled estimates of prevalence of certain chronic diseases, risk factors etc., 2007–08

Notes for all Modelled estimates of prevalence of certain chronic diseases, risk factors etc.: The estimates have been synthetically predicted at the Statistical Local Area (SLA) level from the 2007-08 National Health Survey (NHS), conducted by the ABS: a note on modelled estimates is at www.publichealth.gov.au/data_online/notes_estimates_Aust_2007-08.pdf.

Users of these modelled estimates should note that they do not represent data collected in administrative or other data sets. As such, they should be used with caution, and treated as indicative of the likely social dimensions present in an area with these demographic and socioeconomic characteristics.

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 achieves a response rate in excess of 90%. Although the sample includes the majority of people living in private households, 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. This and other limitations of the method mean that predictions have not been published for SLAs:

- 1) with populations under 1,000;
- 2) in which 50% or more of the population lives in Very Remote areas, as determined by ABS;
- 3) in which Aboriginal people comprise 75% or more of the population; and
- 4) where the relative root mean square errors (RRMSEs) on the predictions was 1 or more.

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 prediction is considered too unreliable for general use.

Note re additional data (Victoria and Queensland only): In Victoria, indicators of health and lifestyle, self-reported health and health conditions are collected annually via computer-assisted telephone interviewing as part of the Victorian Population Health Survey conducted by the Department of Health. Data estimates are available at the Local Government Area. See: <http://www.health.vic.gov.au/healthstatus/survey/vphs.htm>

In Queensland, a Self-Reported Health Status Survey is undertaken annually by Population Health Queensland using computer assisted telephone interviewing. Data are available as estimates at the Local Government Area. See: <http://www.health.qld.gov.au/epidemiology/publications/health-surveys.asp>

Source for all Modelled estimates of prevalence of certain chronic diseases, risk factors etc.: Compiled by PHIDU using data estimated from the 2007–08 National Health Survey (NHS), ABS (unpublished); and ABS Estimated Resident Population, average of 30 June 2007 and 30 June 2008

Self-assessed health (modelled estimates), 2007–08

- **Fair or poor self-assessed health, persons aged 15 years and over**

Notes: Respondents aged 15 years and over in the 2007–08 NHS were asked to rate their health on a scale from 'excellent', through 'very good', 'good' and 'fair', to 'poor' health. The data includes those respondents who rated their health as fair or poor.

- **Current long-term condition and reporting good, very good or excellent health**

Notes: Respondents aged 15 years and over in the 2007–08 NHS were asked to rate their health on a scale from 'excellent', through 'very good', 'good' and 'fair', to 'poor' health. The data comprises those respondents who had been diagnosed with a long term health condition (a condition which has lasted or is expected to last for 6 months or more) and who rated their health as good, very good or excellent.

Chronic disease and conditions (modelled estimates), 2007–08

- Type 2 diabetes⁴
- High cholesterol

Notes for Type 2 diabetes/ High cholesterol data: 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, cancer, heart and circulatory conditions, and/or diabetes⁴.

- Males with mental and behavioural problems
 - Males with mood (affective) problems
- Females with mental and behavioural problems
 - Females with mood (affective) problems

Notes for Mental and behavioural problems/ Mood (affective) problems data: The data are self-reported data, reported to interviewers in the 2007–08 NHS. Mental health and behavioural problems/ mood (affective) problems were identified through the self-reported information on long term conditions obtained by the survey. However, unlike the approach used for conditions such as asthma, cancer, heart and circulatory conditions, and/or diabetes, respondents in the survey were not specifically asked whether they had been diagnosed with any mental disorders. The information provided by respondents could therefore be based on self-diagnosis rather than diagnosis by a health professional.

- Circulatory system diseases
- Hypertensive disease
- Respiratory system diseases
 - Asthma
 - Chronic Obstructive Pulmonary Disease (COPD)
- Musculoskeletal system diseases
 - Arthritis
 - Rheumatoid arthritis
 - Osteoarthritis
- Females with osteoporosis

Notes for Long term health conditions (ie above data from Circulatory system diseases onwards) data: 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, cancer, heart and circulatory conditions, and/or diabetes.

Psychological distress (modelled estimate), 2007–08

- High or very high levels of psychological distress, persons aged 18 years and over

Notes: 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).

Health risk factors (modelled estimates), 2007–08

- Male current smokers, 18 years and over
- Female current smokers, 18 years and over

Notes for Current smokers data: The data are self-reported data, reported to interviewers in the 2007–08 NHS. A current smoker is an adult who reported at the time of interview that they smoked cigarettes, cigars or pipes at least once a week.

- Harmful use of alcohol, persons aged 18 years and over

Notes: The data are self-reported data, reported to interviewers in the 2007–08 NHS. The level of health risk was based on estimated alcohol consumption in the seven days prior to interview using two components – the number of days on which

⁴ Note on diabetes estimates from the NHS and other sources:

The figures for all of Australia for type 2 diabetes published in the 2004-05 and 2007-08 National Health Surveys (NHSs) conducted by the Australian Bureau of Statistics (and used as the basis for the synthetic estimates shown here) is substantially lower than the AusDiab figure of 7.6% in 2000; 3.6% in the 2004-05 survey and 4.0% in the 2007-08 survey. The NHS is based on self-reported data: the AusDiab is based on physical and bio-chemical measures taken by qualified people.

The AusDiab figure is comprised of 3.8% diagnosed and 3.8% undiagnosed – that is, AusDiab state that for every one person with known diabetes, there is one unknown. There is good evidence [Qld and SA] to suggest this relationship is an overstatement. Further, the sample was taken in such a way [highly clustered, households replaced where contact could not be made] and respondents attending the test sites 'self-selected' such that bias in the results is clearly possible: the response rate (as distinct from the contact rate) was also very low. The sample also appears to have relatively few disadvantaged people; this would suggest their diagnosed figure is lower than would be achieved from a well-drawn/ executed sample with reasonable response rates across socioeconomic groups. For a comment on some of these issues from a Queensland perspective, see: http://www.mja.com.au/public/issues/180_02_190104/letters_190104_fm-2.html.

Given the problems with the AusDiab data, PHIDU was not prepared to use those data to predict rates in small areas.

The value of the modelled estimates, albeit on this low overall rate, is in showing likely variations between areas.

the respondent reported consuming alcohol in the previous week; and the quantity consumed in the most recent days on which they consumed alcohol. For people who drank on no more than three days in the last week, their daily consumption was simply the total consumed divided by seven. Harmful use of alcohol is defined as average daily consumption of more than 75 ml (three standard drinks) for males and 50 ml (two standard drinks) for females.

- Physical inactivity, persons aged 15 years and over

Notes: The data are self-reported data, reported to interviewers in the 2007–08 NHS. Physical inactivity is defined as those aged 15 years and over who did not exercise in the two weeks prior to interview for the 2007–08 NHS, through sport, recreation or fitness (including walking).

- Overweight (not obese) males, 18 years and over
- Obese males, 18 years and over
- Overweight (not obese) females, 18 years and over
- Obese females, 18 years and over
- Overweight (not obese) persons, 18 years and over
- Obese persons, 18 years and over
- Males in normal weight range, 18 years and over
- Females in normal weight range, 18 years and over

Notes for Overweight/ Obesity/ Normal weight data: 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 World Health Organization and National Health & Medical Research Council 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.

- Usual daily intake of two or more serves of fruit, persons aged 5 to 17 years
- Usual daily intake of two or more serves of fruit, persons aged 18 years and over

Notes for Usual daily intake of fruit data: The data are self-reported data, reported to interviewers in the 2007–08 NHS. Data includes respondents reporting usually consuming two or more serves of fruit (excluding drinks and beverages) each day. A serve is approximately 150 grams of fresh fruit or 50 grams of dried fruit.

- Persons with at least one of four major health risk factors – smoking, harmful use of alcohol, physical inactivity or obesity – 18 years and over

Notes: The data are self-reported data, reported to interviewers in the 2007–08 NHS. Data includes respondents who reported that they had at least one of the following health risk factors - smoking, harmful use of alcohol, physical inactivity or obesity.

Composite indicators – a chronic disease and an associated risk factor (modelled estimates), 2007–08

- Had type 2 diabetes and were overweight/ obese, persons aged 18 years and over

Notes: The data are self-reported data, reported to interviewers in the 2007–08 NHS.

For further information, refer to the chronic disease and risk factor information provided above.

- Had asthma and were smokers, persons aged 18 years and over

Notes: The data are self-reported data, reported to interviewers in the 2007–08 NHS.

For further information, refer to the chronic disease and risk factor information provided above.

Disability, 2011

- Assistance to persons with a disability (unpaid)

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.

The data exclude the 8.5% of persons aged 15 years and over whose unpaid assistance to persons with a disability was not stated (the proportion excluded was calculated based on the Australian data).

Source: Compiled by PHIDU from ABS Census 2011

- Persons with a profound or severe disability, All ages
- Persons with a profound or severe disability living in the community, All ages
- Persons with a profound or severe disability living in the community, All ages
- Persons with a profound or severe disability, 0 to 64 years
- Persons with a profound or severe disability living in the community, 0 to 64 years
- Persons with a profound or severe disability, 65 years and over
- Persons with a profound or severe disability living in the community, 65 years and over

Notes for People with a profound or severe disability and People with a profound or severe disability living in the community 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 figures include people – of all ages/ aged 0 to 64 years/ aged 65 years and over, as appropriate – 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 (for each age group shown) in this atlas includes people living in these accommodation types, whereas the figure for 'living in the community' (for each age group shown) excludes them.

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

Source for all *People with a profound or severe disability* data: Compiled by PHIDU from ABS Census 2011 (unpublished)

Median age at death, 2003 to 2007

Source for all *Median age at death* data: Data produced by PHIDU from deaths data supplied by ABS on behalf of State and Territory Registrars of deaths for 2003 to 2007

- Median age at death of males
- Median age at death of females
- Median age at death of persons

Premature mortality by sex, 2003 to 2007

Source for all *Premature mortality* data: Data produced by PHIDU from deaths data supplied by ABS on behalf of State and Territory Registrars of deaths for 2003 to 2007; and ABS Estimated Resident Population, 30 June 2003 to 30 June 2007

- Deaths of males aged 15 to 64 years
- Deaths of females aged 15 to 64 years
- Deaths of persons aged 15 to 64 years
- Deaths of males aged 0 to 74 years
- Deaths of females aged 0 to 74 years
- Deaths of persons aged 0 to 74 years

Premature mortality by selected cause, 2003 to 2007

Source for all *Premature mortality* data: Data produced by PHIDU from deaths data supplied by ABS on behalf of State and Territory Registrars of deaths for 2003 to 2007; and ABS Estimated Resident Population, 30 June 2003 to 2007

- Deaths from cancers, persons aged 15 to 64 years
International Classification of Diseases (ICD-10) codes: C00-D48
- Deaths from circulatory system diseases, persons aged 15 to 64 years
ICD-10 codes: I00-I99
- Deaths from respiratory system diseases, persons aged 15 to 64 years
ICD-10 codes: J00-J99
- Deaths from external causes, persons aged 15 to 64 years
ICD-10 codes: V01-Y98
- Deaths from all other causes, persons aged 15 to 64 years
ICD-10 codes: All excluding C00-D48; I00-I99; J00-J99; V01-Y98
- Deaths from cancers, persons aged 0 to 74 years
ICD-10 codes: C00-D48
- Deaths from colorectal cancer, persons aged 0 to 74 years
ICD-10 codes: C18-C21
- Deaths from lung cancer, persons aged 0 to 74 years
ICD-10 codes: C33, C34
- Deaths from circulatory system diseases, persons aged 0 to 74 years
ICD-10 codes: I00-I99
- Deaths from ischaemic heart disease, persons aged 0 to 74 years
ICD-10 codes: I20-25
- Deaths from cerebrovascular disease, persons aged 0 to 74 years
ICD-10 codes: I60-I69
- Deaths from respiratory system diseases, persons aged 0 to 74 years
ICD-10 codes: J00-J99
- Deaths from chronic obstructive pulmonary disease, persons aged 45 to 74 years

ICD-10 codes: J40-J44

- Deaths from external causes, persons aged 0 to 74 years

ICD-10 codes: V01-Y98

- Deaths from road traffic injuries, persons aged 0 to 74 years

ICD-10 codes: V01-V04, V06, V09-V80, V87, V89, V99

- Deaths from suicide and self-inflicted injuries, persons aged 0 to 74 years

ICD-10 codes: X60-X84, Y87.0, Y10-Y34

- Deaths from all other causes, persons aged 0 to 74 years

ICD-10 codes: All excluding C00-D48; I00-I99; J00-J99; V01-Y98

Avoidable mortality, 2003 to 2007

Notes for all Avoidable mortality data: For information on the avoidable mortality concept; rationale for including conditions; and ICD-10 codes, please refer to the information available in the Australian and New Zealand Atlas of Avoidable Mortality, available from:

<http://www.publichealth.gov.au/publications/australian-and-new-zealand-atlas-of-avoidable-mortality.html>

The codes and rationale are included in **Appendix 1.1: ICD codes**; and **Appendix 1.2: Rationale for including conditions**.

Source for all Avoidable mortality data: Data produced by PHIDU from deaths data supplied by ABS on behalf of State and Territory Registrars of deaths for 2003 to 2007; and ABS Estimated Resident Population, 30 June 2003 to 30 June 2007

Potentially avoidable deaths at ages 0 to 74 years

- Deaths at ages 0 to 74 years: all causes
- Deaths at ages 0 to 74 years: cancer
 - Colorectal cancer
 - Lung cancer
- Deaths at ages 0 to 74 years: cardiovascular diseases
 - Ischaemic heart disease
 - Cerebrovascular disease
- Deaths at ages 0 to 74 years: respiratory system diseases
 - Chronic obstructive pulmonary disease (45 to 74 years)
- Deaths at ages 0 to 74 years: road traffic injuries
- Deaths at ages 0 to 74 years: suicide and self-inflicted injuries

Amenable (treatable) mortality, 2003 to 2007

- Amenable (treatable) mortality at ages 0 to 74 years

Preventable mortality, 2003 to 2007

- Preventable mortality at ages 0 to 74 years

Private health insurance, 2001 and 2007–08

- Private health insurance

Notes: The data for 2001 represent the number of people with private health insurance (hospital) cover, calculated from data provided in response to a question on notice in the Parliament of Australia.

While these data are not available for a period later than 2001, they have been included here, as the geographic distribution and its variations are unlikely to have changed substantially since that time.

Source: Compiled by PHIDU using data from Senate Community Affairs Legislation Committee: *Consideration of Supplementary Estimates 2002-2003*; 21 November 2002, pp. 96-162; and ABS Estimated Resident Population, 30 June 2001

- Private health insurance (modelled estimate), persons aged 15 years and over, 2007–08

Notes: The data on which the predictions are based are self-reported data, reported to interviewers in the 2007-08 NHS. Respondents to the NHS were asked whether they were currently covered by private health insurance. Private health insurance was defined as "cover additional to that provided under Medicare, offered by private health organisations registered under the National Health Act to reimburse all or part of the cost of hospital and/or ancillary services"; cover provided/ arranged through employers was included; ambulance only cover, and cover arranged under Veteran's Affairs or other government health benefits cards, were excluded (see Australian Bureau of Statistics (ABS) 2009. National Health Survey: users guide - electronic, Australia 2007-08. ABS cat. no. 4363.0.55.001. ABS: Canberra, pp. 88-89. Accessed 27 Jun 2012, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4363.0.55.0012007-08>).

See also the [Note for all Modelled estimates data](#) above.

Source: Compiled by PHIDU using data estimated from the 2007–08 National Health Survey (NHS), ABS (unpublished); and ABS Estimated Resident Population, average of 30 June 2007 and 30 June 2008

MBS services, 2009/10

Source for all MBS services data: Compiled by PHIDU using data from the Department of Health and Ageing, 2009/10; and ABS Estimated Resident Population, 2010

- GP services to males (MBS and DVA)
- GP services to females (MBS and DVA)
- Total GP services (MBS and DVA)
- 45 Year Old Health Checks by GPs, males aged 45 to 49 years
MBS Item Nos: 717
- 45 Year Old Health Checks by GPs, females aged 45 to 49 years
MBS Item Nos: 717
- 45 Year Old Health Checks by GPs, persons aged 45 to 49 years
MBS Item Nos: 717
Note: The difference between the sum of males and females, and the persons total, for the 45 Year Old Health check data is due to not all data being reported by sex.
- Annual health assessments by GPs, persons aged 75 years and over
MBS Item Nos: 700, 702
- Other services by GPs for Enhanced Primary Care items
MBS Item Nos: 721, 725, 723, 727, 729, 731
- Total services by GPs for Enhanced Primary Care items
MBS Item Nos: 700-746, 749, 757-759, 762, 765, 768, 771-773, 775, 778-779, 900, 903, 2710, 2712-2713
- Practice Nurse services under the MBS
MBS Item Nos: 10993-10999
- Better Access Care Program: Preparation of Mental Health Care Plan by GPs
MBS Item Nos: 2702, 2710, 2712, 2713
- Better Access Care Program: Psychiatrists
MBS Item Nos: 291, 293, 296, 297, 299
- Better Access Care Program: Psychologists
MBS Item Nos: 80100, 80105, 80110, 80115, 80120
- Better Access Care Program: General Psychologists
MBS Item Nos: 80000, 80005, 80010, 80015, 80020
- Better Access Care Program: Clinical Psychologists
MBS Item Nos: 80150, 80155, 80160, 80165, 80170
- Better Access Care Program: Occupational Therapists
MBS Item Nos: 80125, 80130, 80135, 80140, 80145

Home and community care, 2010/11

Source for all Home and community care data: Compiled by PHIDU using data from the Department of Health and Ageing, 2010/11; and ABS Estimated Resident Population, 30 June 2010

- Clients living alone
Notes: Clients whose status is recorded as living alone at the date of most recent assessment.
- Clients with carer
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.
- Indigenous clients (as a proportion of total clients)
Notes: Clients whose status is recorded as Indigenous at the date of most recent assessment.
- Indigenous clients (as a proportion of the Indigenous population)
Notes: Clients whose status is recorded as Indigenous at the date of most recent assessment.
- Non-English speaking clients
Notes: Clients whose main language spoken at home at the date of most recent assessment is not English.
- Total clients
Notes: All clients that recorded at least one instance of assistance for the time period.
- Allied health care instances at home
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.
- Allied health care instances at centre
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.

- **Care counselling instances**
Notes: Assistance with understanding and managing situations, behaviours and relationships associated with the person's need for care and/or the caring role, including the provision of information, advice and training.
- **Case management instances**
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.
- **Centre based day care instances**
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.
- **Client care coordination instances**
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.
- **Domestic assistance instances**
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 maintenance and modification instances**
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.
- **Meals at centre plus meals at home instances**
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.
- **Nursing care at centre plus nursing care at home instances**
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.
- **Personal care instances**
Notes: May include help with bathing, toilet use, eating, dressing and personal grooming.
- **Respite care instances**
Notes: Assistance to carers by provision of a substitute carer. Can include centre-based, in-home, host family and peer support respite care.
- **Social support instances**
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.
- **Transport instances**
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.
- **Total instances of assistances**
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, June 2011

Source for all Aged care places data: Compiled by PHIDU using data from the Department of Health and Ageing, June 2011; and ABS Estimated Resident Population, 30 June 2011

Notes for all Aged care places data: This data includes: Multi-Purpose Services; National Aboriginal and Torres Strait Islander Aged Care Program; and Consumer Directed Care. See:

<http://www.health.gov.au/internet/main/publishing.nsf/content/ageing-rescare-servlist-download.htm> for further information.

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. See:

<http://www.health.gov.au/internet/publications/publishing.nsf/Content/ageing-publicat-aged-care-australia.htm~ageing-publicat-aged-care-australia-pt8~ageing-publicat-aged-care-australia-pt8-4> for further information.

- Residential aged care – high-level care places

Notes: High-level care is nursing home care provided when health deteriorates to such a degree that a person becomes very frail or ill and can no longer be cared for adequately in their present accommodation. It provides 24-hour nursing and personal care for the very frail or ill, with support for the activities of daily living – dining, showering, continence management, rehabilitation, medications etc. Allocation is based on availability and the assessment of an individual's needs, as compared with other residents.

- Residential aged care – low-level care places

Notes: Low-level care is hostel accommodation, offering a greater quality of life for people who benefit significantly from supportive services, companionship and activities, and for whom living without assistance is difficult. Independence is encouraged in maintaining daily living skills. Services provided may include showering, dressing, bed making, room cleaning, supervision of medication, provision of all meals and laundry.

This data includes: Multi-Purpose Services; National Aboriginal and Torres Strait Islander Aged Care Program; and Consumer Directed Care. Further details can be found [here](#).

- Total residential aged care places

Notes: These data comprise both residential high-level and low-level care places. See above **Notes on the Data** for **Residential aged care – high-level care places** and **Residential aged care – low-level care places** for further information.

- Community aged care places

Notes: Community Aged Care Packages offer low dependency level care for older people who are frail and/or disabled, in their own home, whether they live with their spouse, family or on their own. Trained staff provide flexible and coordinated support, which may include assistance with personal care (eg showering, grooming); household help (eg shopping, cleaning); linking with activities and pursuits in the community; and other assistance as negotiated according to individual need.

NB: The data shows the Statistical Local Area of the location of the agency funded, which is not necessarily the address of the person receiving the package of care.