State of Our Health

Technical Appendix

WORKING DRAFT FOR DISCUSSION – MAY 2013

Health Performance Council
State of Our Health – Technical Appendix

The State of Our Health Technical Appendix is published as a separate document to complement the State of Our Health report. The Technical Appendix provides complete and comprehensive detail of information sources, counting methodology, rationale for selection, important caveats, and other data issues relevant to the statistical measures presented throughout the report.

Table of Contents

Chapter 1. Demographic Profile of South Australia

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Resident Population</td>
</tr>
<tr>
<td>1-2</td>
<td>Population Density</td>
</tr>
<tr>
<td>1-3</td>
<td>Population Change</td>
</tr>
<tr>
<td>1-4</td>
<td>Population Projections by Statistical Division</td>
</tr>
<tr>
<td>1-5</td>
<td>Population Composition in South Australia</td>
</tr>
<tr>
<td>1-6</td>
<td>South Australia’s Culturally and Linguistically Diverse (CALD) Population</td>
</tr>
<tr>
<td>1-7</td>
<td>Migration and Refugees</td>
</tr>
<tr>
<td>1-8</td>
<td>Carers</td>
</tr>
<tr>
<td>1-9</td>
<td>Relative Socio-Economic Disadvantage</td>
</tr>
<tr>
<td>1-10</td>
<td>Education</td>
</tr>
<tr>
<td>1-11</td>
<td>Income</td>
</tr>
<tr>
<td>1-12</td>
<td>Economy and Employment</td>
</tr>
<tr>
<td>1-13</td>
<td>Health Expenditure</td>
</tr>
<tr>
<td>1-14</td>
<td>Housing and Households</td>
</tr>
<tr>
<td>1-15</td>
<td>Religious Affiliation</td>
</tr>
</tbody>
</table>

Table 1-11-1. Disposable Income

Table 1-11-2. Children in Welfare Dependent and Other Low Income Families

Table 1-12-1. Unemployment Rate

Table 1-12-2. Unemployment and Socioeconomic Disadvantage

Table 1-12-3. Job Seeker Allowances

Table 1-12-4. Jobless Families with Children Under 15 Years

Table 1-12-5. Financial Stress

Table 1-12-6. Aboriginal Financial Stress

Table 1-12-7. Occupation

Table 1-13-1. Private Health Insurance for Hospital Cover

Table 1-13-2. Out of Pocket Expenditures

Table 1-14-1. Aboriginal Crowded Households

Table 1-14-2. Housing Stress

Table 1-14-3. Affordable Housing (housing costs 30% and over of gross income)

Table 1-14-4. Affordable Housing: State and Territory Owned Rented Housing

Table 1-14-5. Aboriginal Housing

Table 1-14-6. and 1-14-7. Persons Living Alone

Table 1-14-8. Homelessness

Table 1-14-9. Household Computer Access

Table 1-14-10. Household Internet Connection

Table 1-14-11. Households with No Motor Vehicle

Table 1-15. Religious Affiliation
Chapter 2. Starting Well and The Early Years

2-1. Fertility Rate
   2-1-1. Fertility Rate in South Australia ................................................................. 51
   2-1-2. Aboriginal Fertility Rate ............................................................................. 52

2-2. Maternal Age and Ethnicity
   2-2-1. Maternal Age in South Australia ................................................................. 53
   2-2-2. Aboriginal Maternal Age ........................................................................... 54
   2-2-3. Teenage Women Giving Birth .................................................................... 55
   2-2-4. Women Giving Birth Aged 35 years and Over ........................................... 56
   2-2-5. Ethnicity of Women Giving Birth ............................................................... 57

2-3. Folate Intake Before and During Pregnancy .................................................... 58

2-4. Antenatal Visits
   2-4-1. and 2-4-2. Antenatal Visits in South Australia and Aboriginal Antenatal Visits 59

2-5. Perinatal Depression ......................................................................................... 60

2-6. Smoking During Pregnancy
   2-6-1. Smoking During Pregnancy ....................................................................... 61
   2-6-2. Smoking during Pregnancy – Aboriginal and Non-Aboriginal Rates .......... 62

2-7. Gestational Diabetes ......................................................................................... 63

2-8. Overweight and Obesity in Pregnancy ............................................................. 64

2-9. Birth Rate ......................................................................................................... 65

2-10. Low Birth Weight
   2-10-1. Low Birth Weight in South Australia ......................................................... 66
   2-10-2. Aboriginal Low Birth Weight ..................................................................... 67

2-11. Caesarean Births ............................................................................................. 68

2-12. Congenital Abnormalities .............................................................................. 69

2-13. Breastfeeding ................................................................................................ 70

2-14. Children Receiving 4th Year Developmental Health Checks ....................... 71

2-15. Childhood Immunisations
   2-15-1 and 2-15-2. Immunisations (Children Aged 5 Years) in South Australia and Aboriginal Immunisations (Children aged 5 Years) 72

2-16. Childhood Burden of Disease
   2-16-1 and 2-16-2. Childhood Burden of Disease – Top 5 Disability Adjusted Life Years (DALYs) Conditions (0 – 4 years) and (5 – 19 years) 

2-17. Children’s Intellectual and Mental Health
   2-17-1 Severe Behavioural Problems ................................................................... 73
   2-17-2 Migraines and Headaches ........................................................................ 74
   2-17-3 Problems with Co-ordination and Clumsiness ........................................ 75
   2-17-4 Problems with Developmental Delay ....................................................... 76
   2-17-5 Learning Disorders ................................................................................... 77
   2-17-6. Autism ..................................................................................................... 78
   2-17-7. National Mental Health (Children Aged 4 – 17 Years) .............................. 79

2-18. Oral Health
   2-18-1. Deciduous Decay in Children Aged 5 and 6 Years ................................. 80
   2-18-2. Permanent decay in Children Aged 12 Years ........................................... 81
   2-18-3. Teeth and Gum Problems in Aboriginal Children Aged 4-14 Years .......... 82

2-19. Hearing Loss in Children (aged 0 – 14) ........................................................... 83

2-20. Nutrition – Fruit and Vegetable Consumption – Children Aged 5-17 Years .... 84

2-21. Exercise – Participation in Organised Sport and/or Dancing – Children Aged 5 – 14 Years ................................................................. 85

2-22. Childhood Obesity (ages 5 – 14 years) ............................................................ 86

2-23. Children Developmentally at Risk and Vulnerable in the First Full Year of Full-Time School ................................................................. 87
   2-23-1. Children Developmentally at Risk - Physical Health and Wellbeing .......... 88
   2-23-2 and 2-23-3. Developmental Vulnerability and Aboriginal Children Developmentally Vulnerable .............................................................. 89

2-24. Educational Outcomes
   2-24-1. 2-24-2, 2-24-3, and 2-24-4. Educational Outcomes – Reading and Numeracy (School Year 5) ................................................................. 90
Chapter 3. Staying Healthy and Ageing Well

3-1. Life Expectancy....................................................................................................................95
  3-1-1. Life Expectancy in South Australia.........................................................................................95
  3-1-2. & 3-1-3. Male and Female Life Expectancy at Birth – National Comparison...............................97
  3-1-4. Health Adjusted Life Expectancy in South Australia..............................................................98
  3-1-5. Life Expectancy in South Australia from Various Ages.........................................................100
  3-1-6. Aboriginal Life Expectancy at Birth – National Data..............................................................101

3-2. Health Status........................................................................................................................102
  3-2-1. Self-Reported Health Status in South Australia.........................................................................102
  3-2-2. Self-Reported Health Status – National Comparison..............................................................103
  3-2-3. Aboriginal Self-Assessed Health Status..................................................................................105

3-3. Protective Factors – Family and Community Support..............................................................106
  3-3-1. & 3-3-2. Daily Face to Face Social Contact (with family or friends living outside the household) .................................................................................................................................106
  3-3-3. & 3-3-4. Support in a Time of Crisis (from persons living outside the household).......................107
  3-3-5. Aboriginal Support in a Time of Crisis (from persons living outside the household)...............108
  3-3-6. & 3-3-7. Community Trust....................................................................................................109
  3-3-8. & 3-3-9. Acceptance of Different Cultures..............................................................................110

3-4. Protective Factors – Community Participation..........................................................................111
  3-4-1. Participation in a Community Event (in the last 6 months)....................................................111
  3-4-2. Volunteering (in the last 12 months).....................................................................................112
  3-4-3. Able to Have a Say within the Community on Important Issues...........................................113

3-5. Protective Factors – Nutrition..................................................................................................114
  3-5-1. Recommended Fruit Intake in South Australia.........................................................................114
  3-5-2. & 3-5-3. Recommended Fruit Intake – National Comparison....................................................115
  3-5-4. Aboriginal Daily Intake of Fruit................................................................................................116
  3-5-5. Recommended Vegetable Intake in South Australia...............................................................117
  3-5-6. & 3-5-7. Recommended Vegetable Intake – National Comparison.........................................118
  3-5-8. Aboriginal Daily Intake of Vegetables....................................................................................119

3-6. Protective Factors – Exercise and Physical Activity...............................................................120
  3-6-1. Exercise and Physical Activity in South Australia..................................................................120
  3-6-2. & 3-6-3. Sport and Physical Recreation – National Comparison..............................................121
  3-6-4. Aboriginal Participation in Sporting, Social or Community Activities.....................................122

3-7. Protective Factors – Vaccinations............................................................................................123
  3-7-1. Influenza and Pneumococcal Vaccinations............................................................................123
  3-7-2. Aboriginal Influenza and Pneumococcal Vaccinations................................................................125

3-8. Protective Factors – Health Checks........................................................................................126
  3-8-1. 45 Year Old Health Checks................................................................................................126
  3-8-2. Health Assessments for Aboriginal and Torres Strait Islander People.....................................127

3-9. Skin Cancer Prevention Practices – Sun Protective Behaviours..............................................128

3-10. Function – Disability.............................................................................................................129
  3-10-1. Prevalence of Disability.......................................................................................................129
  3-10-1. (cont’d) Prevalence of Disability..........................................................................................130
  3-10-2. People with a Need for Assistance (Profound or Severe Disability)......................................131
  3-10-3. Aboriginal People with a Need for Assistance (Profound or Severe Disability)....................132
  3-10-4. Unpaid Care, Help, or Assistance Because of a Disability...................................................133
  3-10-5. Aboriginal Unpaid Care, Help, or Assistance Because of a Disability.................................134
  3-10-6. Disability and Impairment of Activity in South Australia....................................................135
  3-10-7. Disability Clients in South Australia........................................................................................136

3-11. Function – Impairment..........................................................................................................137
  3-11-1. Deafness (complete or partial) in South Australia..............................................................137
  3-11-2. Aboriginal Ear/Hearing Problems.......................................................................................138
  3-11-3. Eye Disease in South Australia.............................................................................................139
  3-11-4. Aboriginal Eye/Sight Problems............................................................................................141
  3-11-5. Decayed, Missing or Filled Teeth in Adults........................................................................142
  3-11-6. Aboriginal Adults with Missing Teeth................................................................................143
  3-11-7. Incidence of Falls in South Australia...................................................................................144
  3-11-8. Current Long Term Conditions Due to an Injury – National Comparison............................145
  3-11-9. Work Injury Claims...........................................................................................................146
  3-11-10. People with a Mental Illness in Employment.....................................................................147

3-12. Health Risk Factors – Multiple Risk Factors.......................................................................148
  3-12-1. Persons Living with Multiple Risk Factors in South Australia............................................148

3-13. Health Risk Factors – Alcohol Consumption.................................................................149
  3-13-1. Short Term Risk of Harm from Alcohol in South Australia................................................149
3-13-2. Long Term Risk of Harm from Alcohol in South Australia ................................................................. 150
3-13-3. At Risk of Long Term Harm from Alcohol – National Comparison ................................................ 151
3-13-4. Aboriginal Long Term Harm Risk from Alcohol Consumption ...................................................... 152

3-14. Health Risk Factors – Obesity
3-14-1. Obesity in South Australia .............................................................................................................. 153
3-14-2 & 3-14-3. Obesity – National Comparison ......................................................................................... 155
3-14-4. Obesity in the Aboriginal Population .............................................................................................. 156

3-15. Health Risk Factors – High Blood Pressure
3-15-1. Prevalence of High Blood Pressure in South Australia .................................................................... 157
3-15-3. Aboriginal Prevalence of High Blood Pressure ............................................................................... 159

3-16. Health Risk Factors – High Cholesterol
3-16-1. Prevalence of High Cholesterol in South Australia ........................................................................ 160
3-16-2. Prevalence of High Cholesterol – National Comparison ................................................................. 161

3-17. Health Risk Factors – Smoking
3-17-1. Smoking Prevalence in South Australia .......................................................................................... 162
3-17-2. Current Smokers – National Comparison ....................................................................................... 164
3-17-3. Aboriginal Smoking Prevalence – Current Smokers .................................................................... 165
3-17-4. Smoking - Awareness of the Health Effects of Active Smoking ...................................................... 166
3-17-5. Smoking Cessation .......................................................................................................................... 167

3-18-1. Illicit Drug Use (in the last 12 months) ............................................................................................. 168

3-19. Health Risk Factors – Psychological Distress
3-19-1. Psychological Distress in South Australia ......................................................................................... 169
3-19-2. Psychological Distress – National Comparison .............................................................................. 170
3-19-3. Aboriginal Psychological Distress .................................................................................................. 171

3-20. Health Risk Factors – Suicidal Ideation
3-20-1. Suicidal Ideation in South Australia ............................................................................................... 172

3-21. Sexually Transmissible Diseases
3-21-1. 3-21-12. Incidence of Sexually Transmissible Diseases .................................................................... 173

3-22. Burden of Disease – Healthy Life Lost to Disability
3-22-1. Years of Healthy Life Lost to Disability in South Australia .................................................................. 174
3-22-2. & 3-22-3. Burden of Disease – Top 5 Disability Adjusted Life Years (DALYS) (ages 20-64 and 65+ years) .................................................................................................................................................. 175

3-23. Cancer
3-23-1. Prevalence of Cancer in South Australia ......................................................................................... 176
3-23-2. 3-23-4. 3-23-6. 3-23-8. & 3-23-10. Incidence of Cancer – National Comparisons (by type of cancer) ................................................................................................................................................. 177
3-23-3. 3-23-5. 3-23-7. 3-23-9. & 3-23-11. Aboriginal Incidence of Cancer (by type of cancer) ................. 178

Chapter 4. Living with Chronic Conditions

4-1. Living with Multiple Chronic Conditions in South Australia .................................................................. 179
4-1-1. Living with Multiple Chronic Conditions in South Australia ............................................................ 179
4-1-2. Living with Multiple Chronic Conditions – National Comparison .................................................. 180
4-1-3. Aboriginal People Living with Three or More Long Term Health Conditions ................................ 181

4-2. Arthritis
4-2-1. Arthritis in South Australia ................................................................................................................ 182
4-2-2. Arthritis – National Comparison ........................................................................................................ 183
4-2-3. Aboriginal Prevalence of Arthritis ..................................................................................................... 184

4-3. Mental Health Conditions
4-3-1. Mental Health Conditions in South Australia .................................................................................... 185
4-3-2. Mental Health – National Comparison ............................................................................................... 186
4-3-3. Aboriginal Prevalence of Mental Health Problems ........................................................................... 187
4-3-4. Projected Prevalence of Dementia for South Australia, 2011-2020 ................................................ 188

4-4. Asthma Prevalence
4-4-1. Asthma Prevalence in South Australia .............................................................................................. 189
4-4-2. Asthma Prevalence – National Comparison ......................................................................................... 190
4-4-3. Aboriginal Prevalence of Asthma ....................................................................................................... 191

4-5. Diabetes
4-5-1. Diabetes in South Australia ................................................................................................................ 192
4-5-2. Diabetes Prevalence – National Comparison ....................................................................................... 193
4-5-3. Aboriginal Prevalence of Diabetes/High Sugar Levels ...................................................................... 194
4-5-4. Lower Limb Amputation with Principal or Additional Diagnosis of Type 2 Diabetes ..................... 195

4-6. Cardiovascular Disease .......................................................................................................................... 196
## Chapter 5. End of Life

### 5-1. Death Rate
- 5-1-1. Death Rate in South Australia .................................................. 208
- 5-1-2. Aboriginal Death Rate ............................................................. 209

### 5-2. Median Age at Death
- 5-2-1. Median Age at Death in South Australia ............................... 212

### 5-3. Age-Specific Death Rate
- 5-3-1. Age-Specific Death Rate in South Australia ....................... 213

### 5-4. Perinatal Deaths
- 5-4-1. Perinatal Deaths ................................................................. 214
- 5-4-2. Aboriginal Perinatal Deaths ............................................... 215

### 5-5. Infant Mortality
- 5-5-1. Infant Mortality in South Australia ....................................... 216
- 5-5-2. Aboriginal Infant Mortality ............................................... 217

### 5-6. Child Mortality – Aboriginal vs. Non-Aboriginal

### 5-7. Leading Causes of Death
- 5-7-1. Leading Causes of Death by Age Group in South Australia .... 219

### 5-8. Deaths from Circulatory Diseases in South Australia
- 5-8-1 & 5-8-2 Deaths from Circulatory Diseases ......................... 220
- 5-8-3. Aboriginal Deaths from Circulatory Diseases of the Circulatory System 221

### 5-9. Deaths from Cancer in South Australia
- 5-9-1 & 5-9-2 Deaths from Cancer ............................................. 222
- 5-9-3. Aboriginal Deaths from Cancer ........................................ 223

### 5-10. Deaths from Lung Cancer in South Australia
- 5-10-1 & 5-10-2. Deaths from Lung Cancer .................................. 224
- 5-10-3. Aboriginal Deaths from Lung Cancer ............................... 225

### 5-11. Deaths from Prostate Cancer in South Australia .............. 226

### 5-12. Deaths from Female Breast Cancer in South Australia .... 227

### 5-13. Deaths from Colon Cancer in South Australia ............... 228
- 5-13-1 & 5-13-2. Deaths from Colon Cancer .................................. 228

### 5-14. Deaths from Cervical Cancer in South Australia ............. 229

### 5-15. Deaths from Respiratory Diseases in South Australia .... 230
- 5-15-3. Aboriginal Deaths from Respiratory Disease ................... 231

### 5-16. Aboriginal Deaths from External Causes ....................... 232

### 5-17. Top Causes of Premature Death (Years of Life Lost) in South Australia
- 5-17-1, 5-17-2 & 5-17-3. Top Causes of Premature Death (Years of Life Lost) 233

### 5-18. Potentially Avoidable (Preventable and Treatable) Deaths

### 5-19. Suicide Rate
- 5-19-1. Suicide Rate in South Australia ........................................ 236
- 5-19-2. Aboriginal Suicide Rate .................................................. 237
# Chapter 1. Demographic Profile of South Australia Technical Appendix

## 1-1. Resident Population

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Understanding the population size and distribution of South Australia enables a greater understanding of health needs and provision.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Life expectancy. Population change (natural change and migration).</td>
</tr>
</tbody>
</table>
| SA Target | Target 45: Increase South Australia’s population to 2 million by 2027.  
Target 46: Increase regional populations, outside of Greater Adelaide, by 20,000 to 320,000 or more by 2020. |

### Data Source

| Australian Bureau of Statistics, Census 2011, DataPacks, Basic Community Profile, Statistical Local Areas. Latest Issue Released at 11.30am (AEST) 21/06/2012.  
User name and password required.  

### Definition and Calculation

| Definition:  
Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence.  
Calculation:  
The count of residents in South Australia was obtained from the Census by asking respondents to record details for all adults, children, babies and any person who usually lives in the dwelling (who have not been counted elsewhere during the Census).  
The population figures were calculated by linking the ID code provided in the data pack download to a Statistical Division code and name (Obtained from the ABS). They were then summed accordingly to provide the total population for each Statistical Division and for South Australia as a whole.  
How data is presented:  
- The number and proportion of people residing in South Australia on Census night by Statistical Division (SD).  
Caveats | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally. |
| Reporting Schedule | Census is carried out every 5 years. However the ABS provides population estimates annually using the Census figures and births, deaths and migration data. |
### 1-2. Population Density

**Rationale**

Population density can have an effect on a number of environmental issues, such as noise pollution, overcrowding and emissions. Population density can also have an impact on deprivation, access to health care and the levels of crime and violence in an area (Gilthorpe & Wilson, 2003).


**Factors contributing to the outcome**

Population change (natural change and migration).

**SA Target**

n/a.

**Data Source**


**Definition and Calculation**

**Definition:**

Data relates to 2011.

Population density is defined and measured as the number of people per square kilometre in a particular area.

See following link for explanatory notes:


**Calculation:**

Data is expressed as the number of persons per km² and population density figures use the Australian Standard Geographical Classification, 2011 edition.

**Numerator** – Estimated resident population

**Denominator** – Area (kilometres)

**How data is presented:**

- The population density of South Australian compared to all States and Territories.
- The population density in South Australia by statistical local area (SLA).

**Caveats**

All resident population data is subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data.

**Reporting Schedule**

Data is released annually with a reference date of 30 June each year.
### 1-3. Population Change

#### 1-3-1. Population Change (2006-2011)

**Rationale**
Population change provides us with information about how the population has either grown or declined over a certain period of time. This can then be used to assess how the population characteristics have changed and in relation how health services may need to adapt.

<table>
<thead>
<tr>
<th>Factors contributing to the outcome</th>
<th>SA Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy. Population change (national change and migration).</td>
<td>Target 45: Increase South Australia's population to 2 million by 2027. Target 46: Increase regional populations, outside of Greater Adelaide, by 20,000 to 320,000 or more by 2020.</td>
</tr>
</tbody>
</table>

**Data Source**


**Definition and Calculation**
**Definition:**
Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence.

The count of residents in South Australia was obtained from the Census by asking respondents to record details for all adults, children, babies and any person who usually lives in the dwelling (who have not been counted elsewhere during the Census).

Refer to the following link for further Census information:

**Calculation:**
Data is expressed as a percentage (%) change.

Numerator – Resident population in each statistical division area as at Census 2006
Denominator – Resident population in each statistical division area as at Census 2011.

**How data is presented:**
- The population percentage change from between Census 2006 and Census 2011 in each statistical division area in South Australia.

**Caveats**
The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

**Reporting Schedule**
Census is carried out every 5 years. However the ABS provides population estimates annually using the Census figures and births, deaths and migration data.
### 1-3-2. Population Change (2006-2011): Age and Sex

<table>
<thead>
<tr>
<th><strong>Rationale</strong></th>
<th>Population change provides us with information about how the population has either grown or declined over a certain period of time. This can then be used to assess how the population characteristics have changed and in relation how health services may need to adapt.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors contributing to the outcome</strong></td>
<td>Life expectancy. Population change (national change and migration).</td>
</tr>
</tbody>
</table>
| **SA Target** | Target 45: Increase South Australia’s population to 2 million by 2027.  
Target 46: Increase regional populations, outside of Greater Adelaide, by 20,000 to 320,000 or more by 2020. |
| **Data Source** | Australian Bureau of Statistics, 2011 Census of Population and Housing, Census Community Profiles, Time Series Profile, South Australia. Latest Issue Released at 11:30am (AEST) 21/06/2012.  
[Accessed: 16/07/2012] |
| **Definition and Calculation** | **Definition:** Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence.  
The count of residents in South Australia was obtained from the Census by asking respondents to record details for all adults, children, babies and any person who usually lives in the dwelling (who have not been counted elsewhere during the Census).  
**Calculation:** Data is expressed as a percentage (%) change.  
Numerator – Resident population by five year age band as at Census 2006  
Denominator – Resident population by five year age band as at Census 2011.  
**How data is presented:**  
- The population percentage change from between Census 2006 and Census 2011 by five year age band. |
| **Caveats** | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally. |
| **Reporting Schedule** | Census is carried out every 5 years. However the ABS provides population estimates annually using the Census figures and births, deaths and migration data. |
### 1-4. Population Projections by Statistical Division

**Rationale**

Understanding population and demographic change is essential for future planning, especially in terms of health. An ageing society presents great challenges and will require changes on a number of levels. For example, health and welfare expenditure will increase, aged care costs will increase and the built environment and transport system will need to be accessible to older people *(Australian Institute of Health and Welfare, 2000)*.


**Factors contributing to the outcome**


**SA Target**

- **Target 45**: Increase South Australia’s population to 2 million by 2027.
- **Target 46**: Increase regional populations, outside of Greater Adelaide, by 20,000 to 320,000 or more by 2020.

**Data Source**


**Definition and Calculation**

**Definition:**

Data relates to 2006 and are based on a person’s usual place of residence at the time of the 2006 Census of Population and Housing. These are then projected forward year by year by applying assumptions about future trends in fertility, mortality and migration.


**Calculation:**

Data is expressed as a year on year percentage change (%).

- Numerator - Estimated population projection for 2021 (by specific age band and statistical division).
- Denominator – Population estimate for 2011 (by age specific age band and statistical division).

**How data is presented:**

- Population projections are presented for each of the seven statistical division areas for over years from 2011 – 2021.
- The projections are presented according to specific age bands: 0-19 years, 20-44 years, 45-64 years, 65-84 years and 85+ years.

**Caveats**

Population projections are not forecasts for the future. They are estimates of the future size, age structure and geographic distribution of population based on assumptions about future fertility, mortality and migration.

**Disclaimer:** While every reasonable effort has been made to ensure that this document is correct at the time of publication, the Minister for Urban Development and Planning, the State of South Australia, its agencies, instrumentalities, employees and contractors disclaim any and all liability to any person in respect to anything or the consequence of anything done or omitted to be done in reliance upon the whole or any part of this document.

**Reporting Schedule**

The projections are updated every 5 years following the release of final figures from the most recent Census of Population and Housing published by the Australian Bureau of Statistics.
## 1.5. Population Composition in South Australia

### 1.5.1. Population Composition in South Australia: Age and Sex

| Rationale | Understanding the population distribution of South Australia enables a greater understanding of health needs and provision. |
| Factors contributing to the outcome | Life expectancy. Population change (natural change and migration). |
| SA Target | n/a. |

| Definition and Calculation | Definition: Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence. The count of residents in South Australia was obtained from the Census by asking respondents to record details for all adults, children, babies and any person who usually lives in the dwelling (who have not been counted elsewhere during the Census). Refer to the following link for further Census information: http://www.abs.gov.au/websitedbs/censushome.nsf/home/2011information?opendocument&navpos=310 Calculation: Data is expressed as a percentage (%). Numerator - Number of South Australians according to 5 year age band (male and female separately). Denominator – Total number of South Australians (male and female separately) How data is presented: • A population pyramid which compares the percentage of the male and female populations by 5 year age band in South Australia compared to Australia as a whole. |
| Caveats | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally. |
| Reporting Schedule | Census is carried out every 5 years. However the ABS provides population estimates annually using the Census figures and births, deaths and migration data. |
### 1-5-2. Aboriginal Population Composition: Age and Sex

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Understanding the Aboriginal population distribution of South Australia enables a greater understanding of health needs and provision.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Life expectancy. Population change (national change and migration).</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

|                                                                         | [Accessed: 10/07/2012]                                                                                                           |

| Definition and Calculation                                               | Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence. |
|                                                                         | The count of Aboriginal residents in South Australia was obtained from the Census by asking respondents to record details for all adults, children, babies and any person who usually lives in the dwelling (who have not been counted elsewhere during the Census). Respondents were asked to identify if persons in the dwelling were of Aboriginal or Torres Strait Islander origin. |
|                                                                         | Calculation: Data is expressed as a percentage (%)                                                                                     |
|                                                                         | Numerator – Number of Aboriginal South Australians according to 5 year age bands (male and female separately).                     |
|                                                                         | Denominator – Total number of Aboriginal South Australians (male and female separately).                                             |
|                                                                         | How data is presented:                                                                                                               |
|                                                                         | • A population pyramid which compares the percentage of the male and female Aboriginal populations by 5 year age band in South Australia compared to Australia as a whole. |

| Caveats                                                                  | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally. |

| Reporting Schedule                                                       | Census is carried out every 5 years.                                                                                                  |
### 1-6. South Australia’s Culturally and Linguistically Diverse (CALD) Population

#### 1-6-1. Population Born Overseas

| Factors contributing to the outcome | Immigration law and policy. Economic opportunities. |
| SA Target | n/a |
| Definition and Calculation | **Definition:** Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence. Respondents were asked: ‘In which country was the person born?’ Answers include: ‘Australia, England, New Zealand, Italy, Vietnam, India, Scotland, Other – please specify’. **Calculation:** Data is expressed as a percentage (%) Numerator – Number of residents born overseas Denominator – Total number of residents. **How data is presented:** - The proportion of South Australians who were born overseas compared to all States and Territories and the national average. - The proportion of South Australians who were born overseas by age band and sex. |
| Caveats | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally. |
| Reporting Schedule | Census is carried out every 5 years. |
### 1-6-2. Born Predominantly in Non-English Speaking Countries

| **Rationale** | Australia is characterised with a culturally and linguistically diverse (CALD) population with many residents migrating from overseas (including non-English speaking countries) ([Department of Health and Ageing, 2006](http://health.gov.au/internet/publications/publishing.nsf/Content/mental-pubs-p-mono-loc~mental-pubs-p-mono-pop~mental-pubs-p-mono-pop-cul?OpenDocument&from-bnr=G)). With a diverse and changing population it is therefore necessary to understand the characteristics of South Australia’s CALD population, as this is essential for commissioning services which are accessible for all. |
| **Factors contributing to the outcome** | Immigration law and policy. Economic opportunities. |
| **SA Target** | n/a |


| **Definition and Calculation** | **Definition:** Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence. Respondents were asked: "In which country was the person born?" Non-English speaking countries include: Bosnia and Herzegovina, Cambodia, China (excl. SARs and Taiwan), Croatia, Egypt, Fiji, Former Yugoslav Republic of Macedonia (FYROM), Germany, Greece, Hong Kong (SAR of China), India, Indonesia, Iraq, Italy, Japan, Korea, Republic of (South), Lebanon, Malaysia, Malta, Netherlands, Philippines, Poland, Singapore, South Eastern Europe, Sri Lanka, Thailand, Turkey, Vietnam. **Calculation:** Data is expressed as a percentage (%). Numerator – Number of residents born in a predominately non-English speaking country Denominator – Total number of residents. **How data is presented:** The proportion of South Australians who were born in predominately non-English speaking countries compared to all States and Territories and the national average. |

| **Caveats** | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally. |

| **Reporting Schedule** | Census is carried out every 5 years. |
### 1-6-3. Main Language Spoken at Home

| Rationale | Australia is characterised with a culturally and linguistically diverse (CALD) population with many residents migrating from overseas (including non-English speaking countries) (Department of Health and Ageing, 2006). With a diverse and changing population it is therefore necessary to understand the characteristics of South Australia’s CALD population, as this is essential for commissioning services which are accessible for all.  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Immigration law and policy. Economic opportunities.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition and Calculation</td>
<td>Definition: Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence. Respondents were asked: ‘Does the persons speak a language other than English at home?’ Answers include: Italian, Greek, Cantonese, Arabic, Mandarin, Vietnamese, Other – please specify. Calculation: Data is expressed as a percentage (%) Numerator – Number of residents speaking a language other than English at home Denominator – Total number of residents. How data is presented: Table outlining the top 10 languages other than English spoken at home in South Australia (number and percentage).</td>
</tr>
<tr>
<td>Caveats</td>
<td>The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>Census is carried out every 5 years.</td>
</tr>
</tbody>
</table>
### 1-6-4. Proficiency in Spoken English

**Rationale**

Australia is characterised with a culturally and linguistically diverse (CALD) population with many residents migrating from overseas (including non-English speaking countries) ([Department of Health and Ageing, 2006](http://health.gov.au/internet/publications/publishing.nsf/Content/mental-pubs-p-mono-too—mental-pubs-p-mono-pop-mental-pubs-p-mono-pop-cul [Accessed: 19/07/2012]). With a diverse and changing population it is therefore necessary to understand the characteristics of South Australia’s CALD population, as this is essential for commissioning services which are accessible for all.


**Factors contributing to the outcome**

- Immigration law and policy
- Economic opportunities

**SA Target**

n/a

---

**Data Source**

Australian Bureau of Statistics, 2011 Census of Population and Housing, Expanded Community Profile, X02: Country of Birth (Major Group) of Person by Age by Sex. Latest Issue Released at 11.30am (AEST) 21/06/2012.


**Definition and Calculation**

**Definition:**
Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence.

Respondents were asked: ‘How well does the person speak English?’

Answers include: Very well, Well, Not well, and Not at all.

**Calculation:**

Data is expressed as a percentage (%)

- **Numerator** – Number of residents who speak English not well or not at all.
- **Denominator** – Total number of residents.

**How data is presented:**

- The proportion of South Australians who could not speak English well or at all compared to all States and Territories and the national average.
- The proportion of South Australians born overseas who could not speak English well or at all by age band.

**Caveats**

The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

**Reporting Schedule**

Census is carried out every 5 years.
### 1-7. Migration and Refugees

#### 1-7-1. Migration

**Rationale**

Migration statistics can help to explain population change as internal and external movements have an impact on the level and composition of the population in local areas (*Australian Bureau of Statistics, 2012*). These population changes are essential for decisions around policy development, resource allocation and service delivery.


**Factors contributing to the outcome**


**SA Target**

n/a.

**Data Source**


**Definition and Calculation**

**Definition:**

Data refers to migration during 2011 and at the time of writing were preliminary from the 2011 Census.

Migration is the physical movement of people from one area to another. Migration can be overseas or interstate.

**Net interstate migration** – The difference between the number of persons who have changed their place of usual residence by moving into a given State or Territory and the number who have changed their place of usual residence by moving out of that State or Territory during a specified time period. This difference can be either positive or negative.

**Net overseas migration (NOM)** – is the net gain or loss of population through immigration to Australia and emigration from Australia. It is:

- Based on an international travellers duration of stay being in or out of Australia for 12 months or more;
- The difference between: the number of incoming travellers who stay in Australia for 12 months or more, who are not currently counted within the population, and are then added to the population (NOM arrivals); and the number of outgoing international travellers (Australian residents and long-term visitors to Australia) who leave Australia for 12 months or more, who are currently counted within the population, and are then subtracted from the population (NOM departures).

**Natural increase** – Excess of births over deaths.


**Calculation:**

Data is expressed as a proportion of total population growth.

**How data is presented:**

- The net interstate, net overseas and national increase in South Australia compared to all States and Territories.

**Caveats**

Overseas arrivals and departure statistics relate to the number of movements of travellers rather than the number of travellers (i.e. multiple movements of individual persons during a given reference period are each counted separately).

Statistics exclude unauthorised arrivals.

Due to incomplete coverage and the non-compulsory nature of available administrative (indirect) data sources, post-censal quarterly estimates of interstate migration have long been considered the weakest measure of a component of population change.

**Reporting Schedule**

Quarterly through the Australian Bureau of Statistics, next release (March 2012) is expected on 27/09/2012.
### 1-7-2. Age Profile of Migrants

| Rationale |
|------------------|----------------------------------|
| Migration statistics can help to explain population change. Establishing the age distribution of South Australia’s overseas migrant population is useful for health service planning and delivery. |

<table>
<thead>
<tr>
<th>Factors contributing to the outcome</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SA Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a.</td>
</tr>
</tbody>
</table>

#### Data Source

#### Definition and Calculation

**Definition:**
Data relates to 2006.

South Australian overseas migrants are defined as “any person who changes his or her country of usual residence” (United Nations, 1998).

For the purposes of estimated overseas migrations, a person is regarded as a usual resident if they have been (or expected to be) residing in Australia for a period of 12 months or more. As such estimates include all people, regardless of nationality, citizenship or legal status, who usually live in Australia, with the exception of foreign diplomatic personnel and their families.


**Calculation:**
Data is expressed as a percentage (%).

Numerator – Number of overseas migrants by five year age band.

Denominator – Total number of overseas migrants.

**How data is presented:**
- The proportion of overseas migrants in South Australia in 2006 by five year age band compared to Australia as a whole.

#### Caveats
All migration data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data. The ABS does not have control over any non-sampling error associated with data from DIAC, Medicare Australia and the Department of Defence.

In recognition of the inherent inaccuracy involved in estimating migration, the published ABS figures are rounded.

#### Reporting Schedule
Unknown.
## 1-7-3. Refugees

### Rationale

Refugees are a population group with some significant health disadvantages and it is important to monitor the refugee population in South Australia so that the needs of this population group can be met (Department of Immigration and Citizenship, 2012).


### Factors contributing to the outcome

UNHCR assessments of the resettlement needs of refugees overseas. The views of individuals and organisations in Australia conveyed during community consultations with the Minister for Immigration and Citizenship. Australia’s capacity to assist.

### SA Target

n/a.

### Data Source


### Definition and Calculation

**Definition:**

Data relates to 2006-07 and 2010-11.

The UN definition (from over 50 years ago) states that ‘refugees are people who flee their country because of a well-founded fear of persecution for reasons of race, religion, nationality, political opinion or membership of a particular social group’ (Dr Smith, 2009).


**Humanitarian Program** – provides protection to refugees and resettlement to those for whom it may be the appropriate durable solution. The offshore component of the program resettles refugees and others who are in great humanitarian need.

**Calculation:**

Data is expressed as the total number of persons (‘000’s)

**How data is presented:**

- The total number of offshore Humanitarian permanent additions in South Australia split by category (Special Humanitarian Program and Refugees) between 2006-07 and 2010-11.

**Caveats**

There are a limited number of SHP visas available. Demand for these visas is extremely high. This means that applications may take several years to be decided and most will be unsuccessful.

**Reporting Schedule**

Annually.
1-8. Carers

1-8-1. Carers

Rationale
People providing unpaid care are at an increased risk of being socially isolated due to their responsibilities and can experience a low sense of wellbeing and poor health (OECD, 2011).


Factors contributing to the outcome
Support network. Age. Access to services.

SA Target
n/a.

Data Source
Australian Bureau of Statistics, Caring in the Community, Australia 2009. Cat. No. 4436.0. Released at 11.30am (AEST) 20/01/2012.

Definition and Calculation
Definition:
Data relates to 2009 and was obtained through the 2009 Survey of Disability, Ageing and Carers (SDAC) conducted throughout Australia from April to December 2009.

A carer was defined as a person of any age who provides any informal assistance, in terms of help or supervision, to persons with disabilities or long-term conditions or persons who are elderly (i.e. aged 60 years or over). This assistance has to be ongoing, or likely to be ongoing, for at least six months. Assistance to a person in a different household relates to 'everyday types of activities', without specific information on the activities. Where the care recipient lives in the same household, the assistance is for one or more of the following activities:

- cognition/emotion
- communication
- health care
- household chores
- meal preparation
- mobility
- property maintenance
- reading or writing
- self-care
- transport.

Refer to the following link for further explanatory notes:

Calculation:
Data is expressed as a percentage (%).

Numerator – Number of respondents who were classified as a carer.
Denominator – Total number of respondents.

How data is presented:
- The proportion of South Australians who were carers compared to all States and Territories and the national average.

Caveats
Disability is a difficult concept to measure because it depends on a respondent's perception of their ability to perform a range of activities associated with daily living.
Sample surveys are subject to both sampling and non-sampling error.

Reporting Schedule
Unknown.
### 1-8-2. to 1-8-4. Young Carers (including Aboriginal and CALD Young Carers)

<table>
<thead>
<tr>
<th><strong>Rationale</strong></th>
<th>For young people, caring for family members can have an impact on education, relationships and employment (Carers Australia, 2012).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors contributing to the outcome</strong></td>
<td>Family composition. Income/finance. Access/barriers to services</td>
</tr>
<tr>
<td><strong>SA Target</strong></td>
<td>n/a.</td>
</tr>
</tbody>
</table>
| **Definition and Calculation** | **Definition:**  
Data relates to the 2006 Census.  
Young carers were identified as young people aged between 15 and 19 years who responded positively to the question about the provision of unpaid care, help or assistance on the Census form: ‘In the last two weeks did the person spend time providing unpaid care, help or assistance to family members or others because of a disability, a long-term illness or problems relating to old age?’.  
**Calculation:**  
Data is expressed as a percentage (%).  
Numerator – Number of 15-19 year olds providing unpaid care, help or assistance.  
Denominator – Total number of 15-19 year olds.  
**How data is presented:**  
- The proportion of young South Australians (15-19 years) who were carers (male and female separately).  
- The proportion of young Aboriginal South Australians (15-19 years) who were carers (male and female separately).  
- The proportion of young CALD South Australians (15-19 years) who were carers (male and female separately).  
**Caveats** | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.  
**Reporting Schedule** | Census is carried out every 5 years. Unknown reporting schedule for SPRC report.  

---

**Rationale**

For young people, caring for family members can have an impact on education, relationships and employment (Carers Australia, 2012).

**Factors contributing to the outcome**

Family composition. Income/finance. Access/barriers to services

**SA Target**

n/a.

**Data Source**


**Definition and Calculation**

**Definition:**
Data relates to the 2006 Census. Young carers were identified as young people aged between 15 and 19 years who responded positively to the question about the provision of unpaid care, help or assistance on the Census form: ‘In the last two weeks did the person spend time providing unpaid care, help or assistance to family members or others because of a disability, a long-term illness or problems relating to old age?’.

**Calculation:**
Data is expressed as a percentage (%). Numerator – Number of 15-19 year olds providing unpaid care, help or assistance. Denominator – Total number of 15-19 year olds.

**How data is presented:**
- The proportion of young South Australians (15-19 years) who were carers (male and female separately).
- The proportion of young Aboriginal South Australians (15-19 years) who were carers (male and female separately).
- The proportion of young CALD South Australians (15-19 years) who were carers (male and female separately).

**Caveats**

The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

**Reporting Schedule**

Census is carried out every 5 years. Unknown reporting schedule for SPRC report.
### 1.9. Relative Socio-Economic Disadvantage

**Rationale**

This indicator can help to determine how many of South Australia’s residents are living in areas which are classified as the most disadvantaged and least disadvantaged areas nationally.

It is widely recognised that levels of disadvantage and advantage can have an impact on the health outcomes of the population (*Australian Bureau of Statistics, 2010*).


**Factors contributing to the outcome**

Income. Education. Employment. Occupation. Housing

**SA Target**

n/a.

**Data Source**


**Definition and Calculation**

**Definition:**

Data relates to 2010.

The Socio-economic Indexes for Areas (SEIFA) ranks geographic areas across Australia in terms of their socio-economic characteristics.

The quintiles are ranked according to Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socioeconomic Disadvantage (IRSD) area scores at the national level, where the 20 per cent of the population living in Statistical Local Areas (SLA) with the lowest scores (relatively most disadvantaged) are given a quintile number of 1, and the 20 per cent of the population living in areas with the highest scores (relatively least disadvantaged) are given a quintile number of 5.

**Calculation:**

Data is expressed as a percentage (%).

Numerator – Population in each quintile
Denominator – Total population.

**How data is presented:**

- The number and percentage of South Australians residents according to quintile of relative disadvantage.

**Caveats**

The indexes do not capture every aspect of socio-economic disadvantage.

SEIFA is a summary of people in an area and does not apply to an individual person or dwelling. Each area has a diverse range of different people and dwellings. The SEIFA indexes represent the general level of socio-economic disadvantage of all the people in the area in which a person lives, not the person themselves.

Data excludes people who could not be assigned to a SEIFA quintile because they had no usual residence, or they lived in an SLA that could not be assigned to a quintile.

**Reporting Schedule**

2011 data will be available on 23 March 2013 from the Australian Bureau of Statistics.
### 1-10. Education

#### 1-10-1. and 1-10-2. Highest Year of School Completed: Year 12 or Equivalent

<table>
<thead>
<tr>
<th><strong>Rationale</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational attainment and health status are recognised to be linked. For example, education can influence a person’s health through income, access to health care, and participation in the labour market. Furthermore, educational attainment can be associated with developing cognitive skills, choices, and participation in social networks (Australian Bureau of Statistics, 2011).</td>
</tr>
</tbody>
</table>

**Australian Bureau of Statistics (2011) Education and Health: Links Between Education and Health. Cat.No. 4704.0, Released at 11.30am (AEST) 17/02/2011.**

<table>
<thead>
<tr>
<th><strong>Factors contributing to the outcome</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic Status. Aboriginal status. Literacy.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SA Target</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Data Source</strong></th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th><strong>Definition and Calculation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong></td>
</tr>
<tr>
<td>Data relates to 2011 and was obtained from the 2011 Census of Population and Housing. Data are based on a person’s usual place of residence. Includes persons aged 15+.</td>
</tr>
</tbody>
</table>

Respondents were asked: “What is the highest year of primary or secondary school the person has completed?”

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of persons aged 15 years or more no longer attending primary or secondary school who completed Year 12 or equivalent as their highest year of school.

Denominator – Total number of persons aged 15 years or more no longer attending primary or secondary school.

**How data is presented:**

- The proportion of South Australians aged 15 years or more no longer attending primary or secondary school who completed Year 12 or equivalent as their highest year of school.

- The proportion of Aboriginal South Australians aged 15 years or more no longer attending primary or secondary school who completed Year 12 or equivalent as their highest year of school.

<table>
<thead>
<tr>
<th><strong>Caveats</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Reporting Schedule</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Census is carried out every 5 years.</td>
</tr>
</tbody>
</table>
## 1-10-3. Participation in Vocational Education and Training (VET)

**Rationale**
Vocational education and training enable people to develop competency in skills relevant to the workplace or non-vocational. Positive associations between health and wellbeing and vocational education and training has been found in research carried out by the Stanwick, Ong & Karmel (2006).  
[Accessed: 19/07/2012]

**Factors contributing to the outcome**
Age. Socioeconomic status.

**SA Target**
n/a.

### Data Source
National Centre for Vocational Education Research (2007-11). Australian vocational education and training statistics: Students and courses 2011, South Australia, Table 2: VET participation rate (%) of persons aged 15 years and older.
[Accessed: 19/07/2012]

### Definition and Calculation
**Definition:**
Data refers to persons aged 15 – 64 years.
Vocational education and training (VET) is education and training for work and part of a broader educational network in Australia that includes schools, universities and adult and community education.

**Calculation:**
Data is expressed as a percentage (%).
Numerator – Number of students participating in VET.
Denominator – Estimated resident population (based on ABS population figures, Cat. No. 3201.0).

**How data is presented:**
- The proportion of 16-64 year olds in South Australia participating in vocational education and training in 2011 compared to all States and Territories and the national average.
- The 2007 – 2011 participation trend in vocational education and training in South Australia compared to the national average.

### Caveats
Unknown (none reported).

### Reporting Schedule
Annually.
### 1-10-4. Aboriginal Participation in Vocational Education and Training (VET)

**Rationale**

Educational attainment is recognised as being correlated with a range of indicators of social wellbeing, and as such education has been a major focus in the strategy to ‘close the gap’ between the Australian Aboriginal and Torres Strait Islander and non-Indigenous population (Australian Bureau of Statistics, 2011).


**Factors contributing to the outcome**

- Age.
- Socioeconomic status.

**SA Target**

n/a.

**Data Source**


**Definition and Calculation**

**Definition:**

This data relates to the 2006 Census and are based on a person’s ‘usual place of residence’.

Includes Aboriginal persons aged 16+.

Vocational education and training (VET) is education and training for work and part of a broader educational network in Australia that includes schools, universities and adult and community education.

**Calculation:**

Data is expressed as a percentage (%).

Numerator – Number of Aboriginal students participating in VET.

Denominator – Total Aboriginal population.

**How data is presented:**

- The proportion of Aboriginal South Australians (age 16+) who participated in vocational education and training compared to all States and Territories and the national average.

**Caveats**

Unknown (none reported).

**Reporting Schedule**

Annually.
### 1-10-5. Educational Attainment: People with Degrees (aged 25 – 64)

**Rationale**

Education is able to influence a person’s health through a number of mechanisms such as income, employment, access to health care and cognitive skills. Education levels have a strong link with determinants of health such as health behaviours and service use (Australian Bureau of Statistics, 2010).


**Factors contributing to the outcome**

Socioeconomic Status.

**SA Target**

n/a.

**Data Source**

Australian Bureau of Statistics, Australian Social Trends, Data Cube – Education and training – National and state summary tables, Cat No. 4102.0, Table 2.4 Education and training, SA Summary, 1997 – 2011. Released at 11.30am (AEST) 26/06/2012.


**Definition and Calculation**

**Definition:**

Data relates to 2011 and includes persons aged 25-64.

Data was obtained from the ABS 2011 Survey of Education and Work which was conducted throughout Australia in May 2011 as a supplement to the monthly Labour Force Survey (LFS).


**Calculation:**

Data is expressed as a percentage (%).

- **Numerator** – Total number of persons aged 25-64 year olds with a Bachelor degree or above
- **Denominator** – Total number of persons aged 25-64 year olds.

**How data is presented:**

- The proportion of 25-64 year olds with a Bachelor degree or above in South Australia compared to all States and Territories and the national average.
- The 2007 – 2011 trend of the proportion of people in South Australia with a Bachelor degree of above compared to the national trend.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Next release is expected on 19 September 2012.
### 1-10-6. Health Literacy

**Rationale**
Health literacy is about empowering people to be able to make informed decisions about their own health, raise personal awareness and act upon medical advice. Health literacy can have a direct effect on a person’s ability to act on health information and to take more control of their health (WHO, 2009).


**Factors contributing to the outcome**
- Education
- Socioeconomic Status
- English Proficiency

**SA Target**
- n/a.

**Data Source**


**Definition and Calculation**

**Definition:**
This data was collected through the Adult Literacy and Life Skills Survey (ALLS). The survey contained 191 daily tasks that were judged to measure health related activities in five domains: health promotion (60 items), health protection (65 items), disease prevention (18 items), health-care and disease management (16 items), and navigation (32 items).

Information includes knowledge and skills of 15 – 74 year olds only.

Health literacy in the ALLS is defined as: the knowledge and skills required to understand and use information relating to health issues such as drugs and alcohol, disease prevention and treatment, safety and accident prevention, first aid, emergencies, and staying healthy.

Level 1 is the lowest measured level of literacy and 5 the highest. Skill level 3 is regarded as the ‘minimum required for individuals to meet the complex demands of everyday life and work in the emerging knowledge-based economy’.


**Calculation:**
Data is expressed as a percentage (%).

Numerator – Number of people (aged 15-74) scoring below skill level 3 in ALLS Survey.
Denominator – Total number of people (aged 15-74).

**How data is presented:**
- The proportion of people scoring below level 3 for health literacy for South Australia compared to all States and Territories and the national average.

**Caveats**
Sample surveys are subject to both sampling and non-sampling error.


**Reporting Schedule**
Unknown.
1-11. Income

1-11-1. Disposable Income

Rationale

Individuals with a higher income generally benefit from better access to health care, nutrition and often live longer. Inextricably linked to income are other social outcomes such as education and literacy (South Australian Council of Social Service, 2008).


Factors contributing to the outcome

Socioeconomic Status. Occupation. Age. Education.

SA Target

n/a.

Data Source

Household Income and Income Distribution, Australia- Detailed tables, 2009-10 Cat. No. 6523.0. Table 1.1D Equivalised Disposable Household Income, SA, 1994-95 to 2009-10. Released at 11.30am (AEST) 30 August 2011.


Definition and Calculation

Definition: Data relates to 2009-10 and is collected through the Household Expenditure Survey and Survey of Income and Housing.

Income: Household income consists of all current receipts, whether monetary or in kind, that are received by the household or by individual members of the household, and which are available for, or intended to support, current consumption. Income includes receipts from:

- Wages and salaries and other receipts from employment (whether from an employer or own incorporated enterprise), including income provided as part of salary sacrifice and/or salary package arrangements.
- Profit/loss from own unincorporated business (including partnerships)
- Net investment income (interest, rent, dividends, royalties)
- Government pensions and allowances
- Private transfers (e.g. superannuation, workers’ compensation, income from annuities, child support, and financial support received from family members not living in the same household).

Disposable Income: Disposable income better represents the economic resources available to meet the needs of households. It is derived by deducting estimates of personal income tax and the Medicare levy from gross income. Income tax is estimated for all households using taxation criteria for 2009-10 and the income and other characteristics of household members reported in the survey.

Prior to 2005-06 the derivation of disposable income also included the addition of family tax benefit paid through the tax system or as a lump sum by Centrelink since for practical reasons it was not included in the gross income estimates.

Equivalised Disposable Income: Equivalised disposable household income is calculated by adjusting disposable income by the application of an equivalence scale. This adjustment reflects the requirement for a larger household to have a higher level of income to achieve the same standard of living as a smaller household. Where disposable income is negative, it is set to zero equivalised disposable income.

Calculation: Data is expressed as an average (mean).

Numerator – Total equivalised disposable household income ($ per week)
Denominator – Total number of households

How data is presented:

- The average equivalised disposable income in South Australia compared to all States and Territories and the national average.
- The 2003-04 to 2009-10 trend of average equivalised disposable income in South Australia compared to the national trend.
- The average equivalised disposable income in South Australia by income quintile.

Caveats

Sample surveys are subject to both sampling and non-sampling error.

Reporting Schedule

Every two years.
### 1-11-2. Children in Welfare Dependent and Other Low Income Families

| Rationale | Children and young people living in families with low income are at a greater risk of poor health and educational outcomes in the short and long term. Low income households are less likely to have sufficient economic resources to support a minimum standard of living and this can affect children through lack of heating, nutrition, medical care and technology (Australian Institute of Health and Welfare (2009)). Australian Institute of Health and Welfare 2009, A picture of Australia’s children 2009, Cat.no.PHE 112, Australian Institute of Health and Welfare. |
| Factors contributing to the outcome | Socioeconomic Status. Employment. Education. |
| SA Target | n/a. |


| Definition and Calculation | Definition: The level of income used to define ‘low income families’ in 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, in the June quarter 2009. For 2009, families included are those with children 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. Calculation: Data is expressed as a percentage (%) Numerator – Number of children (under 16 years) in low income families receiving welfare payments from Centrelink: income under $28,871 p.a and in receipt of the Family Tax Benefit. Denominator – Total number of children (under 16 years of age). How data is presented: • The proportion of children (under 16 years) in South Australia living in welfare-dependent and other low income families compared to all States and Territories and the national average. • The number and proportion of children (under 16 years) in South Australia living in welfare-dependent and other low income families by SLA of residence. |

| Caveats | Centrelink data were provided at the postcode level, with cells with less than 20 counts removed (confidentialised). A postcode to Statistical Local Area (SLA) concordance was used to convert the data to SLAs; this process splits or combines the data across one or more SLAs, therefore, for some SLAs, there may be undercounting of the ‘actual’ Centreline allocation, as the postcodes/ proportions of postcodes with confidentialised cells will return a zero count. |

| Reporting Schedule | Unknown. |
### 1-12. Economy and Employment

#### 1-12-1. Unemployment Rate

**Rationale**

The *World Health Organisation (2003)* identifies a number of ways in which employment benefits mental health. These include the provision of structured time, social contact and satisfaction arising from involvement in a collective effort. Consequently, the loss of a job or the threat of losing a job can be detrimental to health. Also, the type of job a person has and the working conditions they are exposed to can also affect health.

Unemployment can put health at risk, the effects of which are liked to both psychological and financial consequences (*World Health Organisation, 2003*).

**Factors contributing to the outcome**

- Socioeconomic Status
- Education
- Disability or Limiting Condition

**SA Target**

Target 49: Maintain equal or lower than the Australian average through to 2020.

**Data Source**

Australia Bureau of Statistics, Labour Force, Australia, Detailed-Electronic Delivery. Table 01, and Tables 04-11. Labour force status by Sex – State – Trend, Seasonally adjusted and Original. Cat. No. 6202.0. Released at 11.30am (AEST) 06/09/2012. Series used was Unemployment rate; persons; percent; trend, from June 2007 to June 2012.


**Definition and Calculation**

**Definition:**

Data is obtained from the Labour Force Survey which is a component of the Monthly Population Survey.

The Labour Force Survey is based on a multi-stage area sample of private dwellings (currently approximately 29,000 houses, flats, etc.) and a list sample of non-private dwellings (hotels, motels, etc.), and covers approximately 0.33% of the civilian population of Australia aged 15 years and over.

Data are seasonally adjusted as a means of removing the effects of normal seasonal variation from the series so other influences on the series can be more clearly recognised. The smoothing of seasonally adjusted series to produce ‘trend’ series reduces the impact of the irregular component of the seasonally adjusted series.

Refer to the following link for further explanatory notes:


**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of respondents who were unemployed

Denominator – Total number of respondents.

**How data is presented:**

- The monthly trend (June 2007 – June 2012) of unemployment in South Australia compared to nationally. The series used is seasonally adjusted, trend.
- The proportion of South Australians who were unemployed in June 2012 compared to all states and territories and the national average.
### 1-12-1. (cont’d) Unemployment Rate

<table>
<thead>
<tr>
<th>Caveats</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Labour Force Survey is based on a sample of private dwellings (approximately 29,000 houses, flats etc.) and non-private dwellings, such as hotels and motels. The sample covers about 0.33% of the Australian civilian population aged 15 years or over. The Labour Force Survey is designed primarily to provide estimates of key labour force statistics for the whole of Australia and, secondarily, for each State and Territory.</td>
<td></td>
</tr>
<tr>
<td>Sample surveys are subject to both sampling and non-sampling error.</td>
<td></td>
</tr>
</tbody>
</table>

| Reporting Schedule | Monthly. |
## 1-12-2. Unemployment and Socioeconomic Disadvantage

**Rationale**

Unemployment can put health at risk, the effects of which are linked to both psychological and financial consequences (*World Health Organisation, 2003*).


**Factors contributing to the outcome**

Socioeconomic Status. Education. Disability or Limiting Condition.

**SA Target**

Target 49: Maintain equal or lower than the Australian average through to 2020.

### Data Source


### Definition and Calculation

**Definition:**

Data relates to 2008 and are estimates from the Small Area Labour Markets based on the Structure Preserving Estimation (SPRE) methodology which enables the generation of small area unemployment.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of respondents who were unemployed by quintile of disadvantage

Denominator – Total number of people by quintile of disadvantage

**How data is presented:**

- The proportion of South Australians who were unemployed in 2008 by quintile of socioeconomic status.

**Caveats**

Data are estimates.

**Reporting Schedule**

Unknown.
### 1.12.3. Job Seeker Allowances

**Rationale**
Out of work benefit claimants (Newstart and Youth Allowance) provide an indication on the number of people who are unemployed. This indicator in particular gives an indication on young people who are claiming out of work benefits.

**Factors contributing to the outcome**
- Socioeconomic Status
- Education
- Economy
- Disability or limiting condition

**SA Target**
n/a.

**Data Source**
Department of Education, Employment and Workplace Relations (DEEWR), Labour Market and Related Payments: a monthly profile, June 2012.
[Accessed: 17/09/2012]

**Definition and Calculation**

**Definition:**
Data relates to June 2012.

- **Newstart Allowance**: is a form of financial support provided to people who are seeking work as a means of assisting participation in activities which may increase a person’s chance of finding a job. Newstart Allowance is payable to eligible unemployed persons aged 21 years and over (but below Age Pension age) who satisfy the activity test.

- **Youth Allowance**: is a means tested payment for full-time students and Australian Apprentices aged 16-25.

Long-term allowees are those who have received income support for 12 months or more.

**Calculation:**
Data is expressed as a percentage (%)

- **Numerator**: Number of people receiving Newstart or Youth allowance
- **Denominator**: Total number of people receiving job seeker allowance.

**How data is presented:**
- The number and proportion of South Australians receiving Newstart and Youth allowance in 2012.

**Caveats**
The DEEWR labour market payment numbers data are not seasonally adjusted.

**Reporting Schedule**
Unknown.
### 1-12.4. Jobless Families with Children Under 15 Years

**Rationale**

Children and families with no employed parents are at a higher risk of experiencing substantial economic disadvantage compared to those with parents in employment. They are at risk of financial hardship, reduced social opportunities and overall health and wellbeing can be adversely affected (Australian Bureau of Statistics, 2009).


**Factors contributing to the outcome**

- Socioeconomic Status
- Education
- Economy
- Single Parent Families

**SA Target**

n/a.

**Data Source 1**

- [Accessed: 15/05/2012]

**Definition and Calculation**

- **Definition:** Data relates to 2006 and was collected through the 2006 Census of Population and Housing. Data is unpublished.
- A jobless family refers to a family with at least one child aged less than 15 years in which no resident parent is employed. This includes parents who are unemployed or not in the labour force.
- **Calculation:** Data is expressed as a percentage (%)
- Numerator – Number of jobless families with children under 15 years of age
- Denominator – Total number of families with children under 15 years of age

**How data is presented:**

- The proportion of jobless families with children under 15 in South Australia compared to all States and Territories and the national average.

**Caveats**

- The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

**Reporting Schedule**

- Census is carried out every 5 years.
### 1-12-4. (cont’d) Jobless Families with Children Under 15 Years

| Data Source 2 | OECD (2011), OECD Family Database, OECD, Paris  
|              | Available from: [http://www.oecd.org/els/socialpoliciesanddata/oecdfamilydatabase.htm](http://www.oecd.org/els/socialpoliciesanddata/oecdfamilydatabase.htm)  
|              | [Accessed: 31/08/2012] |
| Definition and Calculation | Definition:  
|                           | Data relates to 2008 and children under 15 years of age.  
|                           | A jobless family refers to a family with at least one child aged less than 15 years in which no resident parent is employed. This includes parents who are unemployed or not in the labour force.  
|                           | Calculation:  
|                           | Data is expressed as a percentage (%)  
|                           | Numerator – Number of children under 15 years living in jobless  
|                           | Denominator – Total number of children under 15 years living in jobless families  
|                           | How data is presented:  
|                           | • The 2008 OECD average of the proportion of children living in jobless families.  
| Caveats | Data for Denmark, Sweden and the United States refers to children aged 0 to 17.  
| Reporting Schedule | Unknown. |
### 1-12-5. Financial Stress

**Rationale**

Financial pressures have significant impacts, ranging in severity from tension in the household through to more severe social issues, where financial stress can contribute to substance abuse, gambling and domestic violence (Wesley Mission Research, 2006).


**Factors contributing to the outcome**


**SA Target**

n/a.

---

**Data Source**


**Definition and Calculation**

**Definition:**

Data relates to 2009-10 and is obtained through the Household Expenditure Survey. One person in each household was asked to provide assessments of the current household’s circumstances. This person was randomly chosen from the reference person and spouse.

Financial stress was measured as the proportion of households who had experienced four or more indicators of financial stress in the last 12 months. Financial stress indicators included:

- Unable to raise $2000 in a week for something important
- Spent more money than received
- Could not pay electricity, gas, or telephone bills on time
- Could not pay car registration or insurance on time
-Pawned or sold something
- Went without meals
- Unable to heat home
- Sought assistance from welfare/community organisations
- Sought financial help from friends or family
- Could not afford a holiday for at least one week a year
- Could not afford a night out once a fortnight
- Could not afford friends of family over for a meal once a month
- Could not afford a special meal once a week
- Could only afford second hand clothes most of the time
- Could not afford leisure or hobby activities.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of households that had four or more indicators of financial stress in the last 12 months.

Denominator – Total number of households.

**How data is presented:**

The proportion of households in South Australia experiencing financial stress during 2009-10 compared to all States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

It should be noted that the choice households make between some of the indicators are likely to be affected by the composition of the household. For example, households with children are probably less likely to choose to go without meals when short of money than are single person households.

**Reporting Schedule**

Unknown.
## 1-12-6. Aboriginal Financial Stress

**Rationale**
Indicators of financial stress can help provide insight into the economic well-being of Aboriginal Australians (Australian Bureau of Statistics, 2009).


**Factors contributing to the outcome**

**SA Target**
n/a.

**Data Source**

Available from:  
[Accessed: 15/05/2012]

**Definition and Calculation**

**Definition:**
Data relates to 2008 and was obtained from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS, which was conducted throughout Australia, including remote areas, from August 2008 to August 2009.

Financial Stress was defined as whether households could raise $2,000 within a week for an emergency or whether household members ran out of money for basic living expenses during the last 12 months.

For further explanatory notes on NATSISS are available through the following link:  

**Calculation:**
Data is expressed as a percentage (%)

**Numerator** – Number of Aboriginal persons aged 15+ living in households unable to raise $2000 or ran out of money for basic living expenses.

**Denominator** – Total number of Aboriginal persons aged 15+.

**How data is presented:**
- The proportion of Aboriginal persons aged 15+ in South Australia living in households that experienced financial stress compared to all States and Territories.

**Caveats**
Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**
Unknown.
### 1-12-7. Occupation

#### Rationale
Occupations can influence health status in a number of ways, firstly it can determine the amounts of economic resources are available to individuals, and secondly the nature of work carried out can influence a person’s health and wellbeing (Australian Bureau of Statistics, 2011).


#### Factors contributing to the outcome
- Education.
- Labour Market.
- Economy.
- Socioeconomic Status.
- Indigenous Status.
- Age/Sex

#### SA Target
- n/a.

#### Data Source


[Accessed: 22/08/2012]

#### Definition and Calculation
**Definition:**
Occupation was collected in the 2006 Census for all employed people aged 15 years and over. Two questions are used in the Census:

1. In the main job held last week, what was the person’s occupation – Give full title
2. What are the main tasks that the person usually performs in the occupation

Collecting both the occupation title and the tasks involved ensures a more accurate coding of the occupation.

Data is coded using the Australian and New Zealand Standard Classification of Occupations (ANZSCO). The classifications use six digit codes; the first digit in the code represents the major group. The first and second digits indicate the sub-major group. The first, second and third digits indicate the minor group. The first, second, third, and fourth digits indicate the unit group, whilst all six digits indicate the occupation.

Where the respondent does not provide adequate information for the response to be coded to occupation level, the response is coded to the next highest level which is sufficiently broad to include all possibilities implied by the available information.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of people by ANZSCO group

Denominator – Total number of people with an assigned ANZSCO grouping

**How data is presented:**
- Proportion of South Australians aged 15+ according to ANZSCO group.

#### Caveats
The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

#### Reporting Schedule
Census is carried out every 5 years.
1-13. Health Expenditure

1-13-1. Private Health Insurance for Hospital Cover

Rationale

The demand for private health insurance (PHI) in Australia is effectively a demand for insurance that is supplementary to the universal insurance that is provided by the Medicare system, rather than insurance for primary health care cover per se. Demand for PHI is driven by two factors:

1. A supplementary care component, affected by waiting times and the availability of treatments in private care that are rationed in public care. This is a function of the gap in care level between the public and private sectors and of each individual’s perception of his or her health risk; and

2. A supplementary amenity or service component, which depends on features such as private rooms, which depends mainly on income.


Factors contributing to the outcome


SA Target

n/a.

Data Source

Private Health Insurance Administration Council (PHIAC), Privately Insured with Hospital Treatment Cover by Age, Gender, State and Territory of Residence, December 2011


Definition and Calculation

Definition:

Calculation:

Data is expressed as a percentage (%)

Numerator – Number of people with private health insurance for hospital cover

Denominator – Total estimated resident population (ABS cat.no. 3101.0).

How data is presented:

- The percentage trend of South Australians with private health insurance for hospital cover between 2000 and 2011 compared to Australia.
- The proportion of South Australians with private health insurance for hospital cover in 2011 compared to all states and territories and the national average.
- The proportion of South Australians with private health insurance for hospital cover in South Australia by age and sex.

Caveats

Disclaimer: While PHIAC endeavours to ensure the quality of this publication, PHIAC does not accept any responsibility for the accuracy, completeness or currency of the material included in this Publication, and will not be liable for any loss or damage arising out of any use of, or reliance on, this Publication.

Reporting Schedule

Annually, released in February each year.
### 1-13-2. Out of Pocket Expenditures

#### Rationale

Funding for health goods and services comes from a range of sources, including the Australian Government; state, territory and local governments; and non-government sources. More than half of non-government funding came from out-of-pocket payments by individuals in 2009-10.


#### Factors contributing to the outcome


#### SA Target

n/a.

#### Data Sources


[Accessed: 28/08/2012]

Organisation for Economic Co-operation and Development (OECD), OECD Health Data 2012


[Accessed: 18/09/2012]

#### Definition and Calculation

**Definition:**

Data refers to 2009-10.

Out of pocket payments included circumstances where individuals met the full cost of goods or services, as well as where they shared the cost, for example, with private health insurance funds or the Australian Government (through Medicare).

**Calculation:**

Data is expressed as a national percentage (%)

Numerator – Out of pocket payments

Denominator – Non-government funding (AIHW) or total health expenditure (OECD)

**How data are presented:**

- The national percentage of health payments which came from out of pocket payments by individuals/households.

#### Caveats

State and Territory data was unavailable.

#### Reporting Schedule

Unknown.
### 1-14. Housing and Households

#### 1-14-1. Aboriginal Overcrowded Households

| **Rationale** | Decent and affordable housing is a cornerstone of good health and a major determinant of health inequalities. Overcrowded, badly designed and poorly built households with poor lighting and shared amenities are a major contributor to poor health (British Medical Association, 2003). British Medical Association (2003) Housing and health: building for the future. 2003. |
| **Factors contributing to the outcome** | Income. Socioeconomic Status. Indigenous Status. |
| **SA Target** | Target 9: Reduce overcrowding in Aboriginal households by 10% by 2014 (2001 baseline). |


| **Definition** | Data relates to 2006. Includes persons aged 18+. The Canadian National Occupancy Standard for housing appropriateness is an internationally accepted measure of housing utilisation. Households that require one additional bedroom to meet the standard are considered to experience 'a moderate degree of overcrowding', whereas households requiring two or more bedrooms are said to experience a 'high degree of overcrowding'. The Canadian model is sensitive to both household size and composition and uses the following criteria to assess bedroom requirements. |

- There should be no more than two people per bedroom.
- A household of one unattached individual may reasonably occupy a bed-sit (i.e. have no bedroom).
- Couples and parents should have a separate bedroom.
- Children less than five years of age, of different sexes, may reasonably share a bedroom.
- Children five years of age or over, of the opposite sex, should not share a bedroom.
- Children less than 18 years of age and of the same sex may reasonably share a bedroom.
- Single household members aged 18 years or over should have a separate bedroom.

| **Calculation** | Data is expressed as a percentage (%). Numerator – Number of Aboriginal households classified as being overcrowded Denominator – Total number of Aboriginal households. How data is presented: The proportion of Aboriginal South Australians (aged 18+) living in overcrowded households in 2006 compared to all States and Territories and the national average. |

| **Caveats** | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally. |

| **Reporting Schedule** | Census is carried out every 5 years. |
### 1-14-2. Housing Stress

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Housing is a basic need for all families, however the costs associated with housing for many can be a large ongoing expense.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Availability of affordable home purchase and rental opportunities.</td>
</tr>
<tr>
<td>SA Target</td>
<td>Target 8: South Australia leads the nation over the period to 2020 in the proportion of low income households not experiencing housing stress.</td>
</tr>
</tbody>
</table>

#### Data Source


#### Definition and Calculation

- **Definition:**
  - Data relates to 2006 and is collated using data from the Census of Population and Housing.
  - Housing stress is defined as households with incomes less than 80% of the median household income, who pay more than 25% of their income on rent or more than 30% of their income on mortgage costs.

- **Calculation:**
  - Data is expressed as a number.
  - Numerator – Number of households in South Australia experiencing housing stress
  - Denominator – Nil

- **How data is presented:**

#### Caveats

- The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

#### Reporting Schedule

- Census is carried out every 5 years.
### 1-14-3. Affordable Housing (housing costs 30% and over of gross income)

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Housing is a basic need for all families, however the costs associated with housing for many can be a large ongoing expense.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Availability of affordable home purchase and rental opportunities. Income.</td>
</tr>
<tr>
<td>SA Target</td>
<td>Target 7: South Australia leads the nation over the period to 2020 in the proportion of homes sold or build that are affordable by low and moderate income households.</td>
</tr>
</tbody>
</table>

#### Data Source


#### Definition and Calculation

**Definition:**

Data relates to 2009-10 and was collated through the Household Expenditure Survey and Survey of Income and Housing.

A household consists of one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling. The persons in a household may or may not be related. They must live wholly within one dwelling.

Relates to households with housing costs 30% or more of gross income.

Gross income is the sum of the income from all sources before income tax and the Medicare levy have been deducted. Prior to 2005-06, family tax benefit paid through the tax system or as a lump sum was excluded from gross income for practical reasons but deducted in deriving disposable income. Since 2005-06, these payments have been included in gross income.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of households with household costs over 30% of gross income

Denominator – Total number of households.

**How data is presented:**

- The proportion of South Australian households with housing costs 30% or more of gross household income compared to all other States and Territories and the national average.

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule

Every two years.
### 1-14-4. Affordable Housing: State and Territory Owned Rented Housing

| Rationale | Housing is a basic need for all families, however the costs associated with housing for many can be a large ongoing expense. Housing affordability can be a problem for individual households, causing financial stress, housing instability and contributing to homelessness. |
| Factors contributing to the outcome | Availability of affordable home purchase and rental opportunities. Income. |
| SA Target | Target 7: South Australia leads the nation over the period to 2020 in the proportion of homes sold or build that are affordable by low and moderate income households. |


| Definition and Calculation | Definition: Data relates to 2009-10 and was collated through the Household Expenditure Survey and Survey of Income and Housing. A household consists of one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling. The persons in a household may or may not be related. They must live wholly within one dwelling. Renters are occupants who pay money as rent to another person or organisation, referred to as the landlord, in return for being allowed to occupy the dwelling. For this indicator data for those renting from State/Territory housing authority is used only. Calculation: Data is expressed as a percentage (%) Numerator – Number of households rented from State and Territory housing authority Denominator – Total number of households How data is presented: The proportion of rented households in South Australia that are State and Territory owned compared to all States and Territories and the national average. The 1994-95 to 2009-10 trend of rented households in South Australia that are State and Territory owned compared to the national trend. |

| Caveats | Sample surveys are subject to both sampling and non-sampling error. |
| Reporting Schedule | Every two years. |
## 1-14-5. Aboriginal Housing

### Rationale
Housing is a basic need for all families, however the costs associated with housing for many can be a large ongoing expense. Substandard and badly maintained housing together with lack of functioning infrastructure can create serious health risks.

### Factors contributing to the outcome

### SA Target
Target 7: South Australia leads the nation over the period to 2020 in the proportion of homes sold or build that are affordable by low and moderate income households.

### Data Source


[Accessed: 15/05/2012]

### Definition and Calculation
**Definition:**
State owned and managed Indigenous housing (SOMIH) is administered by State and Territory governments and is targeted at households with at least one Aboriginal member.

The data relates to households residing in State owned and managed Aboriginal dwellings where the dwelling is either:

- Owned by the housing authority; or
- Leased from the private sector or other housing program areas and used for provision of State owned and managed Aboriginal housing.

**Overcrowding** - Households are those which require one additional bedroom to meet the Canadian National Occupancy Standard are considered to be moderately overcrowded.

**Under-utilised** – Households where there are two or more bedrooms additional to the number required are considered to be underutilised.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of dwellings defined as overcrowded and under-utilised

Denominator – Number of dwellings owned and managed by Aboriginal housing.

**How data is presented:**
- The proportion of Aboriginal owned and managed dwellings which are overcrowded in South Australia compared to four other States and Territories.

### Caveats
Data for Victoria, Australian Capital Territory and Northern Territory were unavailable.

Data may be subject to quality issues such as incomplete/missing information and coding errors.

### Reporting Schedule
Unknown.
### 1-14-6. and 1-14-7. Persons Living Alone

#### Rationale
People living alone may be at risk of social isolation, when can have a negative impact on people’s mental and physical wellbeing (*Australian Bureau of Statistics, 2009*).


#### Factors contributing to the outcome
Family Composition. Age. Housing Developments. Income.

#### SA Target
n/a.

#### Data Source
*Australian Bureau of Statistics, Census of Population and Housing 2011, Basic Community Profiles, B23: Relationship in Household by Age by Sex. Released at 11.30am (AEST) 29/02/2008.*


[Accessed: 23/08/2012]

#### Definition and Calculation
**Definition:**
Data relates to 2011 and is collated using data from the Census of Population and Housing.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of 15-64 year olds and 65+ year olds living alone

Denominator – Total number of 15-64 year olds and 65+ year olds

**How data is presented:**
- The proportion of 15-64 year olds in South Australia who were living alone compared to all States and Territories and the national average.
- The proportion of 65+ year olds in South Australia who were living alone compared to all States and Territories and the national average.

#### Caveats
The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

#### Reporting Schedule
Census is carried out every five years. However similar information is collated through the ABS Multipurpose Household Survey.
### 1-14-8. Homelessness

**Rationale**

Homelessness can be the result of a number of issues, such as poverty, unemployment, unaffordable housing, domestic violence, relationship breakdown, mental illness, substance abuse, gambling and social isolation (Department of Families, Housing, Community and Indigenous Affairs, 2008).


**Factors contributing to the outcome**

- Socioeconomic Status
- Income
- Abuse/Neglect/Violence
- Mental Health
- Substance Misuse
- Relationship Breakdowns
- Affordable Housing
- Indigenous Status

**SA Target**

Target 10: Halve the number of ‘rough sleepers’ in South Australia by 2013 and maintain thereafter.

**Data Source**


[Accessed: 23/08/2012]

**Definition and Calculation**

**Definition:**

Data relates to 2006 and was obtained from the Census of Population and Housing (unpublished). The data in the report refers to persons of all ages who were sleeping rough on Census night.

**Calculation:**

- Data is expressed as a rate per 10,000 population.
- Numerator – Number of rough sleepers
- Denominator – Total population

**How data is presented:**

- The rate of rough sleepers in South Australia (per 100,000 population) compared to all States and Territories and the national average.

**Caveats**

The number of rough sleepers may be an underestimate due to this population being hard to reach.

**Reporting Schedule**

Census is carried out every 5 years.
### Household Computer Access

#### Rationale
Access to information technology has great potential to enhance people’s access to health information and empower people to take a more proactive approach in understanding about and managing their own health and wellbeing (Victoria University, 2010).


#### Factors contributing to the outcome
Socioeconomic Status. Income. Education. Age

#### SA Target
n/a.

#### Data Source
Australian Bureau of Statistics, Household Use of Information Technology, Australia, 2010 -11, Cat. No. 8146.0. Released at 11.30am (AEST) 15/12/2011.


[Accessed: 15/05/2012]

#### Definition and Calculation
**Definition:**
Data relates to 2010 and was obtained through the Multipurpose Household Survey.


**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of households with access to a computer

Denominator – Total number of households

**How data is presented:**
- The proportion of households in South Australia with computer access compared to all States and Territories and the national average.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

The survey is restricted to people aged 15+ and excludes the following persons: members of the permanent defence forces, certain diplomatic personnel of overseas governments, overseas residents in Australia, people living in very remote parts of Australia, and people living in non-private dwellings such as hotels, university residences, students at boarding schools, patients in hospitals, residents of homes, and inmates of prisons.

#### Reporting Schedule
The Multipurpose Household Survey is conducted annually from July to June as a supplement to the monthly Labour Force Survey.
### 1-14-10. Household Internet Connection

**Rationale**
Access to information technology has great potential to enhance people’s access to health information and empower people to take a more proactive approach in understanding about and managing their own health and wellbeing *(Victoria University, 2010)*.


**Factors contributing to the outcome**
Socioeconomic Status. Income. Education. Age

**SA Target**
n/a.

**Data Source**


[Accessed: 23/08/2012]

**Definition and Calculation**
Definition:
Data relates to 2011 and was obtained from the Census of Population and Housing. Respondents were asked: ‘Can the Internet be accessed at this dwelling?’

Calculation:
Data is expressed as a percentage (%)
- Numerator – Number of households with an internet connection
- Denominator – Total number of households

How data is presented:
- The proportion of households in South Australia with an internet connection compared to all States and Territories and the national average.

**Caveats**
The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

**Reporting Schedule**
Census is carried out every 5 years. However, similar data is available from the ABS Multipurpose Household Survey (MPHS).
### 1-14-11. Households with No Motor Vehicle

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Access to transport is a potential barrier for access to health and other services. The remote/rural population may have a greater need for a motor vehicle due to limited public transport, especially if needing to access health services.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Socioeconomic Status. Income. Remoteness of Area.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

#### Data Source


#### Definition and Calculation

<table>
<thead>
<tr>
<th>Definition:</th>
<th>Data relates to 2011 and was obtained from the Census of Population and Housing. Respondents were asked: ‘How many registered motor vehicles owned or use by residents of this dwelling were garaged or parked at or near this dwelling on Census Night?’ Data includes vans and company vehicles kept at home and excludes motorbikes and motor scooters.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation:</td>
<td>Data is expressed as a percentage (%)</td>
</tr>
<tr>
<td>Numerator – Number of households with no motor vehicles</td>
<td></td>
</tr>
<tr>
<td>Denominator – Total number of households</td>
<td></td>
</tr>
</tbody>
</table>

| How data is presented: | The proportion of households in South Australia with no motor vehicle compared to all States and Territories and the national average. |

#### Caveats

The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

#### Reporting Schedule

Census is carried out every 5 years.
## 1-15. Religious Affiliation

| Rationale | Religion-associated variables have been shown to have protective effects for multiple mental health outcomes, including wellbeing, suicidal behaviour and substance misuse (Williams & Sternthal, 2007).  
  
| Factors contributing to the outcome | Family and Community. Ethnic Origin. |
| SA Target | n/a. |

  
  
  [Accessed: 23/08/2012] |
| Definition and Calculation | Definition:  
  Data relates to 2011 and was obtained from the Census of Population and Housing. Respondents were asked: ‘What is the person’s religion?’ Answering of this question was optional.  
  
  Calculation:  
  Data is expressed as a percentage (%).  
  
  Numerator – Number of persons identifying with no religious affiliation  
  
  Denominator – Total number of persons.  
  
  How data is presented:  
  - The proportion of persons who recorded no religious affiliation by state and territory.  
  
  Caveats | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally. |
| Reporting Schedule | Census is carried out every 5 years. |
1-16. Community Safety

1-16-1. Feelings of Safety at Home Alone During the Day

Rationale

Feelings of safety can have a positive influence on health and wellbeing. Conversely, both level of crime and fear of crime are commonly cited influences on people’s quality of life and can result in social isolation, stress and anxiety and a reduced sense of control – all of which are risk factors for poor health (Australian Bureau of Statistics, 2012).


Factors contributing to the outcome

Age. Deprivation. Community Cohesion.

SA Target

n/a.

Data Source


Available from:
[Accessed: 23/08/2012]

Definition and Calculation

Definition:
Data relates to 2010 and was obtained from the General Social Survey.
Data relates to persons aged 18+.
Feelings of safety relate to how safe a person feels in various circumstances (i.e. when home alone during the day) and were reported on a five point scale, from very safe to very unsafe.
Refer to the following link for further explanatory notes:

Calculation:
Data is expressed as a percentage (%).
Numerator – Number of respondents who felt very safe or safe at home alone during the day
Denominator – Total number of respondents.

How data is presented:
• The proportion of South Australians who felt very safe or safe at home alone during the day compared to all States and Territories and the national average.

Caveats

Sample surveys are subject to both sampling and non-sampling error.

Reporting Schedule

Every four years.
### 1-16-2. Feelings of Safety at Home Alone After Dark

**Rationale**

Feelings of safety can have a positive influence on health and wellbeing. Conversely, both level of crime and fear of crime are commonly cited influences on people’s quality of life and can result in social isolation, stress and anxiety and a reduced sense of control – all of which are risk factors for poor health (Australian Bureau of Statistics, 2012).


**Factors contributing to the outcome**

Age. Deprivation. Community Cohesion.

**SA Target**

n/a.

### Data Source


[Accessed: 23/08/2012]

### Definition and Calculation

**Definition:**

Data relates to 2010 and was obtained from the General Social Survey.

Data relates to persons aged 18+.

Feelings of safety relate to how safe a person feels in various circumstances (i.e. when home alone during the day) and were reported on a five point scale, from very safe to very unsafe.


**Calculation:**

Data is expressed as a percentage (%).

Numerator – Number of respondents who felt very safe or safe at home alone after dark

Denominator – Total number of respondents.

**How data is presented:**

- The proportion of South Australians who felt very safe or safe at home alone after dark compared to all States and Territories and the national average.

### Caveats

Sample surveys are subject to both sampling and non-sampling error.

### Reporting Schedule

Every four years.
### 1-16-3. Feelings of Safety Walking Alone in Local Area After Dark

**Rationale**

Feelings of safety can have a positive influence on health and wellbeing. Conversely, both level of crime and fear of crime are commonly cited influences on people’s quality of life and can result in social isolation, stress and anxiety and a reduced sense of control – all of which are risk factors for poor health (Australian Bureau of Statistics, 2012).


**Factors contributing to the outcome**

Age. Deprivation. Community Cohesion.

**SA Target**

n/a.

**Data Source**


**Definition and Calculation**

**Definition:**

Data relates to 2010 and was obtained from the General Social Survey.

Data relates to persons aged 18+.

Feelings of safety relate to how safe a person feels in various circumstances (i.e. when home alone during the day) and were reported on a five point scale, from very safe to very unsafe.


**Calculation:**

Data is expressed as a percentage (%).

Numerator – Number of respondents who felt very safe or safe walking alone in their local area after dark

Denominator – Total number of respondents.

**How data is presented:**

- The proportion of South Australians who felt very safe or safe walking alone in their local area after dark compared to all States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Every four years.
### 1-16-4. Victims of Violence

**Rationale**

Feelings of safety can have a positive influence on health and wellbeing. Conversely, both level of crime and fear of crime are commonly cited influences on people’s quality of life and can result in social isolation, stress and anxiety and a reduced sense of control – all of which are risk factors for poor health ([Australian Bureau of Statistics, 2012](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4159.0ExplanatoryNotes12010?OpenDocument)).


**Factors contributing to the outcome**

Age. Deprivation. Community Cohesion.

**SA Target**

n/a.

**Data Source**

Australian Bureau of Statistics, General Social Survey, South Australia 2006, Cat. No. 4159.4.55.003. Table 2.1: Personal Characteristics, by age: All persons. Released at 11.30am (AEST) 16/03/2012.


[Accessed: 23/08/2012]

**Definition and Calculation**

**Definition:**

Data relates to 2010 and was obtained from the General Social Survey.

Data relates to persons aged 18+.

Includes persons who in the last 12 months had physical force or violence used against them or threatened in person to be used against them. It includes violence or threats made by persons known to the respondent.


**Calculation:**

Data is expressed as a percentage (%).

Numerator – Number of respondents who had been a victim of physical or threatened violence in the last 12 months

Denominator – Total number of respondents.

**How data is presented:**

- The proportion of South Australians who had been a victim of physical or threatened violence in the last 12 months compared to all States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Every four years.
### 2-1. Fertility Rate

#### 2-1-1. Fertility Rate in South Australia

<table>
<thead>
<tr>
<th>Rationale</th>
<th>The total fertility rate provides a summary of the current fertility levels and can essentially be used as an indicator of future population growth or decline.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Delayed child bearing. Lack of knowledge of family planning. Limited contraceptive choice. Social and cultural issues. Increase in the contraceptive prevalence rate.</td>
</tr>
<tr>
<td>SA Target</td>
<td>T1.25 (2007 target) Population fertility rate: Maintain a rate of at least 1.7 births per woman. This aligns with the 2011 target, Supplement to Target 45: Increase South Australia’s population to 2 million by 2027 (baseline: 2003).</td>
</tr>
</tbody>
</table>

#### Data Source 1


#### Definition and Calculation

**Definition:**
The total fertility rate represents the number of children that a woman would bear during her lifetime if she experienced the current age-specific fertility rates at each age of her reproductive life.

**Calculation:**
- Numerator – Number of live births to women in an age group.
- Denominator – Estimated resident population of women aged 15 – 44 years.

**How data is presented:**
- The 2000 – 2010 trend of fertility rates for Metropolitan Adelaide and Country SA.
- The fertility rate in South Australia compared to all States and Territories and the national average.

#### Caveats

The TFR does not necessarily predict how many children young women now will eventually have.

#### Reporting Schedule

TFR is released annually by the ABS. Data is available from 1993 – 2010.
### Data Source 2

OECD iLibrary, OECD Health Data, Society at a Glance 2011, OECD Social Indicators. Available from: [http://www.oecd-ilibrary.org/sites/soc_glance-2011-en/04/02/index.html?contentType=/ns/StatisticalPublication/ns/Chapter&itemId=/content/chapter/soc_glance-2011-7-en&containerItemId=/content/serial/19991290&accessItemIds=&mimeType=text/html](http://www.oecd-ilibrary.org/sites/soc_glance-2011-en/04/02/index.html?contentType=/ns/StatisticalPublication/ns/Chapter&itemId=/content/chapter/soc_glance-2011-7-en&containerItemId=/content/serial/19991290&accessItemIds=&mimeType=text/html) [Accessed: 30/08/2012]

### Definition and Calculation

**Definition:**

The total fertility rate is the number of children that would be born to each woman at the end of her childbearing years if the likelihood of her giving birth to children at each age was the currently prevailing age-specific fertility rates. It is computed by summing up the age-specific fertility rates defined over five-yearly intervals. Assuming no net migration and unchanged mortality, total fertility rate of 2.1 children per woman ( "replacement" ) ensures broad population stability. Data typically come from civil population registers or other administrative records. The exception is Turkey, where fertility data are survey-based.

**Calculation:**

- Numerator – Number of live births to women in an age group.
- Denominator – Estimated resident population of women aged 15 – 44 years.

**How data is presented:**

- The 2000 – 2010 trend of fertility rates for Metropolitan Adelaide and Country SA.

### Caveats

The TFR does not necessarily predict how many children young women now will eventually have.

### Reporting Schedule

Annually.
### 2-1-2. Aboriginal Fertility Rate

<table>
<thead>
<tr>
<th>Rationale</th>
<th>The total fertility rate provides a summary of the current fertility levels and can essentially be used as an indicator of future population growth or decline.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Delayed child bearing. Lack of knowledge of family planning. Limited contraceptive choice. Social and cultural issues. Increase in the contraceptive prevalence rate.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
<tr>
<td>Definition and Calculation</td>
<td>Definition: The total fertility rate represents the number of children that a woman would bear during her lifetime if she experienced the current age-specific fertility rates at each age of her reproductive life. Calculation: Numerator – Number of live births to Aboriginal women in an age group. Denominator – Estimated resident population of Aboriginal women aged 15 – 44 years. How data is presented: • The 2000 – 2010 trend of Aboriginal fertility rates for South Australian compared to the national average.</td>
</tr>
<tr>
<td>Caveats</td>
<td>The TFR does not necessarily predict how many children young women now will eventually have.</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>TFR is released annually by the ABS. Data is available from 1993 – 2010.</td>
</tr>
</tbody>
</table>
## 2-2. Maternal Age and Ethnicity

### 2-2.1. Maternal Age in South Australia

#### Rationale

Maternal age is an important risk factor for both obstetric and perinatal outcomes. Adverse outcomes such as labour complications and birth defects are more likely to occur in younger and older mothers (Laws and Sullivan, 2009).

Mean maternal age data also helps to illustrate the changing age distribution of women giving birth.


#### Factors contributing to the outcome

- Delayed Child Bearing
- Teenage Pregnancy
- Education
- Employment

#### SA Target

n/a

#### Data Source


[Accessed: 03/05/2012]

#### Definition and Calculation

**Definition:**

This indicator refers to the mean age at which women give birth.

**Calculation:**

Data is expressed as an average (mean).

- **Numerator:** Mothers age in completed years at the birth of her baby
- **Denominator:** Number of women giving birth

**How data is presented:**

- Mean maternal age is presented in a time series from 2000 – 2009 for South Australia compared to Australia as a whole.
- Mean maternal age in South Australia compared to all States and Territories and the national average.

**Caveats**

The mean maternal age for South Australian in the AIHW publication differs from that produced by the Pregnancy Outcome Statistics Unit which uses maternal age at four decimal places for this calculation. The AIHW collection contains maternal age in completed years.

**Reporting Schedule**

Maternal age is released annually by the ABS.
### 2-2-2. Aboriginal Maternal Age

#### Rationale
Maternal age is an important risk factor for both obstetric and perinatal outcomes. Adverse outcomes such as labour complications and birth defects are more likely to occur in younger and older mothers (Laws and Sullivan, 2009).

Mean maternal age data also helps to illustrate the changing age distribution of women giving birth.


#### Factors contributing to the outcome
Delayed Child Bearing. Teenage Pregnancy. Education. Employment

#### SA Target
n/a

#### Data Source


#### Definition and Calculation
**Definition:**
This indicator refers to the median age at which women give birth.

**Calculation:**
Data is expressed as the median age from Aboriginal mother’s age in completed years at the birth of her baby in a given year.

**How data is presented:**
- Median maternal age of Aboriginal women giving birth is presented in a time series from 2000 – 2010 for South Australia compared to Australia as a whole.
- Median maternal age of Aboriginal South Australian women compared to all States and Territories and the national average.

#### Caveats
Accurately recoded age data.
Data for Australian Capital Territory was unpublished.

#### Reporting Schedule
Maternal age is released annually by the ABS
### 2-2-3. Teenage Women Giving Birth

| Rationale | There is general agreement in health literature that women who become pregnant and give birth early in their reproductive lives are subject to higher risks of complications or even death during pregnancy and birth and that their children are also more vulnerable (World Health O, 2012).

Furthermore, women having children at an early age experience a curtailment of their opportunities for socio-economic improvement (WHO, 2012). |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Indigenous status. Education. Socioeconomic status. Availability of contraception. Unhealthy behaviours, e.g. drugs and alcohol.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
<tr>
<td>Definition and Calculation</td>
<td>Definition: Teenage mothers are defined as women giving birth who are under 20 years of age. Calculation Expressed: as a percentage (%) Numerator – Number of women aged under 20 years giving birth Denominator – Total number of women giving birth How data is presented: • Data is presented as a time series from 2000 – 2009 for South Australia compared against the average for Australia as a whole. • The proportion of teenage women giving birth in South Australia compared to all States and Territories.</td>
</tr>
<tr>
<td>Caveats</td>
<td>Unknown.</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>Annual</td>
</tr>
</tbody>
</table>
### 2-2-4. Women Giving Birth Aged 35 years and Over

#### Rationale
The risks associated with giving birth over the age of 35 years include: increased risk of miscarriage, birth defects, high blood pressure and diabetes, stillbirth and caesarean birth (Australian Institute of Health and Welfare, 2001).


#### Factors contributing to the outcome
Changing priorities/career. Income. Family or living situation e.g. more people living alone.

#### SA Target
n/a

#### Data Source

#### Definition and Calculation
**Definition:**
The proportion of women who gave birth who are over 35 years of age.

**Calculation:**
Numerator – The number of women aged 35 years and over giving birth in the given year.
Denominator – The total number of women giving birth in the given year.

**How data is presented:**
- Data is presented as a time series from 2000 – 2009 for South Australia compared against the average for Australia as a whole.
- The proportion of South Australian women giving birth aged 35+ compared to all States and Territories and the national average.

#### Caveats
Unknown.

#### Reporting Schedule
Annual
### 2-2-5. Ethnicity of Women Giving Birth

**Rationale**

This indicator allows us to monitor the ethnicity of women who are giving birth in South Australia and also enables us to assess the age profile of those women. For example, women of a certain ethnicity may be more likely to give birth at an older age – which can increase the risk of certain outcomes.

**Factors contributing to the outcome**

Annually.

**SA Target**

Migration flow. Socioeconomic status

---

**Date Source**


**Definition and Calculation**

**Definition:**

Ethnic groups include: Aboriginal, Asian, Caucasian and Other.

**Calculation:**

Data is expressed as a percentage (%)

**Numerator** – Number of women according to ethnic group giving birth.

**Denominator** – Total number of women giving birth.

**How data is presented:**

- The proportion of South Australian women who gave birth in 2010 by their ethnic origin.
- The percentage of South Australian women who gave birth in 2010 by their ethnic origin and age group.

**Caveats**

Accuracy of ethnicity recording.
### 2-3. Folate Intake Before and During Pregnancy

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Folate (or folic acid) is a B-group vitamin that is essential for healthy fetal development. Folate can prevent neural tube defects, including spina bifida, if taken before conception and early in pregnancy. All women of child-bearing age should take extra folate as around half of all pregnancies are unplanned. BetterHealth Victoria [Internet] Available from: [<a href="http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Folate_for_women">http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Folate_for_women</a>][Accessed: 27/09/2012]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors Contributing to the Outcome</td>
<td>Socioeconomic Status. Income. Health Literacy. Education</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
</tbody>
</table>

| --- | --- |
| Definition and Calculation | **Definition:** This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and refers to persons aged 16 years and over.  
‘Do you know when folic acid needs to be taken by a woman to reduce her chance of having a baby with spina bifida?’  
‘In the month before you became pregnant the last time, did you take some form of folate?’  
‘In the first three months of your current or most recent pregnancy, did you take some form of folate?’  
**Calculation:** Data is expressed as a percentage (%)  
Numerator – Number of respondents aware that a woman should take folic acid before pregnancy and in the first three months of pregnancy to reduce her chance of having a baby with spina bifida  
Denominator – Total number of respondents  
**How data is presented:**  
- The proportion of South Australians aware that a woman should take folic acid before pregnancy and in the first three months of pregnancy to reduce her chance of having a baby with spina bifida in 2010 and 2011 by metropolitan Adelaide and Country SA area of residence.  
- The proportion of South Australian males and females aware that a woman should take folic acid before pregnancy and in the first three months of pregnancy to reduce her chance of having a baby with spina bifida in 2011 by age band.  
- The proportion of South Australians aware that a woman should take folic acid before pregnancy and in the first three months of pregnancy to reduce her chance of having a baby with spina bifida in 2011 by quintile of socioeconomic status (also with 95% confidence intervals).  
- The types of folic acid taken by women before and during the first three months of pregnancy in 2011. |
| Caveats | Sample surveys are subject to both sampling and non-sampling error. No national comparators available through SAMSS. |
| Reporting Schedule | SAMSS data is collected and reported on a monthly basis. |
# 2-4. Antenatal Visits

## 2-4-1. & 2-4-2. Antenatal Visits in South Australia and Aboriginal Antenatal Visits

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Antenatal care coverage is an indicator of access and use of health care during pregnancy. The antenatal period presents opportunities for reaching pregnancy women with interventions which may be vital to their health and wellbeing and that or their infants (World Health Organisation, 2012).</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Factors contributing to the outcome.</th>
<th>Health literacy. Access to services</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SA Target</th>
<th>n/a</th>
</tr>
</thead>
</table>


| Definition and Calculation | Definition: The proportion of pregnancies that resulted in a birth with an antenatal visit in the first trimester. Calculation: Numerator – Number of women who gave birth in 2009 with the first antenatal visit in the first trimester of pregnancy (first trimester is defined as the first 13 weeks of pregnancy). Denominator – Number of women who gave birth in 2009 with a known gestational age in weeks of 13 or less. How data is presented: 2007-2010 trend of South Australian women attending their first antenatal assessment in the first 14 weeks of pregnancy. 2007-2010 trend of Aboriginal and non-Aboriginal South Australian women attending their first antenatal assessment in the 14 weeks of pregnancy. |


| Reporting Schedule | Data is provided annually through the South Australia Pregnancy Outcomes Statistics Unit and is available from 2001 – 2009. |
### 2-5. Perinatal Depression

**Rationale**

Women are at increased risk of developing common mental health conditions, such as depression and anxiety, as well as less common conditions such as bipolar disorder, during pregnancy and the year after a birth (BeyondBlue 2012).


**Factors Influencing the Outcome**

Socioeconomic Status. Low income households. Age. Smoking.

**SA Target**

n/a

**Data Source**


**Definition and Calculation**

**Definition:**

Data relates to 2010 and was obtained from the Australian National Infant Feeding Survey.

The perinatal period extends from when pregnancy begins to the first year after the baby is born. The perinatal depression includes a wide range of mood disorders that can affect a woman during pregnancy and after the birth of her child. It includes prenatal depression, the ‘baby blues’, postpartum depression and postpartum psychosis.

**Calculation:**

Data is expressed as a percentage.

Numerator – number of mothers diagnosed with depression occurring from pregnancy until the child’s first birthday.

Denominator – total number of respondents.

**How data is presented:**

- The proportion of South Australian mothers diagnosed with perinatal depression compared to all States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Unknown.
### 2-6. Smoking During Pregnancy

#### 2-6-1. Smoking During Pregnancy

<table>
<thead>
<tr>
<th><strong>Rationale</strong></th>
<th>Reducing the proportion of South Australian mothers who smoke during pregnancy is vital to ensuring that more children are given the best possible start to life. Smoking is associated with poorer perinatal outcomes and is a risk factor for pregnancy complications and the effects of smoking during pregnancy can persist through into infancy and childhood (Australian Institute of Health and Welfare, 2006).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors contributing to the outcome</strong></td>
<td>Antenatal attendance. Access to stop smoking services. Socioeconomic status. Education/health literacy. Indigenous status. Teenage mothers. Single mothers</td>
</tr>
<tr>
<td><strong>SA Target</strong></td>
<td>n/a</td>
</tr>
</tbody>
</table>

#### Data Source


#### Definition and Calculation

**Definition:**
Smoking in pregnancy is captured during the antenatal visit and is recorded by the midwife or neonatal nurse. Pregnant women are asked which of the following relates to them:

1. Smoker
2. Quit in pregnancy before visit
3. Non smoker
4. Unknown smoking status

**Calculation:**
Expressed as a percentage (%)

Numerator – Number of women who identified that they smoked during pregnancy.
Denominator - Total number of women attending antenatal sessions.

**How data is presented:**
- Metropolitan Adelaide and country SA smoking during pregnancy rates are provided for South Australia compared to the rate for Australia as a whole.
- The proportion of South Australia women smoking during pregnancy according to socioeconomic status (SEIFA).

**Caveats**
Women are asked if they smoke and therefore increase the chance of self-reporting bias.

**Reporting Schedule**
Unknown
### 2-6-2. Smoking during Pregnancy – Aboriginal and Non-Aboriginal Rates

#### Rationale
Reducing the proportion of South Australian mothers who smoke during pregnancy is vital to ensuring that more children are given the best possible start to life. Smoking is associated with poorer perinatal outcomes and is a risk factor for pregnancy complications and the effects of smoking during pregnancy can persist through into infancy and childhood (Australian Institute of Health and Welfare, 2006).


#### Factors contributing to the outcome

#### SA Target
n/a

#### Data Source
South Australia Pregnancy Outcomes Statistics Unit (2011)


[Accessed: 08/05/2012]

#### Definition and Calculation

**Definition:**
Smoking in pregnancy is captured during the antenatal visit and is recorded by the midwife or neonatal nurse. Pregnant women are asked which of the following relates to them:

1. Smoker
2. Quit in pregnancy before first visit
3. Non smoker
4. Unknown smoking status

In the second half of the pregnancy women aged asked the average number of tobacco cigarettes they smoke per day, the categories of which are:

- None
- Number per day =…..
- <1 (occasional)
- Unknown number

**Calculation:**
Expressed as a percentage (%)

Numerator – Number of women who identified that they smoked during pregnancy.

Denominator - Total number of women attending antenatal sessions.

**How data is presented:**
- 2006-2010 trend of smoking during pregnancy at first antenatal visit for Aboriginal and non-Aboriginal South Australian women.
- The 2006-2010 trend of smoking during the second half of pregnancy for Aboriginal and non-Aboriginal South Australian women.

#### Caveats
Smoking status was unknown for 1.7% of women.

Women are asked if they smoke and therefore increase the chance of self-reporting bias.

**Reporting Schedule**
Data is provided annually through the South Australia Pregnancy Outcomes Statistics Unit and is available from 2001 – 2009.
2-7. Gestational Diabetes

**Rationale**

Babies born to mothers with gestational diabetes are typically at increased risk of a number of problems:

1. Being large for gestational age
2. Low blood sugar
3. Jaundice
4. Childhood obesity
5. Type 2 diabetes in later life

Women with gestational diabetes are at an increased risk of:

- Developing type 2 diabetes
- Pre-eclampsia (a condition characterised by hypertension)
- Caesarean section

Women who are treated for gestational diabetes are more likely to have smaller birth weight babies, thus leading to other problems such as premature birth.

**Factors contributing to the outcome**

Maternal age, Overweight and obesity, Previous diagnosis of gestational diabetes, Hypertension, Ethnic background

**SA Target**

n/a

**Data Source 1**


**Definition and Calculation**

**Definition:**

Gestational diabetes is diagnosed when higher than normal blood glucose levels first appear during pregnancy.

Gestational diabetes is captured during the antenatal visit and is recorded by the midwife or neonatal nurse.

**Calculation:**

Numerator – The number of women with a record of gestational diabetes at the time of birth

Denominator – The total number of women giving birth

**How data is presented:**

- Data is presented as a time series from 2001 – 2009 for South Australia only.

**Caveats**

State and territory comparisons are not available due to differing definitions and data collection of this indicator.

**Reporting Schedule**

Data is provided annually through the South Australia Pregnancy Outcomes Statistics Unit and is available from 2001 – 2009.
### 2-7. (cont’d) Gestational Diabetes

#### Data Source 2

<table>
<thead>
<tr>
<th>Definition and Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong></td>
</tr>
<tr>
<td>Data refers to 2012.</td>
</tr>
<tr>
<td>Gestational diabetes is diagnosed when higher than normal blood glucose levels first appear during pregnancy.</td>
</tr>
<tr>
<td>Gestational diabetes is captured during the antenatal visit and is recorded by the midwife or neonatal nurse.</td>
</tr>
<tr>
<td><strong>Calculation:</strong></td>
</tr>
<tr>
<td>Numerator – Number of people with a diagnosis of diabetes who are registered on the National Diabetes Service Scheme.</td>
</tr>
<tr>
<td>Denominator – Total population.</td>
</tr>
<tr>
<td><strong>How data is presented:</strong></td>
</tr>
<tr>
<td>• Figure for Australia as a whole is presented in the data table.</td>
</tr>
</tbody>
</table>

#### Caveats

The data contained in the Australian Diabetes Map is derived from the National Diabetes Service Scheme (NDSS) Registrant database from September 2011 and only shows people diagnosed with diabetes who are registered on the scheme.

#### Reporting Schedule

Unknown.

---

#### Data Source 3

<table>
<thead>
<tr>
<th>Definition and Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong></td>
</tr>
<tr>
<td>Gestational diabetes is diagnosed when higher than normal blood glucose levels first appear during pregnancy.</td>
</tr>
<tr>
<td>Gestational diabetes is captured during the antenatal visit and is recorded by the midwife or neonatal nurse.</td>
</tr>
<tr>
<td><strong>Calculation:</strong></td>
</tr>
<tr>
<td>Data is expressed as a rate per 1,000 women.</td>
</tr>
<tr>
<td>Numerator – Number of women who gave birth with diabetes mellitus</td>
</tr>
<tr>
<td>Denominator – Total number of women giving birth.</td>
</tr>
<tr>
<td><strong>How data is presented:</strong></td>
</tr>
<tr>
<td>• Figure for Australia as a whole is presented in the data table.</td>
</tr>
</tbody>
</table>

#### Caveats

Data for Victoria was unpublished due to small numbers.

Differences in definitions and methods used for data collection.

#### Reporting Schedule

Annually from AIHW.
2-8. Overweight and Obesity in Pregnancy

| Rationale | Being overweight or obese during pregnancy and at the time of giving birth can pose a number of risks and complications for both the mother and baby. These include: Gestational diabetes, Pre-eclampsia (a condition characterised by hypertension), Abnormalities of the baby’s growth, development and general health, Emergency caesarean section (birth of child by an abdominal operation), and Post natal depression. |
| Factors contributing to the outcome | Inactive or sedentary lifestyles. Socioeconomic status. |
| SA Target | n/a |

**Data Source**


**Definition and Calculation**

**Definition:**
Overweight and obesity is captured during the antenatal visit where Body Mass Index (BMI) is recorded by the midwife or neonatal nurse.

BMI is defined as weight (in kg) ÷ height² (in metres). The categories for describing weight using BMI are:

<table>
<thead>
<tr>
<th>BMI</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18.5</td>
<td>Underweight</td>
</tr>
<tr>
<td>18.5-24.9</td>
<td>Normal</td>
</tr>
<tr>
<td>25-29.9</td>
<td>Overweight</td>
</tr>
<tr>
<td>30-34.9</td>
<td>Obese</td>
</tr>
<tr>
<td>35-39.9</td>
<td>Severely obese</td>
</tr>
<tr>
<td>≥40</td>
<td>Morbidly obese</td>
</tr>
</tbody>
</table>

**Calculation:**
Presented as a proportion (%).

Numerator - Number of women screened at first antenatal visit (before 20 weeks gestation) with a BMI of 25 or above.

Denominator – Number of women giving birth

**How data is presented:**
- Data is presented for between 2007 and 2010 for South Australia only by overweight and obese classification.

**Caveats**

State and territory comparisons are not available due to differing definitions and data collection of this indicator.

Statistics on Body Mass Index (BMI) were only available for 68% of women who gave birth in 2009, and only 42% in 2007. Therefore data should be interpreted with caution.

BMI does not take into account factors such as frame size, muscle mass, varying proportions such as fat, bone, cartilage, and water.

**Reporting Schedule**

Data is provided annually through the South Australia Pregnancy Outcomes Statistics Unit and is available from 2007 – 2009.
### 2-9. Birth Rate

| Rationale | Birth rate helps to determine the rate of population growth (along with fertility levels and the age structure of the population). |
| Factors contributing to the outcome | Family planning services e.g. birth control. Age of marriage. Social or religious beliefs (especially in relation to contraception and abortion). Economic prosperity/finance |
| SA Target | n/a |

#### Data Source
Australian Bureau of Statistics, Births Australia (cat.no. 3301.0) data cubes, Table 1: Births, Summary, States and territories – 2000 to 2010.

#### Definition and Calculation
**Definition:**
Crude birth rate represents live birth per 1,000 mid-year estimated resident population. The data is obtained from the ABS Birth Registrations collection and includes all births that occurred and were registered in Australia, including births to mothers whose place of usual residence was overseas.

**Calculation:**
Expressed as a rate per 1,000 population
Numerator – the number of live births registered during the calendar year
Denominator – estimated mid-year population

**How data is presented:**
- Rates are presented as a time series from 2000 – 2010 for South Australia compared to Australia as a whole.
- Birth rate in South Australia compared to all States and Territories and the national average.

**Caveats**
Rate per 1,000 includes all ages and not those of maternal age.
Indigenous status is not always consistent or correctly recorded.

**Reporting Schedule**
Data is reported annually and historic data is available from 1993 – 2010.
### 2-10. Low Birth Weight

#### 2-10-1. Low Birth Weight in South Australia

<table>
<thead>
<tr>
<th>Rationale</th>
<th>A baby’s birth weight is a key indicator of health status. Low birth weight babies are more prone to ill health during childhood, and may be more vulnerable to illness in adulthood (Australian Institute of Health and Welfare, 2012).</th>
</tr>
</thead>
</table>

| --- | --- |

<table>
<thead>
<tr>
<th>SA Target</th>
<th>Target 26: To reduce the proportion of low birth weight babies and halve the proportion of Aboriginal low birth weight babies by 2020 (baseline year is 2003).</th>
</tr>
</thead>
</table>


| Definition and Calculation | Definition: Birth weight is the first weight of a newborn obtained after birth. This is preferably measured within the first hour of life before significant post-natal weight loss has occurred. Low birth weight is defined as babies who are born weighing less than 2,500 grams. Calculation: Expressed as a percentage (%) Numerator – Number of babies born with a weight less than 2,500 grams Denominator – Total number of babies born. |

| How data is presented: | • The 2005 – 2009 trends for South Australia compared to the national average. • The 2009 percentage for South Australia compared to all States and Territories and the national average. • By remoteness area (major cities, inner regional, outer regional and remote/very remote) for South Australia compared to Australia as a whole for 2008 • And by low and high socioeconomic status for South Australia compared to Australia as a whole for 2008. |

| Caveats | Indigenous status of the mother is collected; however the data element does not provide the indigenous status of the baby. Therefore Indigenous births may be underestimated as babies born to Indigenous fathers and non-Indigenous mothers are not included in the data collection. |

| Reporting Schedule | Data is provided annually through the South Australia Pregnancy Outcomes Statistics Unit and is available from 2001 – 2009. |
### Data Source 2

OECD iLibrary, Health at a Glance 2011, OECD Indicators, Low Birth Weight Infants. 
Available from: [http://www.oecd-ilibrary.org/sites/health_glance-2011-en/01/08/index.html?contentType=/ns/Chapter,/ns/StatisticalPublication&itemId=/content/chapter/health_glance-2011-en&containerItemId=/content/serial/19991312&accessItemIds=&mimeType=text/html](http://www.oecd-ilibrary.org/sites/health_glance-2011-en/01/08/index.html?contentType=/ns/Chapter,/ns/StatisticalPublication&itemId=/content/chapter/health_glance-2011-en&containerItemId=/content/serial/19991312&accessItemIds=&mimeType=text/html) 
[Accessed: 30/08/2012]

### Definition and Calculation

**Definition:** 
Low birth weight is defined by the World Health Organization (WHO) as the weight of an infant at birth of less than 2,500 grams (5.5 pounds) irrespective of the gestational age of the infant. This is based on epidemiological observations regarding the increased risk of death to the infant and serves for international comparative health statistics.

**Calculation:**
Expressed as a percentage (%)

Numerator – Number of babies born with a weight less than 2,500 grams 
Denominator – Total number of live births.

**How data is presented:**
- The 2009 OECD Average of low birth weight babies.

### Caveats

The majority of the data comes from birth registers, however for Mexico the source is a national health interview survey. A small number of countries supply data for selected regions or hospital sectors only.

### Reporting Schedule

Annually.
### 2-10-2. Aboriginal Low Birth Weight

**Rationale**

A baby’s birth weight is a key indicator of health status. Low birth weight babies are more prone to ill health during childhood, and may be more vulnerable to illness in adulthood (Australian Institute of Health and Welfare, 2012).


**Factors contributing to the outcome**


**Target**

To reduce the proportion of low birth weight babies and halve the proportion of Aboriginal low birth weight babies by 2020 (baseline year is 2003).

**Data Source**

[Accessed: 30/07/2012]

**Definition and Calculation**

**Definition:**

Birth weight is the first weight of a newborn obtained after birth. This is preferably measured within the first hour of life before significant post-natal weight loss has occurred.

Low birth weight is defined as babies who are born weighing less than 2,500 grams.

**Calculation:**

Expressed as a percentage (%)

Numerator – Number of babies born with a weight less than 2,500 grams

Denominator – Total number of babies born.

**How data is presented:**

- The 2005-2009 trend of Aboriginal South Australian babies born under 2500g compared to the national average.
- The 2009 percentage for South Australian compared to all State and Territories and the national average.

**Caveats**

Indigenous status of the mother is collected; however the data element does not provide the indigenous status of the baby. Therefore Indigenous births may be underestimated as babies born to Indigenous fathers and non-Indigenous mothers are not included in the data collection.

**Reporting Schedule**

Unknown.
### 2-11. Caesarean Births

#### Rationale

The percentage of births by caesarean section is an indicator of access to and use of health care during childbirth (WHO, 2012).


#### Factors contributing to the outcome

- Previous caesarean section
- Multiple pregnancy

#### SA Target

n/a

#### Data Source 1


#### Definition and Calculation

**Definition:**
Caesarean section is a surgical procedure in which one or more incisions are made through a mother’s abdomen and uterus to deliver a baby.

**Calculation:**
Data is expressed as a percentage (%)
- Numerator – Number of births by caesarean procedure.
- Denominator – Total number of births.

**How data is presented:**

#### Caveats

- The data does not provide information on the reason for undergoing caesarean section. The number of caesarean sections that were performed according to clinical need is not possible to determine.

#### Reporting Schedule

Annually

#### Data Source 1


#### Definition and Calculation

**Definition:**
Caesarean section is a surgical procedure in which one or more incisions are made through a mother’s abdomen and uterus to deliver a baby.

**Calculation:**
Data is expressed as a percentage (%)
- Numerator – Number of births by caesarean procedure.
- Denominator – Total number of live births.

**How data is presented:**
- The 2009 OECD average of the percentage of caesarean section births.

#### Caveats

- In Portugal, the denominator is limited to the number of live births which took place in National Health Service Hospitals on the mainland, resulting in an over-estimation of caesarean rates. In Mexico, the number of caesarean sections is estimated based on public hospital reports and data obtained from National Health Surveys. Estimation is required to correct for under-reporting of caesarean deliveries in private facilities. The combined number of caesarean deliveries is then divided by the total number of live births as estimated by the National Population Council.

#### Reporting Schedule

Annually
2-12. Congenital Abnormalities

| Factors contributing to the outcome | Indigenous status. Folate acid intake |
| SA Target | n/a |


| Definition and Calculation | Definition: Information on congenital abnormalities detected at birth or in the neonatal period (within 28 days of birth) is provided by doctors using the Congenital Abnormality Form. Births with anomalies are then coded using the British Paediatric Association (BPA) Classification of Diseases. Calculation: 2009 data is expressed as the total number of births with a recorded congenital abnormality according to specific BPA code. Trend data is expressed as a percentage (%) of births. Numerator – Number of births with a congenital abnormality. Denominator – Total number of births. How data is presented: • The number of South Australian births with a recorded congenital anomalies by specific BPA code in 2009. • The 2000- 2009 trend of the proportion of births in South Australia with congenital anomalies. |

| Caveats | Terminations of pregnancy are not included in this table unless they meet a criterion for inclusion in the perinatal data collection, i.e. at least 400g birth weight or 20 weeks gestation. Notifications of births with birth defects identified after discharge from the hospital of birth but within the first five years of life are made to the South Australian Birth Defects Register at the Women’s and Children’s Hospital, and more complete statistics on birth defects in South Australia are available from the Registers Annual Report. |

| Reporting Schedule | Annually |
### 2-13. Breastfeeding

| Rationale | Breastfeeding has a number of benefits for both mother and baby. Breast milk provides nutrients and antibodies that are essential to protecting the baby against diseases and conditions such as type 2 diabetes, asthma, obesity, lower respiratory infections, and gastrointestinal problems (Commonwealth of Australia, 2007).  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing the outcome</td>
<td>Education. Health Literacy. Socioeconomic Status. Antenatal attendance</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
</tbody>
</table>
[Accessed: 04/06/2012] |
| Definition and Calculation | **Definition:**  
Data is collected from the Australian National Infant Feeding Survey.  
Includes the proportion of children ever breastfed (aged 0-2 years) and the most recent data is for 2010.  
Ever breastfed is defined as an infant who has been put to the breast, if only once, and/or an infant has received expressed breastmilk or breastmilk from a donor or donor milk bank.  
Australia’s dietary guidelines recommend exclusive breastfeeding of infants until 6 months of age, with the introduction of solid foods at around 6 months and continued breastfeeding until the age of 12 months – and beyond if both mother and child wish.  
**Calculation:**  
Data is expressed as a percentage (%).  
Numerator – Number of children aged 24 months and under ever breastfed.  
Denominator – Total number of children aged 24 months and under.  
**How data is presented:**  
- The proportion of South Australian children (aged 0-2 years) ever breast fed compared to all states and territories and the national average. |
| Caveats | Sample surveys are subject to both sampling and non-sampling error. |
| Reporting Schedule | Unknown. |
2-14. Children Receiving 4th Year Developmental Health Checks

**Rationale**

The Australian Government aims to improve the health and well-being outcomes for Australian children by encouraging early detection of lifestyle risk factors and physical health issues, and facilitating early intervention strategies. This initiative aligns with the broader policy agenda of optimising outcomes for children through attention to health, learning and development (Department of Health and Ageing, 2010).


**Factors contributing to the outcome**

Access to service. Socioeconomic Status.

**SA Target**

n/a

**Data Source**


**Definition and Calculation**

**Definition:**

Healthy Kids Check – An assessment of a child’s physical health, general well-being and development, with the purpose of initiating medical interventions as appropriate. Examinations include: height and weight, eye sight, hearing, oral health, toileting and allergies.

Aboriginal and Torres Strait Islander Peoples Health Assessment - to help ensure that Aboriginal and Torres Strait Islander people receive primary health care matched to their needs, by encouraging early detection, diagnosis and intervention for common and treatable conditions that cause morbidity and early mortality. The health assessment is an annual service.

**Calculation:**

Data is expressed as a percentage.

**Numerator** – Number of children receiving a 4th year developmental health check

**Denominator** – Estimated Number of children aged 4 (ABS estimated resident population, 30 June 2010).

**How data is presented:**

- Proportion of children aged 4 receiving Healthy Kids Check in South Australia and Australia from 2008/09 to 2010/11.
- Proportion of South Australian children aged 4 receiving Healthy Kids Check compared to all States and Territories and the national average in 2010/11.
- Proportion of children aged 4 receiving Aboriginal and Torres Strait Islander Peoples Health Assessment in South Australia and Australia from 2008/09 to 2010/11.
- Proportion of South Australian children aged 4 receiving Aboriginal and Torres Strait Islander Peoples Health Assessment compared to all States and Territories and the national average in 2010/11.

**Caveats**

Children are counted only once in the numerator. Where a child received both a healthy kids check and an Aboriginal and Torres Strait Islander people's health assessment during the reference period they were counted against the Aboriginal and Torres Strait Islander health assessment.

**Reporting Schedule**

Unknown.
2-15. Childhood Immunisations

2-15-1 & 2-15-2. Immunisations (Children Aged 5 Years) in South Australia and Aboriginal Immunisations (Children aged 5 Years)

Rationale

Immunisation is an essential component for reducing under-five mortality and is a good indicator of health system performance (World Health Organisation, 2012).


Factors contributing to the outcome

Education. Health Literacy. Access to services. Indigenous Status

SA Target

n/a

Data Source


Definition and Calculation

Definition:
Proportion of children aged 5 years who are fully vaccinated against diphtheria, tetanus, pertussis, hepatitis B, poliomyelitis, measles, mumps and rubella.

Calculation:
Expressed as a percentage (%)
Numerator – Number of children aged 5 years who are fully vaccinated.
Denominator – Population aged 5 years.

How data is presented:

- State and Territory comparisons are presented for 2011 for all children aged 5 years.
- The immunisation rate is also presented by remoteness of area for South Australia (major cities, inner regional, outer regional, remote and very remote).
- Data is presented for Aboriginal South Australian children compared to all other States and Territories and the national average.
- The 2010 and 2011 immunisation rates are presented for Aboriginal and non-Aboriginal children in South Australia.

Caveats

Data for ‘other Australians’ includes records for children where Indigenous status is not known or not stated.
Disaggregation by remoteness area is by usual residence of the child. Remoteness areas were defined using the Australian Standard Geographical Classification (AGSC) based on the ABS 2006 Census of population and housing.

Reporting Schedule

Not published
## 2-16. Childhood Burden of Disease

### 2-16-1 & 2-16-2. Childhood Burden of Disease – Top 5 Disability Adjusted Life Years (DALYs) Conditions (0 – 4 years) and (5 – 19 years)

| Rationale | This indicator describes the overall impact of and overall health loss due to specific conditions for the South Australia population. Ranking the top 5 causes in terms of burden of disease area to specific age bands enables the comparison of what is contributing to health years of life lost at different stages in life. |
| Factors contributing to the outcome | Accessible communities, Housing/living conditions, Socioeconomic status, Access to services, Early health outcomes |
| SA Target | n/a |

| Definition and Calculation | Definition: Burden of disease estimates for South Australia are taken from the Australian study. These results use uniform age-weighting and 3% p.a. discounting for incidence outcomes and uniform age-weighting and no discounting of prevalence outcomes. To partially control for the volatility associated with estimates by sex, age, and time for the many conditions covered, reporting is in the form of three yearly average estimates. Disability Adjusted Life Years (DALYs) describe the amount of years of life lost (YLL) due to premature death coupled with years of ‘healthy’ life lost due to disability (YLD). \[ DALY = YLL + YLD \] DALYs take into account both people living with a condition and people dying from a condition. One DALY represents one lost year of ‘healthy’ life. Calculation: Expressed as a percentage of all DALYs. Numerator – Number of DALYs for specific condition by age group Denominator – Total number of DALYs for age group. How data is presented: - The top five DALYs are presented by sex for two age groups: 0 – 4 years and 5 – 19 years. The top five conditions according to DALYs are ranked. |
| Caveats | SA Health advises that the Burden of Disease information and material displayed in the State of Our health are an information resource only and whilst all reasonable care has been taken in its preparation, SA Health does not make any representations or warranties as to its accuracy or otherwise. SA Health excludes all liability and or loss whatever its cause and to whomsoever arising directly or indirectly from its use. 2006-08 data is provisional. State comparison data is not available. |
| Reporting Schedule | Unknown |
2-17. Children's Intellectual and Mental Health

2-17.1 Severe Behavioural Problems

Rationale
Severe behavioural problems can interfere with children’s social and academic development. They can lead to social isolation and interrupt learning. Children with serious behaviour problems often do not feel connected at school and are more likely to experience low self-esteem and depression (Department of Health and Ageing, 2009).


Factors contributing to the outcome
Unknown.

SA Target
n/a

Data Source
South Australia Monitoring and Surveillance System (SAMSS), 2002 – 2011

Definition and Calculation

Definition:
Data is collected through the SAMSS questionnaire.
Data refers to children aged 2-15 years.
Data is obtained using the following question:
‘I am going to read you a list of problems of difficulties that some children have. Please tell me if a health care professional or other professional (e.g., teacher) has ever told you that [child’s name] has:
1. Severe behavioural problems
2. Migraines and headaches
3. A problem with coordination and clumsiness
4. Developmental delay
5. Learning disorder or difficulty
6. Any other physical or intellectual disability
7. Attention Deficit Hyperactivity Disorder
8. None of the above.

Calculation:
Data is expressed as a percentage.
Numerator – Number of children aged 2-15 told by a healthcare or other professional that they have severe behavioural problems.
Denominator – Total number of respondents.

How data is presented:
- The 2002-2011 trend of severe behavioural problem prevalence in Metropolitan Adelaide and Country SA.
- The prevalence of severe behavioural problems by sex.
- The prevalence of severe behavioural problems by socioeconomic status.

Caveats
No comparator data available.
95% confidence interval for ‘Middle SES’ quintile was unavailable.

Reporting Schedule
SAMSS data is collected monthly.
### 2-17.2 Migraines and Headaches

#### Rationale
One of the recommendations of a recent World Health Organization report ‘Headache Disorders and Public Health’ was ‘to raise the priority of effective treatment and prevention of headache in children’ *(World Health Organisation, 2000).*


#### Factors contributing to the outcome

#### SA Target
n/a

#### Data Source
South Australia Monitoring and Surveillance System (SAMSS) 2002-2011
[Accessed: 30/07/21012]

#### Definition and Calculation
**Definition:**
Data is collected through the SAMSS questionnaire.
Data refers to children aged 2-15 years.
Data is obtained using the following question:
‘I am going to read you a list of problems of difficulties that some children have. Please tell me if a health care professional or other professional (e.g. teacher) has ever told you that [child’s name] has:

- 9. Severe behavioural problems
- 10. Migraines and headaches
- 11. A problem with coordination and clumsiness
- 12. Developmental delay
- 13. Learning disorder or difficulty
- 14. Any other physical or intellectual disability
- 15. Attention Deficit Hyperactivity Disorder
- 16. None of the above.

**Calculation:**
Data is expressed as a percentage.
Numerator – Number of children aged 2-15 told by a healthcare or other professional that they have migraines or headaches.
Denominator – Total number of respondents.

**How data is presented:**
The 2002-2011 trend of migraine or headache prevalence in Metropolitan Adelaide and Country SA.
The prevalence of migraines or headaches by sex.
The prevalence of migraines or headaches by socioeconomic status.

#### Caveats
No comparator data available.

#### Reporting Schedule
SAMSS data is collected monthly.
### 2-17.3 Problems with Co-ordination and Clumsiness

**Rationale**
Children with coordination and clumsiness problems can have trouble with many tasks which are required for daily living and at school.

**Factors contributing to the outcome**
Unhealthy weight. Social skills and confidence.

**SA Target**
n/a.

### Data Source
South Australia Monitoring and Surveillance System (SAMSS) 2002-2011
[Accessed: 30/07/2012]

### Definition and Calculation

**Definition:**
Data is collected through the SAMSS questionnaire.
Data refers to children aged 2-15 years.
Data is obtained using the following question:

> I am going to read you a list of problems of difficulties that some children have. Please tell me if a health care professional or other professional (e.g. teacher) has ever told you that [child’s name] has:

1. Severe behavioural problems
2. Migraines and headaches
3. A problem with co-ordination and clumsiness
4. Developmental delay
5. Learning disorder or difficulty
6. Any other physical or intellectual disability
7. Attention Deficit Hyperactivity Disorder
8. None of the above.

**Calculation:**
Data is expressed as a percentage.
Numerator – Number of children aged 2-15 told by a healthcare or other professional that they have a problem with co-ordination and clumsiness.
Denominator – Total number of respondents.

**How data is presented:**
- The 2002-2011 trend of co-ordination and clumsiness problems in Metropolitan Adelaide and Country SA.
- The prevalence of co-ordination and clumsiness by sex.
- The prevalence of co-ordination and clumsiness by socioeconomic status.

**Caveats**
No comparator data available.

**Reporting Schedule**
SAMSS data is collected monthly.
## 2-17.4 Problems with Developmental Delay

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Developmental delay is when a young child is slower to reach milestones than other children and this indicator can help map delays in intellectual and learning ability of South Australians children.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Unknown.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

### Data Source
South Australia Monitoring and Surveillance System (SAMSS) 2002-2011
[Accessed: 30/07/2012]

### Definition and Calculation
**Definition:**
Data is collected through the SAMSS questionnaire.
Data refers to children aged 2-15 years.
Data is obtained using the following question:
'I am going to read you a list of problems of difficulties that some children have. Please tell me if a healthcare professional or other professional (e.g. teacher) has ever told you that [child's name] has:

- 25. Severe behavioural problems
- 26. Migraines and headaches
- 27. A problem with co-ordination and clumsiness
- 28. Developmental delay
- 29. Learning disorder or difficulty
- 30. Any other physical or intellectual disability
- 31. Attention Deficit Hyperactivity Disorder
- 32. None of the above.

**Calculation:**
Data is expressed as a percentage.
Numerator – Number of children aged 2-15 told by a healthcare or other professional that they have a problem with developmental delay.
Denominator – Total number of respondents.

**How data is presented:**
- The 2002-2011 trend of developmental delay in Metropolitan Adelaide and Country SA.
- The prevalence of developmental delay by sex.
- The prevalence of developmental delay by socioeconomic status.

### Caveats
No comparator data available.

### Reporting Schedule
SAMSS data is collected monthly.
## 2-17.5 Learning Disorders

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Learning disabilities are associated with impairment of intellectual functions with limitations in a range of daily activities and with restriction in participation in various life areas. Supports may be needed throughout life, the level of support tending to be consistent over a period of time but may change in association with changes in life circumstances (Australian Institute of Health and Welfare, 2004).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Unknown.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
</tbody>
</table>

### Data Source

South Australia Monitoring and Surveillance System (SAMSS) 2002-2011


[Accessed: 30/07/2012]

### Definition and Calculation

**Definition:**

Data is collected through the SAMSS questionnaire.

Data refers to children aged 2-15 years.

Data is obtained using the following question:

“I am going to read you a list of problems of difficulties that some children have. Please tell me if a health care professional or other professional (e.g. teacher) has ever told you that [child’s name] has:

- 33. Severe behavioural problems
- 34. Migraines and headaches
- 35. A problem with co-ordination and clumsiness
- 36. Developmental delay
- 37. Learning disorder or difficulty
- 38. Any other physical or intellectual disability
- 39. Attention Deficit Hyperactivity Disorder
- 40. None of the above.

**Calculation:**

Data is expressed as a percentage.

Numerator – Number of children aged 2-15 told by a healthcare or other professional that they have a problem with learning disorders of difficulty.

Denominator – Total number of respondents.

**How data is presented:**

- The 2002-2011 trend of learning disorders in Metropolitan Adelaide and Country SA.
- The prevalence of learning disorders by sex.
- The prevalence of learning disorders by socioeconomic status.

### Caveats

No comparator data available.

### Reporting Schedule

SAMSS data is collected monthly.
2-17-6. Autism

| Rationale | Autism is classed as an intellectual disability, which is associated with impairment of intellectual functions with limitations in a range of daily activities and with restriction in participation in various life areas. Supports may be needed throughout life, the level of support tending to be consistent over a period of time but may change in association with changes in life circumstances (Australian Institute of Health and Welfare, 2004). Australian Institute of Health and Welfare (AIHW) 2004. Children with disabilities in Australia. AIHW cat. no. DIS 38. Canberra: AIHW. |
| Factors contributing to the outcome | Genetics. Problems occurring at birth. |
| SA Target | n/a |


| Definition and Calculation | Definition: Autism Spectrum Disorder (ASD) is a lifelong neurological disorder of unknown aetiology. The criteria for diagnosis are based on a triad of impairments in social interaction, communication and flexible thinking, interests, and behaviours. Calculation: Data is expressed as a total number. How data is presented: • The number of South Australian children and students with Autism Spectrum Disorder (March 2010). • The proportion enrolled in schools with special provisions. • The proportion enrolled and included in mainstream classes. |
| Caveats | No comparator data. |
| Reporting Schedule | Unknown. |
### 2-17-7. National Mental Health (Children Aged 4 – 17 Years)

#### Rationale

Mental health problems can have a significantly adverse impact upon a child’s quality of life. Adolescents with mental health problems are more likely to engage in unhealthy behaviours such as smoking, drinking and drug use (Australian Government Office for Youth, 2009).


#### Factors contributing to the outcome

Socioeconomic Status. Family breakdown or conflict. Child abuse or neglect.

#### Data Source


#### Definition and Calculation

**Definition:** Data was collated through the Child and Adolescent Component of the National Survey of Mental Health and Wellbeing (2000).

In the report, children and adolescents were considered to have a mental health problem if the number of emotional and behavioural problems they were experiencing was in the range typically reported for children and adolescents attending mental health clinics. They were identified by having parents and adolescents complete questionnaires asking about a large number of emotional and behavioural problems that occur in childhood and adolescents.

- **Internalising Problems** - refer to inhibited or over-controlled behaviour such as anxiety or depression.
- **Externalising Problems** - refer to antisocial or under-controlled behaviour such as delinquency or aggression.
- **Somatic Complaints** - refer to chronic physical complains without known cause or medically verified basis.
- **Delinquent Behaviour** - refers to breaking rules and norms set by parents and communities such as lying, swearing, stealing or truancy.
- **Attention Problems** - refer to difficulties in concentration and inability to sit still, in addition to impaired school performance.
- **Aggressive Behaviour** - refers to bullying, teasing, temper tantrums and fighting.
- **Social Problems** - refers to impaired peer relationships.
- **Withdrawn** - refers to shyness and social isolation
- **Anxious/Depressed** - refers to feelings of loneliness, sadness, being unloved, worthlessness, and anxiety and general fears.
- **Thought Problems** – refers to strange behaviour of ideas, obsessions.

**How data is presented:**
- The national prevalence figures for ‘externalising’ and ‘internalising’ mental health problems are presented according to sex and age band.
- National prevalence figures are also presented according to specific mental health issue by age band (4-12 years and 13-17 years) and sex.

#### Caveats

Specific data is not available at a state level.

#### Reporting Schedule

The most recent National Survey of Mental Health and Wellbeing was in 2007; however it relates to those aged 16 – 85 only.
### 2-18. Oral Health

#### 2-18-1. Deciduous Decay in Children Aged 5 and 6 Years

| Factors contributing to the outcome | Diet (carbohydrate intake and exposure to sugar). Exposure to fluorides. Dental hygiene. Standard of living. Access to dental services |
| SA Target | n/a |


| Definition and Calculation | Deciduous decay (or dmft) is recorded as the number of baby teeth that are decayed, missing and filled because of dental decay. Decay experience is measured by the number of decayed, missing and filled teeth and refers to cavities. Deciduous decay is presented for children aged 5 and 6 years of age. **Calculation:** Data is expressed as an average. Numerator – total number of dmft in children aged 5 and 6 Denominator - the total number of children aged 5 and 6. **How data is presented:** • Average number of decayed, missing and filled in South Australian children, a 2005, 2006 and 2007 comparison. • The average number of dmft in South Australian children compared to all states and territories and the national average. • Decayed Missing and Filled teeth as a proportion of the dmft index for South Australia and compared to all states and territories. |


| Reporting Schedule | Unknown |
### 2-18-2. Permanent decay in Children Aged 12 Years

**Rationale**

Dental health in children is a good indicator of diet and overall health. Good oral health throughout infancy and early childhood contributes to better dental health in adulthood, resulting in less decay and reduced loss of natural teeth (Australian Institute of Health and Welfare, 2005).


**Factors contributing to the outcome**

Diet (carbohydrate intake and exposure to sugar). Exposure to fluorides. Dental hygiene. Standard of living. Access to dental services

**SA Target**

n/a

**Data Source**


[Accessed: 30/07/2012]

**Definition and Calculation**

**Definition**

Permanent decay (or DMFT) is recorded as the number of adult teeth that are decayed, missing and filled because of dental decay. DMFT is presented for children aged 12 years of age.

**Calculation**

Data is expressed as an average

- Numerator – total number of dmft in children aged 12.
- Denominator – the total number of children aged 12.

**How data is presented:**

- Average number of decayed, missing and filled in South Australian children, a 2005, 2006 and 2007 comparison.
- The average number of DMFT in South Australian children compared to all states and territories and the national average.
- Decayed Missing and Filled teeth as a proportion of the DMFT index for South Australia and compared to all states and territories.

**Caveats**

Data from 1991 – 2010 is presented in the South Australia Public and Environmental Health Report 2010-11, however a link to the data source or raw data are not provided. Available from:


[Accessed: 04/06/2012]

**Reporting Schedule**

Unknown
### 2-18-3. Teeth and Gum Problems in Aboriginal Children Aged 4-14 Years

| **Factors contributing to the outcome** | Diet (carbohydrate intake and exposure to sugar). Exposure to fluorides. Dental hygiene. Standard of living. Access to dental services |
| **SA Target** | n/a |

### Data Source
Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Social Survey, 2008. Data Cubes, Table 07: Indigenous children aged 4-14 years, by State or Territory of usual residence.

[Accessed: 30/07/2012]

### Definition and Calculation
**Definition**
Data relates to 2008 and Aboriginal children aged 4-14 years.

Teeth and gum problems include the following:

1. Holes
2. Decays
3. Fillings
4. Pulled teeth
5. Broken/missing teeth due to an accident
6. Bleeding or sore gum

**Calculation**
Data is expressed as a percentage.

Numerator – total number of Aboriginal children aged 4-14 with teeth and/or gum problems.

Denominator - the total of respondents.

**How data is presented:**
- The proportion of Aboriginal children aged 4-14 with teeth and/or gum problems in South Australian children compared to all states and territories and the national average.

### Caveats
Estimates from the 2008 NATSISS are subject to sampling and non-sampling errors.

The 2008 NATSISS was designed to produce reliable estimates at the national level and for each state and territory. However, there was a relatively large level of undercoverage when compared to other ABS surveys. As undercoverage can result in variances across population characteristics, as well as across data items, caution should be exercised when interpreting the survey results.

### Reporting Schedule
Unknown
### 2-19. Hearing Loss in Children (aged 0 – 14)

<table>
<thead>
<tr>
<th>Rationale</th>
<th>For a child, hearing is an essential tool for learning and developing social skills. A child with hearing loss may have delays in speech and language development, social problems and academic difficulties. Monitoring the rate of hearing loss in children can help to determine the effectiveness of early intervention and diagnosis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver of the outcome</td>
<td>Infections during pregnancy. Birth complications e.g. low birth weight. Indigenous status. Socioeconomic status</td>
</tr>
<tr>
<td>Target</td>
<td>n/a</td>
</tr>
<tr>
<td>Definition and Calculation</td>
<td>Definition  Hearing loss conditions included are: complete and partial deafness, complete and partial deafness and otitis media, all disease of the ear and mastoid.  Calculation  Expressed as a rate per 1,000 children aged 0-14 years.  Numerator – the number of children aged 0-14 years with hearing loss or otitis media) collated through the National Health Survey (NHS)  Denominator – the number of children aged 0-14 years from ABS  How data is presented:  - Data is presented for South Australia compared to the national average for complete and partial deafness, complete and partial deafness and otitis media, and all diseases of the ear and mastoid for 2007/08. The 95% confidence intervals are also illustrated.  Caveats</td>
</tr>
</tbody>
</table>
### 2-20. Nutrition – Fruit and Vegetable Consumption – Children Aged 5-17 Years

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Diets which are high in fruit and vegetables provide numerous health benefits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Socioeconomic status. Education/health literacy</td>
</tr>
</tbody>
</table>
| SA Target | The Commonwealth, States and Territories have agreed to meet a number of performance benchmarks.  
- Increase the mean number of daily serves of fruit and vegetables consumed by children and adults by at least 0.2 for fruit and 0.5 for vegetables from the baseline year by 2013.  
- Increase the mean number of daily services of fruit by 0.6 and 1.5 for vegetables from the baseline year by 2015. |
| Data Source | South Australian Monitoring and Surveillance System (SAMSS), June 2009 – 11 cited from SA Health.  
[Accessed: 07/05/12] |
| Definition and Calculation | Definition:  
The Australian guide to healthy eating recommends the following minimum daily intake of fruit and vegetables.  

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Fruit (serves per day)</th>
<th>Vegetables (serves per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3*</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4-7</td>
<td>1-2</td>
<td>2-4</td>
</tr>
<tr>
<td>8-11</td>
<td>1-2</td>
<td>3-5</td>
</tr>
<tr>
<td>12-18</td>
<td>3-4</td>
<td>4-9</td>
</tr>
<tr>
<td>19+</td>
<td>2+</td>
<td>5+</td>
</tr>
</tbody>
</table>

*The Australian Guide to Healthy Eating does not provide recommendations for those under the age of 4. These figures are those referred to in the 2007 National Children’s Nutrition and Physical Activity Survey.  
One serve of fruit is 150 grams of fresh fruit or: 1 medium piece, 2 small pieces, or 1 cup of chopped or canned fruit  
One serve of vegetables is 75 grams or: ½ cup cooked vegetables or cooked legumes, 1 medium potato, or 1 cup of salad vegetables.  
Calculation:  
Expressed as the average number of fruit and vegetables are consumed by children aged between 5 and 17 years of age.  
How data is presented:  
- Data is provided for South Australia between financial years 2009 – 2011. The graph also illustrates the 2013 and 2015 targets.  
| Caveats | Self-reporting bias.  
Survey excludes people without a telephone number listed in the Electronic White Pages. |
| Reporting Schedule | Annual |
### 2-21. Exercise – Participation in Organised Sport and/or Dancing – Children Aged 5 – 14 Years

#### Rationale

Low levels of physical activity are a major risk factor for ill health and mortality from all causes. People who do not do sufficient physical activity have a greater risk of cardiovascular disease, colon and breast cancers, Type 2 diabetes and osteoporosis. Being physically active improves mental and musculoskeletal health and reduces other risk factors such as overweight, high blood pressure and high blood cholesterol (Australian Institute of Health and Welfare, 2012).


#### Factors contributing to the outcome

Socioeconomic status. Overweight/obesity

#### SA Target

n/a

#### Data Source

Australian Bureau of Statistics (ABS), Children’s Participation in Cultural and Leisure Activities, Cat No. 4901.0.


#### Definition and Calculation

**Definition:**

Data is collected from the survey of Children’s Participation in Cultural and Leisure Activities which is conducted throughout Australia as part of the Australian Bureau of Statistics Monthly Population Survey (MPS).

Most recent data is for 2009 and relates to children aged 5 – 14 years.

Relates to participation in organised sport and/or dancing outside of school hours during the 12 months prior to interview in April of the survey year.


**Calculation:**

Data is expressed as a percentage (%)

Numerator – number of children participating in organised sport and/or dancing.

Denominator – total number of children.

**How data is presented:**

- The proportion of South Australian children participating in organised sport and/or dancing compared to all other states and territories.

#### Caveats

Subject to sampling and non-sampling error.

Sampling error is the difference between the published estimate and the value that would have been produced if all in-scope children had been included in the survey.

Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers, and errors made in coding and processing data.

#### Reporting Schedule

Every three years. Previous surveys are: 2000, 2003, and 2006.
### 2-22. Childhood Obesity (ages 5 – 14 years)

**Rationale**

The increasing prevalence of overweight and obesity in Australian children is a serious public health concern. In the short-term, children who are overweight or obese frequently experience psycho-social problems such as poor body image, disordered eating, low self-esteem and teasing by their peers. Overweight and obese children may also develop a range of health problems including asthma, sleep apnoea and early development of risk factors for heart disease such as raised blood pressure. Research also shows that young people who were overweight or obese as children are likely to be overweight as adults (Australian Institute of Health and Welfare, 2005).


**Factors contributing to the outcome**

Inactive or sedentary lifestyle. Unhealthy eating. Socioeconomic status. Education/health literacy

**SA Target**

Target 82: Increase by five percentage points the proportion of South Australian adults and children at a healthy body weight by 2017.

**Data Source**

Australian Institute of Health and Welfare (AIHW). Children’s Headline Indicators, Overweight and obesity Headline Indicator (2007-08)


**Definition**

Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity. BMI scores were derived using Quetelet’s metric body mass index which is calculated as weight (kg) divided by height (m)².

The classification of children’s BMI takes into account individual age and sex, the cut off points for overweight and obese children are presented in the table below. Cut-off points for each grouping for children are based on corresponding cut off points for persons aged 18 years and over, e.g. a score of 22.77 for a 9 year old boy is equivalent to a score of 30 (obese) for an adult.

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys</th>
<th></th>
<th>Girls</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overweight</td>
<td>Obese</td>
<td>Overweight</td>
<td>Obese</td>
</tr>
<tr>
<td>5</td>
<td>17.42</td>
<td>19.30</td>
<td>17.15</td>
<td>19.17</td>
</tr>
<tr>
<td>5.5</td>
<td>17.45</td>
<td>19.47</td>
<td>17.20</td>
<td>19.34</td>
</tr>
<tr>
<td>6</td>
<td>17.55</td>
<td>19.78</td>
<td>17.34</td>
<td>19.65</td>
</tr>
<tr>
<td>6.5</td>
<td>17.71</td>
<td>20.23</td>
<td>17.53</td>
<td>20.08</td>
</tr>
<tr>
<td>7</td>
<td>17.92</td>
<td>20.63</td>
<td>17.75</td>
<td>20.51</td>
</tr>
<tr>
<td>7.5</td>
<td>18.16</td>
<td>21.09</td>
<td>18.03</td>
<td>21.01</td>
</tr>
<tr>
<td>8</td>
<td>18.44</td>
<td>21.60</td>
<td>18.35</td>
<td>21.57</td>
</tr>
<tr>
<td>8.5</td>
<td>18.76</td>
<td>22.17</td>
<td>18.69</td>
<td>22.18</td>
</tr>
<tr>
<td>9</td>
<td>19.10</td>
<td>22.77</td>
<td>19.07</td>
<td>22.81</td>
</tr>
<tr>
<td>9.5</td>
<td>19.46</td>
<td>23.39</td>
<td>19.45</td>
<td>23.46</td>
</tr>
<tr>
<td>10</td>
<td>19.84</td>
<td>24.00</td>
<td>19.86</td>
<td>24.11</td>
</tr>
<tr>
<td>10.5</td>
<td>20.20</td>
<td>24.57</td>
<td>20.29</td>
<td>24.77</td>
</tr>
<tr>
<td>11</td>
<td>20.55</td>
<td>25.10</td>
<td>20.74</td>
<td>25.42</td>
</tr>
<tr>
<td>11.5</td>
<td>20.89</td>
<td>25.58</td>
<td>21.20</td>
<td>26.05</td>
</tr>
<tr>
<td>12</td>
<td>21.22</td>
<td>26.02</td>
<td>21.68</td>
<td>26.67</td>
</tr>
<tr>
<td>12.5</td>
<td>21.56</td>
<td>26.43</td>
<td>22.14</td>
<td>27.24</td>
</tr>
<tr>
<td>13</td>
<td>21.91</td>
<td>26.84</td>
<td>22.58</td>
<td>27.76</td>
</tr>
<tr>
<td>13.5</td>
<td>22.27</td>
<td>27.25</td>
<td>22.98</td>
<td>28.20</td>
</tr>
<tr>
<td>14</td>
<td>22.62</td>
<td>27.63</td>
<td>23.34</td>
<td>28.57</td>
</tr>
<tr>
<td>14.5</td>
<td>22.96</td>
<td>27.98</td>
<td>23.66</td>
<td>28.87</td>
</tr>
<tr>
<td>15</td>
<td>23.29</td>
<td>28.30</td>
<td>23.94</td>
<td>29.22</td>
</tr>
<tr>
<td>15.5</td>
<td>23.60</td>
<td>28.60</td>
<td>24.17</td>
<td>29.29</td>
</tr>
<tr>
<td>16</td>
<td>23.90</td>
<td>28.88</td>
<td>24.37</td>
<td>29.43</td>
</tr>
<tr>
<td>16.5</td>
<td>24.19</td>
<td>29.14</td>
<td>24.54</td>
<td>29.56</td>
</tr>
<tr>
<td>17</td>
<td>24.46</td>
<td>29.41</td>
<td>24.70</td>
<td>29.69</td>
</tr>
<tr>
<td>17.5</td>
<td>24.73</td>
<td>29.70</td>
<td>24.85</td>
<td>29.84</td>
</tr>
<tr>
<td>18</td>
<td>25.00</td>
<td>30.00</td>
<td>25.00</td>
<td>30.00</td>
</tr>
</tbody>
</table>
### Calculation

**Calculation:**
Expressed as a percentage (%)

Numerator – Number of boys and girls with a self-reported BMI classified as overweight or obese in the National Health Survey 2007-08.

Denominator – Total number of boys and girls in the National Health Survey 2007-08.

**How data is presented:**
The prevalence of overweight and obese children is presented as a comparison between all States and Territories for boys and girls.

Prevalence rates for all South Australia children are compared to the national average by specific groups:
- **Age Bands:** 5 – 9 years and 10-14 year olds
- **Living situation:** couple with children under 15, and lone parent with children under 15.
- **Socioeconomic status:** Low SES areas and high SES areas.

### Caveats

Through the National Health Survey, BMI is a self-reported measure and therefore may be an under-representation or over-representation of actual levels of obesity.

Age was only available for whole years in the National Health Survey; therefore BMI calculations were based on the half-year cut off points, as these were considered to provide an essentially unbiased estimate of prevalence. For example, a child who is recorded in the survey as being 7 years old may have just turned seven, or may be shortly turning 8, so the half year cut off provides a mid-point across all 7 year olds in the survey.

### Reporting Schedule

The first wave of the next survey will be conducted over 2011-12, with results available in late 2012.
### 2-23. Children Developmentally at Risk and Vulnerable in the First Full Year of Full-Time School

#### 2-23-1. Children Developmentally at Risk - Physical Health and Wellbeing

<table>
<thead>
<tr>
<th>Rationale</th>
<th>This indicator highlights how children are developing in comparison to other children in the South Australian community and in other communities across Australia.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Socioeconomic status.</td>
</tr>
<tr>
<td>SA Target</td>
<td>Target 12: To increase the proportion of children developing well (baseline year is 2009).</td>
</tr>
</tbody>
</table>

[Accessed: 17/09/2012] |

| Definition and Calculation | Definition: This indicator refers to children who were in their first full year of full-time school in 2009. The Australian Early Development Index (AEDI) domain of physical health and wellbeing comprises of the following outcomes:  
- Physical readiness for the day  
- Physical independence  
- Gross and fine motor skills  
Children who are 'developmentally at risk' score between the 10th and 25th percentile of the national AEDI population.  
Calculation: Data is expressed as a percentage (%)  
Numerator – Number of children scoring between the 10th and 25th percentile  
Denominator – Total number of children  
How data is presented: The percentage of developmentally at risk children in terms of physical health and wellbeing is presented for South Australia compared to all states and territories and the national average. |

| Caveats | Results for children with special needs are not included in the results. If there are a certain number of questions not answered by teachers these children do not contribute to the domain analyses. |
| Reporting Schedule | Annually. The next data collection takes place from May to July 2012 and results are expected in 2013. |
### 2-23-2 & 2-25-3. Developmental Vulnerability and Aboriginal Children Developmentally Vulnerable

<table>
<thead>
<tr>
<th><strong>Rationale</strong></th>
<th>This indicator is a measure of a child’s development at the time they start school.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors contributing to the outcome</strong></td>
<td>Socioeconomic status. Learning disability. Home and family environment</td>
</tr>
<tr>
<td><strong>SA Target</strong></td>
<td>Target 12: To increase the proportion of children developing well (baseline year is 2009).</td>
</tr>
</tbody>
</table>


| **Definition and Calculation** | **Definition:**
This indicator includes children who were assessed as being developmentally vulnerable in one or more domains of the Australian Early Development Index (AEDI).

Data relates to 2009 and children in their first full year of full-time school.

The five different areas which comprise the AEDI are:
- Physical health and wellbeing
- Social competence
- Emotional maturity
- Language and cognitive skills
- Community skills and general knowledge

Children who score in the lowest 10% of the AEDI population are classed as developmentally vulnerable. These children demonstrate a much lower than average ability in the developmental competencies measured in that domain.

**Calculation:**
Expressed as a percentage (%)

Numerator - Number of children in the lower 10% of the AEDI population in at least one domain.

Denominator – Total number of children assessed.

**How data is presented:**
- The proportion of developmentally vulnerable children in South Australia is presented in comparison to all States and Territories and to the national average.
- The proportion of developmentally vulnerable children in South Australia is presented according to low and high socioeconomic status in comparison to the national average.
- The proportion of Aboriginal South Australian children developmentally vulnerable compared to all States and Territories and the average for Australia as a whole.

| **Caveats** | Data is also available by sex and remoteness area but are not included within the report. |
| **Reporting Schedule** | The National Assessment Program – Literacy ad Numeracy (NAPLAN) tests are conducted in May each year for all students across Australia in Years 3, 5, 7, and 9. |
## 2-24. Educational Outcomes

### 2-24-1, 2-24-2, 2-24-3, & 2-24-4. Educational Outcomes – Reading and Numeracy (School Year 5)

#### Rationale

Reading and numeracy and among the important foundation skills that children need during their education and through life. Achieving the minimum standard of reading and numeracy skills is an essential base level for developing required life skills and for further educational attainment.

#### Factors contributing to the outcome

| Socioeconomic status, Learning disability, Indigenous status |

#### SA Target

**Target 87:** By 2020, for reading, writing and numeracy, increase by five percentage points the proportion of South Australian students who achieve:

- above the National Minimum Standard
- higher proficiency bands

#### Data Source


#### Definition and Calculation

**Definition:**

NAPLAN results are reported using five national achievement scales, one for each of the NAPLAN assessment domains of Reading, Writing, Spelling, Grammar and Punctuation, and Numeracy. In 2011, results for Writing were reported on the Persuasive Wiring scale.

Each scale consists of ten bands which represent the increasing complexity of the skills and understanding assessed by NAPLAN from Years 3 to 9. Six bands are used for reporting performance in each year level. Students raw test scores are converted to NAPLAN scale scores so that the scores can be located on the national domain scales.

For children in Year 5, scores are allocated between bands 3 and 8.

- **Band 3** – Students are below the national minimum standard.
- **Band 4** – Students are at the national minimum standard.
- **Band 5 – 8** – Students are above the national minimum standard.

**Calculation:**

Expressed as a percentage (%)

**Numerator** – The number of children achieving reading and numeracy scores at band 4 – 8 level.

**Denominator** – The total number of children participating in the NAPLAN assessment.

**How data is presented:**

- 2008-2011 trend of the proportion of year 5 children at or above the national minimum standard (bands 4 – 8) for South Australian compared to the national trend.
- The percentage of year 5 children who are at or above the national minimum standard (bands 4 – 8) for all Australian States and Territories compared to the national average.
- The percentage of Aboriginal year 5 children who are at or above the national minimum standard (bands 4 – 8) for all Australian States and Territories compared to the national average.

#### Caveats

Geolocation (metro, provincial, remote and very remote) data is also available but not included within the report.

#### Reporting Schedule

The National Assessment Program – Literacy and Numeracy (NAPLAN) tests are conducted in May each year for all students across Australia in Years 3, 5, 7, and 9.
### Chapter 3. Staying Healthy and Ageing Well Technical Appendix

#### 3-1. Life Expectancy

| Rationale | Life expectancy at birth is one of the most widely used and internationally recognised indicators of population health. Life expectancy at birth reflects the overall mortality level of a population. It summarises the mortality pattern that prevails across all age groups – children and adolescents, adults and the elderly (World Health Organisation, 2012). |
| Factors contributing to the outcome | Social policy. Expenditure on health. Socioeconomic status. Indigenous status. Health behaviours e.g. smoking |
| SA Target | n/a. |


| Definition and Calculation | Definition: The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex and age specific death rates prevailing at the time of his or her birth, for a specific year, in a given area. Most recent data is for 2010. Calculation: Life expectancy is calculated using the ‘life table’ tool. These are constructed by taking death rates from the population in question and applying them to a hypothetical cohort of persons. Data is expressed as the number of years at birth (2010) a person can expect to live. How data is presented: The 2005 – 2010 life expectancy trend is presented for South Australian males and females at a metropolitan Adelaide and Country SA level. |

| Caveats | Life expectancy is only a guide to the health of a population at a specific point in time and it not a prediction about how long people alive today will actually live. Changes in mortality at younger ages have a large impact on life expectancy than changes at older ages. For example, infants surviving into adulthood and living long lives will add a considerable number of person years to the population when compared to the elderly living only a few extra years. |

| Reporting Schedule | Annually. |
### 3-1-1. (cont’d) Life Expectancy in South Australia

|---|---|

<table>
<thead>
<tr>
<th>Definition and Calculation</th>
<th>Definition: The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex and age specific death rates prevailing at the time of his or her birth, for a specific year, in a given area. Data is for 2010 and refers to the OECD average. Calculation: Data is expressed as the number of years at birth a person can expect to live. Calculation and methodology can vary slightly between countries. How data is presented: The male and female OECD 2010 average life expectancy is provided in each corresponding table.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Caveats</th>
<th>The methodology used to calculate life expectancy can vary slightly between countries. This can change a country’s estimates by a fraction of a year.</th>
</tr>
</thead>
</table>

| Reporting Schedule | Unknown. |
### 3-1-2. & 3-1-3. Male and Female Life Expectancy at Birth – National Comparison

#### Rationale

Life expectancy at birth is one of the most widely used and internationally recognised indicators of population health. Life expectancy at birth reflects the overall mortality level of a population. It summarises the mortality pattern that prevails across all age groups – children and adolescents, adults and the elderly (World Health Organisation, 2012).


#### Factors contributing to the outcome

Social policy. Expenditure on health. Socioeconomic status. Indigenous status. Health behaviours e.g. smoking.

#### SA Target

n/a.

#### Data Source


#### Definition and Calculation

**Definition:**
The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex and age specific death rates prevailing at the time of his or her birth, for a specific year, in a given area.

Data relates to 2010.

**Calculation:**
Life expectancy is calculated using the ‘life table’ tool. These are constructed by taking death rates from the population in question and applying them to a hypothetical cohort of persons.

Data is expressed as the number of years at birth (2010) a person can expect to live.

**How data is presented:**
The 2010 life expectancy is presented for male and female South Australians compared to all other States and Territories and the national average.

**Caveats**

Life expectancy is only a guide to the health of a population at a specific point in time and it not a prediction about how long people alive today will actually live.

Changes in mortality at younger ages have a large impact on life expectancy than changes at older ages. For example, infants surviving into adulthood and living long lives will add a considerable number of person years to the population when compared to the elderly living only a few extra years.

**Reporting Schedule**

Annually.
### 3-1-4. Health Adjusted Life Expectancy in South Australia

| Rationale | With the increase in life expectancy in Australia being driven mainly by people living longer into old age, we need to question whether people are spending those extra years of life in poor health. The issue of ‘healthy life expectancy’ stresses that increases in life expectancy alone are not important. What is important is that people live longer lives in better health (Australian Institute of Health and Welfare, 2012). |
| SA Target | Target 78: To increase the healthy life expectancy of South Australians to 73.4 years (6%) for males and 77.9 years (6%) for females by 2020. Baseline year is 1999 – 2001 (South Australian Strategic Plan). |

#### Data Source 1
South Australia Burden of Disease Study, SA Health 2006-08. 
[Accessed: 16/05/2012]

#### Definition and Calculation

**Definition:**
Health Adjusted Life Expectancy (HALE) is an estimate of the number of healthy years (free from disability or disease) that a person born in a particular year can expect to live, based on current trends in deaths and disease patterns. The average number of years spent in unhealthy states is subtracted from the overall life expectancy, taking into account the severity of such states.

**Calculation:**
Data is expressed as the estimated number of years a person can expect to live in good health (free from disability or disease).  
Data is expressed as a three year average (2006 – 2008).  
Numerator – Years of healthy years (free from disability)  
Denominator – Life expectancy  

**How data is presented:**
Estimated HALE for South Australians at exact age and by sex, compared with overall life expectancy.

#### Caveats
Latest data for 2006-2008 is still labelled by SA Health as ‘provisional’.

#### Reporting Schedule
Unknown.
### 3-1-4. (cont’d) Health Adjusted Life Expectancy in South Australia

**Data Source 2**  
OECD (2011), OECD Family Database, OECD, Paris  
[Accessed: 04/12/2012]

**Definition and Calculation**

**Definition:**  
Data relates to 2008.

Health Adjusted Life Expectancy (HALE) is an estimate of the number of healthy years (free from disability or disease) that a person born in a particular year can expect to live, based on current trends in deaths and disease patterns. The average number of years spent in unhealthy states is subtracted from the overall life expectancy, taking into account the severity of such states.

The data is sourced from the WHO statistical information system (WHOSYS) and HALE is calculated using the WHO Global Burden of Disease Study, WHO Multi-Country Study (MCSS) and World Health Survey (WHS).

**Calculation:**  
Data is expressed as the estimated number of years a person can expect to live in good health (free from disability or disease).

- **Numerator** – Years of healthy years (free from disability)
- **Denominator** – Life expectancy

**How data is presented:**  
The OECD average of HALE in 2008 for males and females.

**Caveats**  
Unknown.

**Reporting Schedule**  
Unknown.
## 3-1-5. Life Expectancy in South Australia from Various Ages

### Rationale
This indicator allows us to observe life expectancy for a certain year and by specific age. The indicator reflects the cumulative effect of the impact of risk factors, occurrence and severity of disease, and effectiveness of interventions and treatment over time (ECHIM, 2010).


### Factors contributing to the outcome

### SA Target
n/a.

### Data Source
Australian Bureau of Statistics, Deaths, Australia, Cat. No. 3302.0, Table 3: Life expectancy, Selected age, States and territories – 2000 to 2010, table 3.4.


### Definition and Calculation
**Definition:**
Life expectancy at a given age represents the average number of years of life remaining if a group of persons at that age were to experience the mortality rates for a particular year over the course of their remaining life.

**Calculation:**
Life expectancies are calculated using life tables presenting age specific mortality rates.

Refer to the following link for further explanatory notes:

**How data is presented:**
- The growth in life expectancy from 2000 – 2010 is presented for males and females at specific age groups (new born, 25 years, 45 years, 65 years and 85 years).

### Caveats
Deaths data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data.

### Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS)
### 3-1-6. Aboriginal Life Expectancy at Birth – National Data

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Life expectancy at birth is one of the most widely used and internationally recognised indicators of population health. Life expectancy at birth reflects the overall mortality level of a population. It summarises the mortality pattern that prevails across all age groups – children and adolescents, adults and the elderly (World Health Organisation, 2012).</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

| --- | --- |
| Definition and Calculation | **Definition:**
The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex and age specific death rates prevailing at the time of his or her birth, for a specific year, in a given area.

Most recent data related to 2005-07.

**Calculation:**
Life expectancies are calculated using life tables presenting age specific mortality rates.


**How data is presented:**
2005-07 life expectancy for the Australian Aboriginal population is presented for males and females and compared against the life expectancy of non-Aboriginal Australians. |
| Caveats | Aboriginal life expectancy for South Australia as unavailable. Deaths data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data. |
| Reporting Schedule | Unknown. |
### 3-2. Health Status

#### 3-2.1. Self-Reported Health Status in South Australia

**Rationale**

Self-reported health status is a frequently used general indicator of health and wellbeing. It refers to both physical and mental health as assessed by an individual according to their personal values. This indicator has been found to be a strong indicator of future health care use and mortality (University of Adelaide, 2011).

University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011: Justification of topics.

**Factors contributing to the outcome**


**SA Target**

n/a.

**Data Source**

- Data is unpublished and was requested from: [http://health.adelaide.edu.au/pros/data/samss/#data](http://health.adelaide.edu.au/pros/data/samss/#data)
  - [Accessed: February 2012]

**Definition and Calculation**

**Definition:**

Data is obtained from the South Australian Monitoring and Surveillance System and relates to the 16+ population.

Respondents were asked: *In general, would you say your health is excellent, very good, good, fair or poor?*

Most recent data is for 2011.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Survey respondents (aged 16+) who self-assessed their general health status as excellent, very good, good, fair or poor.

Denominator – Total number of surveyed people (aged 16+)

**How data is presented:**

- The trend of the proportion of South Australians reporting good, very good, or excellent health between 2002 and 2011 according to metropolitan Adelaide and country SA area of residence.
- The proportion of South Australians reporting excellent, very good, good, fair, and poor health according to metropolitan Adelaide and country SA area of residence.
- The proportion of male and female South Australians reporting good, very good or excellent health by specific age band.
- The proportion of South Australians reporting good, very good, or excellent health according to quintile of socioeconomic status (also with 95% confidence intervals).

**Caveats**

This indicator is based on self-reported health according to a person’s own values and interpretation of very good or poor health.

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 3-2-2.)

**Reporting Schedule**

SAMSS data is collected and reported on a monthly basis.
### 3-2-2. Self-Reported Health Status – National Comparison

| Rationale | The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for. Self-reported health status is a frequently used general indicator of health and wellbeing. It refers to both physical and mental health as assessed by an individual according to their personal values. This indicator has been found to be a strong indicator of future health care use and mortality (University of Adelaide, 2011). University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011: Justification of topics. |
| SA Target | n/a. |


| Definition and Calculation | **Definition:** Data is obtained from the Australian Health Survey and relates to the 15+ population. Respondents were asked: "In general, would you say your health is excellent, very good, good, fair or poor?" The most recent data is for 2011-12. **Calculation:** Data is expressed as a percentage (%). Numerator – Survey respondents (aged 15+) who self-assessed their general health status as excellent or very good. Denominator – Total number of surveyed people (aged 15+) **How data is presented:** The proportion of South Australians reporting excellent or very good health status compared to six other States and Territories and the national average. |
| Caveats | This indicator is based on self-reported health according to a person’s own values and interpretation of very good or poor health. |
| Reporting Schedule | Unknown. The previous National Health Survey was in 2007-08. |
3-2-2. (cont’d) Self-Reported Health Status – National Comparison

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition and Calculation</td>
<td>Definition: Data relates to 2009. Calculation: Data is expressed as a percentage (%) Numerator – Number of adults surveyed reporting to be in good health Denominator – Total number of adults surveyed How data is presented: The 2009 OECD average of adults reporting good health is outlined in the comparator table.</td>
</tr>
<tr>
<td>Caveats</td>
<td>This indicator is based on self-reported health according to a person’s own values and interpretation of very good or poor health. Since they rely on the subjective views of the respondents, self-reported health status may reflect cultural biases or other influences. Caution is required when comparing against the OECD comparator as the response scale used in Australia is asymmetric (skewed on the positive side) including the following response categories: ‘excellent, very good, good, fair or poor’. The data reported in OECD Health Data refer to respondents answering on of the three positive responses (‘excellent, very good or good’). By contrast, in most other OECD countries, the response scale is symmetric, with response categories being: ‘very good, good, fair, poor, very poor’. The data reported from these countries refer only to the first two categories (‘very good, good’). Such a difference in response categories biases upward the results from countries that are using an asymmetric scale.</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>Unknown.</td>
</tr>
</tbody>
</table>
### 3-2-3. Aboriginal Self-Assessed Health Status

**Rationale**

Self-reported health status is a frequently used general indicator of health and wellbeing. It refers to both physical and mental health as assessed by an individual according to their personal values. This indicator has been found to be a strong indicator of future health care use and mortality (*University of Adelaide, 2011*).

*University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011: Justification of topics.*

**Driver of the outcome**


**Target**

n/a.

<table>
<thead>
<tr>
<th>Data Source 1</th>
</tr>
</thead>
</table>

**Definition and Calculation**

**Definition:**

Data was obtained from the National Aboriginal and Torres Strait Islander Social Survey relates to the 15+ population.

The self-assessed measure is based on the persons overall physical and mental health both generally and in comparison to the period on year prior to the survey interview. All people were asked to rate their health on the following scale: excellent, very good, good, fair or poor.

Most recent data is for 2008.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Aboriginal survey respondents (aged 15+) who self-assessed their general health status as excellent, very good or good.

Denominator – Total number of surveyed Aboriginal persons (aged 15+)

**How data is presented:**

- The proportion of Aboriginal South Australians reporting excellent, very good or good health status compared to all other States and Territories and the national average.

**Caveats**

This indicator is based on self-reported health according to a person’s own values and interpretation of very good or poor health.

**Reporting Schedule**

Unknown.
### 3-3. Protective Factors – Family and Community Support

#### 3-3-1. & 3-3-2. Daily Face to Face Social Contact (with family or friends living outside the household)

| Rationale | This indicator highlights the importance of socialisation for people on a day to day basis. Relationships and networks are at the core of society and are essential to individual wellbeing. People are linked together with family and friends, and in wider communities characterised by shared interests, sympathies or living circumstances *(Australian Bureau of Statistics, 2011).*


| Factors contributing to the outcome | Support Networks. Living Location. Socioeconomic Status. Employment Status |
| SA Target | n/a. |

| Data Source | Australian Bureau of Statistics, General Social Survey, South Australia 2010, Cat. No. 4159.4.55.003. Released at 11.30am (AEST) 16/03/2012 (first issue).


| Definition and Calculation | Definition:

Data is obtained from the 2006 General Social Survey and relates to the 18+ population.

Refer to the following link for further explanatory notes:


Calculation:

Expressed as a percentage (%)

Numerator – Number of respondents identifying that they have had daily face to face contact (with family or friends living outside the household).

Denominator – Total number of respondents.

How data is presented:

- 2006 and 2010 proportion of South Australians having daily face to face contact compared to Australia as a whole.
- The proportion of South Australians having daily face to face contact in 2010 compared to all States and Territories and the national average.
- The proportion of male and female South Australians having daily face to face contact as compared to all States and Territories and the national average.

| Caveats | Sample surveys are subject to both sampling and non-sampling error. |
| Reporting Schedule | Unknown. Previous General Social Survey was in 2002. |
3-3-3. & 3-3-4. Support in a Time of Crisis (from persons living outside the household)

Rationale
Having support networks outside of the household is crucial for generating feelings of trust and maintaining social networks. This type of indicator provides an indication on the connectedness within a community, which is essentially a ‘protective factor’ in maintaining a healthy life (Australian Bureau of Statistics, 2009).


Factors contributing to the outcome
Social Networks. Socioeconomic Status.

SA Target
n/a

Data Source
Australian Bureau of Statistics, General Social Survey 2010, States and Territories 2010 Cat. No. 4159.4.55.003. Released at 11.30am (AEST) 16/03/2012.
[Accessed: 15/05/2012]

Definition and Calculation
Definition:
Data is obtained from the 2006 General Social Survey and relates to the 18+ population.
Refers to whether there is someone outside the person’s household that could be asked for support in a time of crisis. Support could be in the form of emotion, physical or financial help. Potential sources of support could be family members, friends, neighbours, work colleagues and various community, government and professional organisations.

Refer to the following link for further explanatory notes:

Calculation:
Expressed as a percentage (%)
Numerator – Number of respondents identifying that they have support in a time of crisis.
Denominator – Total number of respondents.

How data is presented:
- 2006 and 2010 proportion of South Australians having support in a time of crisis compared to Australia as a whole.
- The proportion of South Australians having support in a time of crisis in 2010 compared to all States and Territories and the national average.
- The proportion of male and female South Australians having support in a time of crisis by age band.
- The proportion of male and female South Australians having support in a time of crisis as compared to all States and Territories and the national average.

Caveats
Sample surveys are subject to both sampling and non-sampling error.

Reporting Schedule
Unknown. Previous General Social Survey was in 2002.
### 3-3-5. Aboriginal Support in a Time of Crisis (from persons living outside the household)

<table>
<thead>
<tr>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having support networks outside of the household is crucial for generating feelings of trust and maintaining social networks. This type of indicator provides an indication on the connectedness within a community, which is essentially a ‘protective factor’ in maintaining a healthy life (Australian Bureau of Statistics, 2009).</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Factors contributing to the outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Networks. Socioeconomic Status</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SA Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Source</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Definition and Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong></td>
</tr>
<tr>
<td>Data is obtained from the 2008 National Aboriginal and Torres Strait Islander Social Survey 2009 and relates to the 15+ population.</td>
</tr>
</tbody>
</table>

| Refers to the existence of a support network outside a person’s household. Such support could be called on in a time of crisis and could take the form of emotional, physical and/or financial help. |


| **Calculation:** |
| Expressed as a percentage (%) |

| Numerator – Number of respondents identifying that they have support in a time of crisis. |

| Denominator – Total number of respondents. |

| **How data is presented:** |
| The proportion of Aboriginal South Australians having support in a time of crisis in 2010 compared to all States and Territories and the national average. |

| Caveats |
| Sample surveys are subject to both sampling and non-sampling error. |

| Reporting Schedule |
| Unknown. Previous General Social Survey was in 2002. |
### 3-3-6. & 3-3-7. Community Trust

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Socioeconomic Status. Deprivation. Levels of Crime/Violence</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

#### Data Source

Australian Bureau of Statistics, General Social Survey 2010, States and Territories 2010 Cat. No. 4159.4.55.003. Released at 11.30am (AEST) 16/03/2012 (first issue).


#### Definition and Calculation

**Definition:**

Data is obtained from the General Social Survey and relates to the 18+ population.

To ascertain people’s feelings of trust in other people in the community, they were asked how strongly they agreed or disagreed, giving a rating on a 5-point scale. The response categories were: ‘strongly agree’, ‘somewhat agree’, ‘neither agree nor disagree’, ‘somewhat disagree’, and ‘strongly disagree’.


**Calculation:**

Expressed as a percentage (%)

Numerator – Number of respondents who ‘strongly agree/agree’ that most people in their community can be trusted.

Denominator – Total number of respondents

**How data is presented:**

- 2006 and 2010 proportion of South Australians who agree that most people in the community can be trusted compared to Australia as a whole.
- The proportion of South Australians who agree that most people in the community can be trusted in 2010 compared to all States and Territories and the national average.
- The proportion of male and female South Australians who agree that most people in the community can be trusted as compared to all States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error

**Reporting Schedule**

Unknown. Previous General Social Survey was in 2002.
### 3-3-8. & 3-3-9. Acceptance of Different Cultures

**Rationale**

Increasing migration in South Australia means that the population is becoming more diverse and this indicator signifies the level of acceptance of diversity and inclusiveness in the community, which can also be viewed as a ‘protective factor’ in living a healthy life (Australian Bureau of Statistics, 2012).


**Factors contributing to the outcome**

- Community Connectedness
- Levels of trust in the community
- Age

**SA Target**

Target 5: Maintain the high rate of South Australians who believe cultural diversity is a positive influence in the community (South Australian Strategic Plan).

**Data Source**

Australian Bureau of Statistics, General Social Survey 2010, States and Territories 2010 Cat. No. 4159.4.55.003. Released at 11:30am (AEST) 16/03/2012 (first issue).


[Accessed: 07/08/2012]

**Definition and Calculation**

**Definition:**

Data is obtained from the General Social Survey and relates to the 18+ population.

This question was new for the 2010 General Social Survey and was designed to gauge community acceptance of different cultures. The question asks respondents the extent to which they agree or disagree with the following statement: ‘that it is a good thing for a society to be made up of people from different cultures’.


**Calculation:**

Expressed as a percentage (%)

Numerator – Number of respondents who strongly agree/agree that it is a good thing for a society to be made up of people from different cultures.

Denominator – Total number of respondents

**How data is presented:**

- The proportion of South Australians who agree that it is a good thing for a society to be made up of people from different cultures in 2010 compared to all States and Territories and the national average.
- Proportion of South Australians who agree that it is a good thing for a society to be made up of people from different cultures by age band.
- The proportion of male and female South Australians who agree that it is a good thing for a society to be made up of people from different cultures as compared to all States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error

**Reporting Schedule**

Unknown. Previous General Social Survey was in 2002.
### 3-4. Protective Factors – Community Participation

#### 3-4-1. Participation in a Community Event (in the last 6 months)

| Rationale | Participation in community events can be indicative of general sense of belonging and people’s perception of friendliness in the community \(\text{Australian Bureau of Statistics, 2012}\).  
| --- | ---  

| Factors contributing to the outcome | Community Connectedness. Levels of trust in the community. Age. |

| SA Target | Target 23: Increase the proportion of South Australians participating in social, community and economic activities by 2020. |

| Data Source | Australian Bureau of Statistics, General Social Survey 2010, States and Territories 2010 Cat. No. 4159.4.55.003. Released at 11.30 am (AEST) 16/03/2012 (first issue).  
| --- | ---  |

**Definition:**  
Data is obtained from the General Social Survey and relates to persons aged 18 years and over.  
Respondents are asked: 'Since [date of 6 months ago], have you attended any events that bring people together such as fetes, shows, festivals or other community events?'  

**Calculation:**  
Expressed as a percentage (%)  
Numerator – Number of respondents who participated in a community event in the previous 6 months.  
Denominator – Total number of respondents  
**How data is presented:**  
- The proportion of South Australians who participated in a community event during the previous six months in 2010 compared to all States and Territories and the national average.  
- Proportion of South Australians who participated in a community event during the previous six months in 2010 by age band.  

**Caveats**  
Sample surveys are subject to both sampling and non-sampling error.  

**Reporting Schedule**  
Unknown. Previous General Social Survey was in 2002.
### 3-4-2. Volunteering (in the last 12 months)

**Rationale**
Volunteers contribute to the community and benefit personally through increased satisfaction, development of social networks, learning new skills and gaining work experience.

Willingly giving time to do work for an organisation or community group on an unpaid basis can be rewarding for individuals, and it can extend and enhance their social networks. For example, volunteering encourages interaction between people and can strengthen the bond within the community (Australian Bureau of Statistics, 2011).

Australian Bureau of Statistics (2011) Volunteering Rates. Cat.No. 4125.0 Gender Indicators, Australia, Jan 2012. Released at 11.30am (AEST) 07/02/2012.

**Factors contributing to the outcome**
Socioeconomic Status. Community Cohesion.

**SA Target**
Target 24: To maintain a high level of formal and informal volunteering in South Australia at 70% participation rate or higher *(South Australian Strategic Plan)*.

**Data Source**
Australian Bureau of Statistics, 2011 Census of Population and Housing, Basic Community Profile (Cat. No. 2001.0) B19 Voluntary Work for an Organisation or group by Age by Sex.

[Accessed: 07/08/2012]

**Definition and Calculation**
**Definition:**
Voluntary work for an organisation or group consists of help willingly given, in the form of time, service or skills, to a club, organisation, or association in the previous 12 months.

Relates to population aged 15+.

This data relates to the 2011 Census and are based on a person’s ‘usual place of residence’.

Refer to the following link for further Census information:

**Calculation:**
Expressed as a percentage (%)

Numerator – Number of respondents identifying that they had volunteered in the last 12 months

Denominator – Total number of respondents

**How data is presented:**
- The 2006 and 2010 proportion of South Australians volunteering in the last 12 months compared to Australia as a whole.
- The 2010 proportion of South Australians volunteering in the last 12 months as compared to all other States and Territories and the national average.
- The proportion of South Australian males and females volunteering in the last 12 months by age band.

**Caveats**
The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

Some forms of unpaid work, such as student placements or work under a Community Service Order that were not strictly voluntary have been excluded.

**Reporting Schedule**
Census is carried out every five years.
### 3-4-3. Able to Have a Say within the Community on Important Issues

| Rationale | The ability to have a say in local issues is a key aspect of citizenship, and contributes to an individual’s sense of identity, empowerment and community membership *(Australian Bureau of Statistics, 2012).*  

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver of the outcome</td>
<td>Socioeconomic Status. Community Cohesion.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
</tbody>
</table>
| Data Source | Australian Bureau of Statistics, General Social Survey 2010, States and Territories 2010, Cat. No. 4159.4.55.003. Released at 11.30am (AEST) 16/03/2012 (first issue).  


[Accessed: 17/08/2012] |
| Definition and Calculation | **Definition:**  

Data is obtained from the General Social Survey and relates to the 18+ population.  

Respondents are asked: ‘How often do you feel that you are able to have a say within the general community, on issues that are important to you?’  


**Calculation:**  

Expressed as a percentage (%)  

Numerator – Number of respondents with who felt that had a say within the community ‘all/most of the time’.  

Denominator – Total number of respondents.  

**How data is presented:**  

- The proportion of South Australian who felt that they were able to have a say within the community on important issues ‘all/most of the time’ compared to all States and Territories and the national average.  
- The proportion of South Australians who felt that they were able to have a say within the community on important issues ‘all/most of the time’ by age band compared to Australia as a whole.  

**Caveats** | Sample surveys are subject to both sampling and non-sampling error. |
| **Reporting Schedule** | Unknown. Previous General Social Survey was in 2002. |
### 3-5. Protective Factors – Nutrition

#### 3-5-1. Recommended Fruit Intake in South Australia

| Rationale | Health research has shown that diets high in vegetables and fruit have health benefits, particularly in relation to the prevention of diseases such as cardiovascular disease, stroke, type 2 diabetes and several major forms of cancer. The inadequate consumption of fruit and vegetables has been linked with developmental and behavioural problems, cancer and other conditions (University of Adelaide, 2011). |
| Factors contributing to the outcome | Socioeconomic Status. Income. Health Literacy. Education |
| SA Target | n/a |

#### Data Source


#### Definition and Calculation

**Definition:**
This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the aged 16+ population. The NHMRC has recommended that to prevent many chronic conditions, adults should consume at least 2 serves of fruit per day. Respondents were asked: ‘How many serves of fruit do you usually eat each day? A ‘serve’ is 1 medium piece or 2 small pieces of fruit or 1 cup of diced pieces’.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of respondents who reported having 2 or more serves of fruit per day.
Denominator – Total number of respondents.

**How data is presented:**
- The 2002 – 2011 trend of the proportion of South Australians having 2 or more serves of fruit per day according to metropolitan Adelaide and country SA area of residence.
- The proportion of South Australian males and females having 2 or more serves of fruit per day in 2011 according to specific age band.
- The proportion of South Australians having 2 or more services of fruit per day in 2011 according to quintile of socioeconomic status (also with 95% confidence intervals).

**Caveats**
Sample surveys are subject to both sampling and non-sampling error.
No national benchmarks available from SAMSS.

**Reporting Schedule**
SAMSS data is collected and reported on a monthly basis.
### 3-5-2. & 3-5-3. Recommended Fruit Intake – National Comparison

| Rationale | Health research has shown that diets high in vegetables and fruit have health benefits, particularly in relation to the prevention of diseases such as cardiovascular disease, stroke, type 2 diabetes and several major forms of cancer. The inadequate consumption of fruit and vegetables has been linked with developmental and behavioural problems, cancer and other conditions (University of Adelaide, 2011). University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011: Justification of topics. |
| Factors contributing to the outcome | Socioeconomic Status. Income. Health Literacy. Education |
| SA Target | n/a |


| Definition and Calculation | Definition: This indicator is collected through the Australian Health Survey and relates to persons aged 15+ years. Respondents were asked to report the number of serves of fruit they usually eat each day. For the purpose of this survey:  - A serve of fruit was defined as one medium piece or two small pieces of fruit, or one cup of diced fruit, or quarter of a cup of sultanas, or four dried apricot halves - approximately 150 grams of fresh fruit or 50 grams of dried fruits.  - Tomatoes were included as a vegetable rather than a fruit.  - Fruit and vegetable juices were excluded. Calculation: Data is expressed as a percentage (%) Numerator – Number of respondents who reported having 2 or more serves of fruit per day. Denominator – Total number of respondents. How data is presented: The proportion of South Australians having 2 or more serves of fruit per day in 2011-12 compared to all States and Territories and the national average. The proportion of male and female South Australians having 2 or more serves of fruit per day in 2011-12 as compared to all States and Territories and the national average. Caveats Sample surveys are subject to both sampling and non-sampling error. Reporting Schedule Unknown. The previous National Health Survey was in 2007-08. |
### 3-5-4. Aboriginal Daily Intake of Fruit

| **Rationale** | Health research has shown that diets high in vegetables and fruit have health benefits, particularly in relation to the prevention of diseases such as cardiovascular disease, stroke, type 2 diabetes and several major forms of cancer. The inadequate consumption of fruit and vegetables has been linked with developmental and behavioural problems, cancer and other conditions (*University of Adelaide, 2011*). University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011: Justification of topics. |
| **Factors contributing to the outcome** | Socioeconomic Status. Income. Health Literacy. Education |
| **SA Target** | n/a |


| **Definition and Calculation** | **Definition:** This indicator is collected through the National Aboriginal and Torres Strait Islander Health Survey and relates to persons aged 12+ years. Respondents were asked whether they usually ate fruit each day. For the purpose of this survey:  
- A serve of fruit was defined as one medium piece or two small pieces of fruit, or one cup of diced fruit, or quarter of a cup of sultanas, or four dried apricot halves - approximately 150 grams of fresh fruit or 50 grams of dried fruits.  

**Calculation:** Data is expressed as a percentage (%)  
**Numerator:** Number of respondents who reported that they eat fruit on a daily basis.  
**Denominator:** Total number of respondents.  

**How data is presented:** The proportion of Aboriginal South Australians eating fruit on a daily basis in 2004/05 compared to all States and Territories and the national average. |

| **Caveats** | Sample surveys are subject to both sampling and non-sampling error. |
| **Reporting Schedule** | Unknown. |
### 3-5-5. Recommended Vegetable Intake in South Australia

| **Rationale** | Health research has shown that diets high in vegetables and fruit have health benefits, particularly in relation to the prevention of diseases such as cardiovascular disease, stroke, type 2 diabetes and several major forms of cancer. The inadequate consumption of fruit and vegetables has been linked with developmental and behavioural problems, cancer and other conditions (*University of Adelaide, 2011*). University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011: Justification of topics. |
| **Driver of the outcome** | Socioeconomic Status. Income. Health Literacy. Education |
| **Target** | n/a |


| **Definition and Calculation** | Definition: This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population. The NHMRC has recommended that to prevent many chronic conditions, adults should consume at least 5 serves of vegetables per day. Respondents were asked: ‘How many serves of vegetables do you usually eat each day? A serve is ½ a cup of cooked vegetables or 1 cup of salad. Calculation: Data is expressed as a percentage (%). Numerator – Number of respondents who reported having 5 or more serves of vegetables per day. Denominator – Total number of respondents. How data is presented: - 2002 – 2011 trend of the proportion of South Australians having 5 or more serves of vegetables per day according to metropolitan Adelaide and country SA area of residence. - The proportion of males and females having 5 or more serves of vegetables per day in 2011 according to specific age band. - The proportion of South Australians having 5 or more services of vegetables per day in 2011 according to quintile of socioeconomic status (also with 95% confidence intervals). |

| **Caveats** | Sample surveys are subject to both sampling and non-sampling error. No national benchmarks available from SAMSS. |

| **Reporting Schedule** | SAMSS data is collected and reported on a monthly basis |
3-5-6. & 3-5-7. Recommended Vegetable Intake – National Comparison

**Rationale**
Health research has shown that diets high in vegetables and fruit have health benefits, particularly in relation to the prevention of diseases such as cardiovascular disease, stroke, type 2 diabetes and several major forms of cancer. The inadequate consumption of fruit and vegetables has been linked with developmental and behavioural problems, cancer and other conditions (*University of Adelaide, 2011*).

*University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011: Justification of topics.*

**Factors contributing to the outcome**
Socioeconomic Status. Income. Health Literacy. Education

**SA Target**
\(n/a\)

**Data Source**


**Definition and Calculation**

**Definition:**
This indicator is collected through the Australian Health Survey and relates to persons aged 15+ years.

Respondents were asked to report the number of serves of vegetables they usually eat each day. For the purpose of this survey:

- A serve of vegetables was defined as a half cup of cooked vegetables, one medium potato, or one cup of salad vegetables – approximately equivalent to 75 grams. All vegetables were included, but legumes were excluded.
- Tomatoes were included as a vegetable rather than a fruit.
- Fruit and vegetable juices were excluded.

**Calculation:**
Data is expressed as a percentage (%)

**Numerator** – Number of respondents who reported having 5 or more serves of vegetables per day.

**Denominator** – Total number of respondents.

**How data is presented:**

- The proportion of South Australians having 5 or more serves of vegetables per day in 2011-12 compared to all States and Territories and the national average.
- The proportion of male and female South Australians having 5 or more serves of vegetables per day in 2011-12 as compared to all States and Territories and the national average.

**Caveats**
Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**
Unknown. The previous National Health Survey was in 2007-08.
### 3-5-8. Aboriginal Daily Intake of Vegetables

| Rationale | Health research has shown that diets high in vegetables and fruit have health benefits, particularly in relation to the prevention of diseases such as cardiovascular disease, stroke, type 2 diabetes and several major forms of cancer. The inadequate consumption of fruit and vegetables has been linked with developmental and behavioural problems, cancer and other conditions *(University of Adelaide, 2011)*.  
University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011: Justification of topics. |
| Factors contributing to the outcome | Socioeconomic Status. Income. Health Literacy. Education |
| SA Target | n/a |

| Data Source | Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey 2004-05. Cat No. 4715.4.55.005. Table 22: Indigenous Persons aged 12 and over: Selected dietary habits, by remoteness.  

| Definition and Calculation | Definition:  
This indicator is collected through the National Aboriginal and Torres Strait Islander Health Survey and relates to persons aged 12+ years. Respondents were asked whether they usually ate fruit each day. For the purpose of this survey:  
- A serve of vegetables was defined as a half cup of cooked vegetables or one cup of salad vegetables – approximately equivalent to 75 grams. All types of vegetables were included but legumes were excluded  
- Tomatoes were included as a vegetable rather than a fruit.  
Calculation:  
Data is expressed as a percentage (%)  
Numerator – Number of respondents who reported that they ate vegetables on a daily basis.  
Denominator – Total number of respondents.  
How data is presented:  
- The proportion of Aboriginal South Australians eating vegetables on a daily basis in 2004/05 compared to all States and Territories and the national average.  
Caveats | Sample surveys are subject to both sampling and non-sampling error. |
| Reporting Schedule | Unknown. |
### 3-6. Protective Factors – Exercise and Physical Activity

#### 3-6-1. Exercise and Physical Activity in South Australia

<table>
<thead>
<tr>
<th>Rationale</th>
</tr>
</thead>
</table>
| Exercise and physical activity has numerous health benefits, for example it is known to reduce the risk of heart disease, stroke, developing type II diabetes and developing high blood pressure. Physical activity is important for achieving and maintaining a healthy body weight and it can aid in reducing feelings of stress, anxiety and depression *(Australian Bureau of Statistics, 2011)*.  

<table>
<thead>
<tr>
<th>Factors contributing to the outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic Status, Health Literacy, Education, Age, Disability or Limiting Long Term Illness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target</th>
</tr>
</thead>
</table>
| **Target 2.** To double the number of people cycling in South Australia by 2020 *(South Australia Strategic Plan)*.  
**Target 83.** To increase the proportion of South Australians participating in sport or physical recreation at least once per week to 50% by 2020 *(South Australia Strategic Plan)*. |

<table>
<thead>
<tr>
<th>Data Source</th>
</tr>
</thead>
</table>
Data is unpublished and was requested from:  
[Accessed: February 2012] |

<table>
<thead>
<tr>
<th>Definition and Calculation</th>
</tr>
</thead>
</table>
| **Definition:**  
This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.  
**Definition 2 (sufficient time and sessions):** 150 minutes of walking, moderate or vigorous physical activity (with vigorous) activity weighted by a factor of two to account for its greater intensity accrued over at least five separate activity sessions.  
Respondents were asked questions about physical activities, and time spent being physically active in the last week.  
**Calculation:**  
Data is expressed as a percentage (%)  
**Numerator** – Number of respondents spending sufficient time and undertaking sufficient sessions of physical activity.  
**Denominator** – Total number of respondents.  
**How data is presented:**  
- 2002 – 2011 trend of the proportion of South Australians spending sufficient time and undertaking sufficient sessions of physical activity according to metro and country area of residence.  
- The proportion of males and females spending sufficient time and undertaking sufficient sessions of physical activity in 2011 according to specific age band.  
- The proportion of South Australians spending sufficient time and undertaking sufficient sessions of physical activity in 2011 according to quintile of socioeconomic status (also with 95% confidence intervals). |

<table>
<thead>
<tr>
<th>Caveats</th>
</tr>
</thead>
</table>
| Sample surveys are subject to both sampling and non-sampling error.  
No national benchmarks available from SAMSS. |

<table>
<thead>
<tr>
<th>Reporting Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMSS data is collected and reported on a monthly basis</td>
</tr>
</tbody>
</table>
### 3-6.2 & 3-6.3. Sport and Physical Recreation – National Comparison

| Rationale | Exercise and physical activity has numerous health benefits, for example it is known to reduce the risk of heart disease, stroke, developing type II diabetes and developing high blood pressure. Physical activity is important for achieving and maintaining a healthy body weight and it can aid in reducing feelings of stress, anxiety and depression (*Australian Bureau of Statistics, 2011*).  
| Factors contributing to the outcome | Socioeconomic Status, Health Literacy, Education, Age, Disability or Limiting Long Term Illness |
| Target | Target 2. To double the number of people cycling in South Australia by 2020 (*South Australia Strategic Plan*).  
Target 83. To increase the proportion of South Australians participating in sport or physical recreation at least once per week to 50% by 2020 (*South Australia Strategic Plan*). |

### Data Source


### Definition and Calculation

**Definition:**  
Participation in sport and physical recreational activity refers to participation at least once during the 12 months prior to interview.  
Data was collected through the ABS 2009-10 Multipurpose Household Survey (MPHS) and relates to persons aged 15+.  

**Calculation:**  
Data is expressed as a percentage (%)

**Numerator – Number of respondents participating in sport and physical activity at least once during the 12 months prior to interview.**  
**Denominator – Total number of respondents.**

**How data is presented:**
- The proportion of South Australians participating in sport and physical recreation at least once during the 12 months prior to interview as compared to all States and Territories and the national average.
- The proportion of male and female South Australians participating in sport and physical recreation at least once during the 12 months prior to interview as compared to all States and Territories and the national average.

### Caveats

Sample surveys are subject to both sampling and non-sampling error.  
The question on sport and physical recreation participation did not prompt for particular activities and whether an activity was regarded as a sport or physical recreation was left to the opinion of the respondent. However, activities such as gardening, housework, manual labouring and other forms of occupational physical activity were excluded from the data.

### Reporting Schedule

The MPHS is conducted each financial year throughout Australia from July to June as a supplement to the ABS’ monthly Labour Force Survey (LFS).
### 3-6-4. Aboriginal Participation in Sporting, Social or Community Activities

#### Rationale
Exercise and physical activity has numerous health benefits, for example it is known to reduce the risk of heart disease, stroke, developing type II diabetes and developing high blood pressure. Physical activity is important for achieving and maintaining a healthy body weight and it can aid in reducing feelings of stress, anxiety and depression (Australian Bureau of Statistics, 2011).


#### Factors contributing to the outcome
Socioeconomic Status, Health Literacy, Education, Age, Disability or Limiting Long Term Illness.

#### SA Target
- **Target 2.** To double the number of people cycling in South Australia by 2020 *(South Australia Strategic Plan).*
- **Target 83.** To increase the proportion of South Australians participating in sport or physical recreation at least once per week to 50% by 2020 *(South Australia Strategic Plan).*

#### Data Source
Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Social Survey 2008. Table 03. Indigenous persons aged 15 years and over, by State or Territory of usual residence. Released at 11.30am (AEST) 30/10/2009.

#### Definition and Calculation
**Definition:**
This indicator is collected through the National Aboriginal and Torres Strait Islander Social Survey 2008 and relates to persons aged 15+ years.

Participation in activities in the 12 months prior to interview including: attending sporting events as a player, coach, spectator, referee or other official; attending a native title meeting; community or special interest group activities; church or religious activities; attending funerals/sorry business or Aboriginal or Torres Strait Islander ceremonies or festivals; going to a cafe, bar, restaurant, the movies, theatre or concert; visiting libraries, museums, art galleries, parks, zoos, botanic gardens or theme parks; and watching Indigenous TV or listening to Indigenous radio

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of respondents who reported that they had participated in activities in the 12 months prior to interview.

Denominator – Total number of respondents.

**How data is presented:**
- The proportion of Aboriginal South Australians participating in activities in the 12 months prior to interview as compared to all States and Territories and the national average.
- The proportion of Aboriginal South Australians participating in activities in the 12 months prior to interview by age band as compared to the national average.

**Caveats**
Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**
Unknown.
### 3-7. Protective Factors – Vaccinations

#### 3-7-1. Influenza and Pneumococcal Vaccinations

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Influenza is an epidemic disease which can cause widespread illness each year. People aged over 65 years are in particular at high risk from influenza (flu) and its complications (Australian Institute of Health and Welfare, 2011).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver of the outcome</td>
<td>Indigenous Status. Access and Barriers to Services.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

#### Data Source 1

|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Definition and Calculation

**Definition:**

Pneumococcal disease is an illness which is caused by an infection with the bacterium *Streptococcus pneumonia*. This can cause illnesses such as pneumonia, meningitis, and septicemia.

**Calculation:**

Data is expressed as a percentage (%)

**Numerator** – Total number of population aged 65 years and over who were vaccinated for influenza.

**Denominator** – Total population aged 65 years and over

**How Data is presented:**

- Influenza vaccination coverage rate for 2009 in South Australia as compared to all States and Territories and the national average.
- Influenza and pneumococcal disease by remoteness area for South Australia and Australia (with 95% confidence intervals).

#### Caveats

Sampling error - The prevalence estimate obtained from a sample will differ from the prevalence rate obtained from counting the whole population.

#### Reporting Schedule

Unknown. There have in total been 7 Adult Vaccination Surveys carried out in the current series.
### 3-7-1. (cont'd) Influenza and Pneumococcal Vaccinations

|              | [Accessed: 31/08/2012] |

### Definition and Calculation

**Definition:**
Data relates to 2009 and persons aged 65+.

**Calculation:**
Data is expressed as a percentage (%)
Numerator – Number of persons aged 65+ who have received an annual influenza vaccination
Denominator – Total number of persons aged 65+

**How Data is presented:**
- The 2009 OECD average of persons aged 65+ who received an annual influenza vaccination.

### Caveats
The main limitation in terms of data comparability arises from the use of different data sources, whether survey or programme, which are susceptible to different types of errors and biases. For example, data from population surveys may reflect some variation due to recall errors and irregularity of administration.

### Reporting Schedule
Annual.
### 3-7-2. Aboriginal Influenza and Pneumococcal Vaccinations

#### Rationale

Vaccinations against influenza and pneumococcal disease have been available free to Indigenous people aged 50+ since 1999. The older Aboriginal population are at a higher risk of vaccine preventable death and therefore it is important to ensure that all Aboriginal South Australians are able access to the free vaccinations.

Monitoring vaccination coverage provides evidence of successful program delivery and can highlight areas for improvement (Department of Health and Ageing, 2008).


#### Factors contributing to the outcome

Access to services. Health literacy. Socioeconomic status.

#### SA Target

n/a.

#### Data Source


[Accessed: 30/05/2012]

#### Definition and Calculation

**Definition:**

This data was collated through the 2004-05 National Aboriginal and Torres Strait Islander Health Survey and data relates to Indigenous population aged 50+.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of Aboriginal people (aged 50+) fully vaccinated against influenza and pneumococcal disease.

Denominator – Total number of Aboriginal people (aged 50+)

**How data is presented:**

- The proportion of Aboriginal South Australians fully vaccinated is presented in comparison to all other States and Territories and the national average.

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

Data for ACT should be interpreted with caution due to an RSE of 54.0%.

#### Reporting Schedule

Unknown.
## 3-8. Protective Factors – Health Checks

### 3-8-1. 45 Year Old Health Checks

| **Rationale** | The 45 year old health check is part of the Australian Better Health Initiative (ABHI) announced by the Council of Australian Governments (COAG) in February 2006. A health check at this stage of life can assist patients to make the necessary lifestyle changes to prevent or delay the onset of chronic disease (Bupa, 2011). |
| **Factors contributing to the outcome** | Unhealthy behaviours. Family History of Chronic Disease. High cholesterol. High blood pressure. Access to services. |
| **SA Target** | n/a. |


| **Definition and Calculation** | **Definition:**
Data is collated through the Medicare Benefits Schedule (MBS) and relates to persons aged 45-49 year olds.

Data relates to 2009/10.

Eligible patients must be between 45 and 49 years of age who are at risk of developing a chronic disease. The decision that a patient is at risk of developing a chronic disease is a clinical judgement made by the GP. However at least one risk factor must be identified, such as: smoking, physical activity, poor nutrition or alcohol misuse, high cholesterol, high blood pressure, excess weight, and family history of chronic disease.

**Calculation:**
Data is expressed as a rate per 10,000 population.

**Numerator** – Number of 45 – 49 years olds receiving an MBS Item 717 health check

**Denominator** – Total number of 45 - 49 year olds using ABS estimated resident population figures.

**How data is presented:**
- The proportion of 45 – 49 year old South Australians receiving a health check, trend between 2007/08 and 2009/10 compared to the national average.
- The proportion of 45 – 49 year old South Australians receiving a health check compared to all States and Territories and the national average.

| **Caveats** | MBS figures include only those services that are performed by a registered provider, for services that qualify for Medicare Benefit and for which a claim has been processed by Medicare Australia. They do not include services provided by hospital doctors to public patients in public hospitals or services that qualify for a benefit under the Department of Veterans’ Affairs National Treatment Account.

**MBS Disclaimer:** The information and data contained in the reports and tables have been provided by Medicare Australia for general information purposes only. While Medicare Australia takes care in the compilation and provision of the information and data, it does not assume or accept any liability for the accuracy, quality, suitability and currency of the information or data, or for any reliance on the information or data. Medicare Australia recommends that users exercise their own care, skill and diligence with respect to the use and interpretation of the information and data.

| **Reporting Schedule** | Data is updated monthly. |
### 3-8-2. Health Assessments for Aboriginal and Torres Strait Islander People

#### Rationale

The aim of this MBS health assessment item is to help ensure that Aboriginal and Torres Strait Islander people receive primary health care matched to their needs, by encouraging early detection, diagnosis and intervention for common and treatable conditions that cause morbidity and early mortality.

The MBS health assessment for Aboriginal and Torres Strait Islander people covers the full age spectrum.


#### Factors contributing to the outcome

- Unhealthy behaviours
- Family History of Chronic Disease
- High cholesterol
- High blood pressure
- Access to services

#### SA Target

n/a.

#### Data Source

Medicare Australia, Medicare Benefits Schedule (MBS) Statistics


[Accessed: 2/10/2012 ]

#### Definition and Calculation

**Definition:**

The health assessment includes an assessment of the patient’s health, including their physical, psychological and social wellbeing. It also assesses what preventive health care, education and other assistance should be offered to the patient to improve their health and wellbeing. It complements existing services already undertaken by a range of health care providers.

As part of a health assessment, a medical practitioner may develop a simple strategy for the good health of the patient. The strategy should identify any services the patient needs and the actions the patient, or parent or carer, should take. It should be developed in collaboration with the patient, or parent or carer, and documented in the written report on the assessment that is offered to the patient, and/or patient’s carer.

**Calculation:**

Data is expressed as a rate per 100,000 population.

Numerator – Number of Aboriginal and Torres Strait Islander People receiving an MBS Item 715 health check.

Denominator – Total number of people enrolled in Medicare as at the end of that month.

**How data is presented:**

- The proportion of Aboriginal and Torres Strait Islander South Australians receiving a health check, trend between 2007-08 and 2011-12 compared to the national average.
- The proportion of Aboriginal and Torres Strait Islander South Australians receiving a health check compared to all states and territories and the national average.

#### Caveats

MBS figures include only those services that are performed by a registered provider, for services that qualify for Medicare Benefit and for which a claim has been processed by Medicare Australia. They do not include services provided by hospital doctors to public patients in public hospitals or services that qualify for a benefit under the Department of Veterans’ Affairs National Treatment Account.

MBS Disclaimer: The information and data contained in the reports and tables have been provided by Medicare Australia for general information purposes only. While Medicare Australia takes care in the compilation and provision of the information and data, it does not assume or accept any liability for the accuracy, quality, suitability and currency of the information or data, or for any reliance on the information or data. Medicare Australia recommends that users exercise their own care, skill and diligence with respect to the use and interpretation of the information and data.

#### Reporting Schedule

Data is updated monthly.
3-9. Skin Cancer Prevention Practices – Sun Protective Behaviours

**Rationale**

Australia has the highest rate of skin cancer in the world. Two in every three Australians develops skin cancer at some time during their life. Over-exposure to ultraviolet (UV) radiation in sunlight causes permanent damage to your skin and increases your risk of skin cancer. Most skin cancers can be prevented if you protect your skin from the sun.


**Factors contributing to the outcome**


**SA Target**

n/a.

**Data Source**


**Definition and Calculation**

**Definition:**

Cancer Council SA commissions a series of questions to assess knowledge and prevalence of risk factors for cancer in the South Australian Health Omnibus Survey (HOS) on an annual basis. The HOS is a state-wide, annual face-to-face survey of approximately 3,000 respondents aged 15 years and over.

In years 2004, 2007, 2009, 2010 and 2011, Cancer Council SA included a series of questions which assessed respondents’ participation in the five key sun protection behaviours as recommended by Cancer Council SA to reduce the risk of skin cancer – wearing a sun protective hat, wearing sunscreen, wearing long sleeved clothing, wearing Australian-standard sunglasses and seeking shade. Respondents were asked how often they engage in each of these five sun protective behaviours when they are in the sun for an hour in the middle of a summer’s day.

Results are shown for those people who reported to regularly engage in each of the sun protective behaviours, and are based on weighted data.

**Calculation:**

Data are expressed as a percentage (%)

Numerator – Number of survey respondents who regularly engage in each of the sun protective behaviours of sun protective hat, sunscreen, long sleeved clothing, Australian-standard sunglasses and seeking shade.

Denominator – Total number of survey respondents.

**How data is presented:**

- Proportion of South Australians who regularly engage in key sun protective behaviours recommended by Cancer Council SA to reduce the risk of skin cancer.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Annually.
## 3-10. Function – Disability

### 3-10-1. Prevalence of Disability

#### Rationale
Studies reveal that people with a disability are more likely than people without disabilities to report poorer overall health status, less access to adequate health care, and smoking and physical activity. People with disabilities are also at greater risk of secondary conditions such as injury, overweight and obesity, pain, mental health and depression and fatigue (Centres for Disease Control and Prevention, 2011).


#### Factors contributing to the outcome
Age. Differing concepts of ‘need’ between individuals. Accessible communities. Housing.

#### SA Target
n/a.

#### Data Source
Australian Bureau of Statistics, Disability, Ageing and Carers 2009, Australia Survey of Disability, Ageing and Carers, State Tables. Cat. No. 4430.0. Released at 11.30am (AEST) 16/12/2010

#### Definition and Calculation
**Definition:**
Data is obtained from the Survey of Disability, Ageing and Carers (SDAC) and relates to persons of all ages.

Most recent data relates to 2009.

In this survey, a person has a disability if they report they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities. This includes:

- loss of sight (not corrected by glasses or contact lenses)
- loss of hearing where communication is restricted, or an aid to assist with, or substitute for, hearing is used
- speech difficulties
- shortness of breath or breathing difficulties causing restriction
- chronic or recurrent pain or discomfort causing restriction
- blackouts, fits, or loss of consciousness
- difficulty learning or understanding
- incomplete use of arms or fingers
- difficulty gripping or holding things
- incomplete use of feet or legs
- nervous or emotional condition causing restriction
- restriction in physical activities or in doing physical work
- disfigurement or deformity
- mental illness or condition requiring help or supervision
- long-term effects of head injury, stroke or other brain damage causing restriction
- receiving treatment or medication for any other long-term conditions or ailments and still being restricted
- any other long-term conditions resulting in a restriction.

Refer to the following link for further explanatory notes: http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4430.0Explanatory%20Notes12009?OpenDocument

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of respondents who reported a disability
Denominator – Total number of respondents
### 3-10-1. (cont’d) Prevalence of Disability

<table>
<thead>
<tr>
<th>Definition and Calculation (cont’d)</th>
<th>How data is presented:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- The proportion of South Australians reporting a disability in 2003 and 2009 compared to the national average.</td>
</tr>
<tr>
<td></td>
<td>- The proportion of South Australians reporting a disability in 2009 compared to all States and Territories and the national average.</td>
</tr>
<tr>
<td>Caveats</td>
<td>Sample surveys are subject to both sampling and non-sampling error.</td>
</tr>
<tr>
<td></td>
<td>Disability is a difficult concept to measure because it depends on a respondent’s perception of their ability to perform a range of activities associated with daily living.</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>Unknown.</td>
</tr>
</tbody>
</table>
### 3-10-2. People with a Need for Assistance (Profound or Severe Disability)

<table>
<thead>
<tr>
<th><strong>Rationale</strong></th>
<th>Studies reveal that people with a disability are more likely than people without disabilities to report poorer overall health status, less access to adequate health care, and smoking and physical activity. People with disabilities are also at greater risk of secondary conditions such as injury, overweight and obesity, pain, mental health and depression and fatigue (Centres for Disease Control and Prevention, 2011).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors contributing to the outcome</strong></td>
<td>Differing concepts of ‘need’ between individuals. Accessible communities. Housing.</td>
</tr>
<tr>
<td><strong>SA Target</strong></td>
<td>n/a.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Data Source</strong></th>
<th>Australian Bureau of Statistics (ABS) 2011 Census of Population and Housing, Basic Community Profile, B18: Core activity need for assistance by age by sex. Released at 11.30am (AEST) 21/06/2012.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Definition and Calculation</strong></th>
<th><strong>Definition:</strong> Data is obtained from the Census of Population and Housing and relates to persons of all ages. People with a profound or severe disability are defined as: needing help or assistance in one or more of the three core activity areas of self-care, mobility, and communication because of a disability or long-term health condition (lasting 6 months or more), or old age. <strong>Calculation:</strong> Data is expressed as a percentage (%). Numerator – Number of respondents identifying a need for assistance Denominator – Total number of respondents <strong>How data is presented:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The 2006 and 2011 proportion of South Australian who had a need for assistance due to a profound or severe disability compared to Australia. • The 2011 proportion of South Australians with a need for assistance due to a profound or severe disability as compared to all States and Territories and the national average. • The 2011 proportion of South Australian males and females with a need to assistance due to a profound or severe disability by age band.</td>
</tr>
</tbody>
</table>

| **Caveats** | The Australian Census is self-enumerated. This means that householder are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally |

| **Reporting Schedule** | The Census of Population and Housing is carried out every 5 years. |
3-10.3. Aboriginal People with a Need for Assistance (Profound or Severe Disability)

| Rationale | Studies reveal that people with a disability are more likely than people without disabilities to report poorer overall health status, less access to adequate health care, and smoking and physical activity. People with disabilities are also at greater risk of secondary conditions such as injury, overweight and obesity, pain, mental health and depression and fatigue (Centres for Disease Control and Prevention, 2011). |

| Factors contributing to the outcome | Differing concepts of 'need' between individuals. Accessible communities. Housing. |

| SA Target | n/a. |


| Definition and Calculation | Definition: Data is obtained from the Census of Population and Housing and relates to persons of all ages. People with a profound or severe disability are defined as: needing help or assistance in one or more of the three core activity areas of self-care, mobility, and communication because of a disability or long-term health condition (lasting 6 months or more), or old age. Calculation: Data is expressed as a percentage (%). Numerator – Number of respondents identifying a need for assistance Denominator – Total number of respondents |

| How data is presented: | • The 2006 and 2011 proportion of Aboriginal South Australians who had a need for assistance due to a profound or severe disability compared to Australia. • The 2011 proportion of Aboriginal South Australians with a need for assistance due to a profound or severe disability as compared to all States and Territories and the national average. • The 2011 proportion of Aboriginal South Australian males and females with a need to assistance due to a profound or severe disability by age band. |

| Caveats | The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally |

| Reporting Schedule | The Census of Population and Housing is carried out every 5 years. |
### 3-10-4. Unpaid Care, Help, or Assistance Because of a Disability

#### Rationale
People providing unpaid care are at an increased risk of being socially isolated due to their responsibilities and can experience a low sense of wellbeing and poor health (OECD, 2011).


#### Factors contributing to the outcome
Support network. Age. Access to services.

#### SA Target
n/a.

#### Data Source
Australian Bureau of Statistics (ABS) 2011 Census of Population and Housing, Basic Community Profile, B21: Unpaid assistance to a person with a disability by age by sex. Released at 11.30am (AEST) 21/06/2012.


#### Definition and Calculation
**Definition:**
Data is obtained from the Census of Population and Housing and relates to persons aged 15+.

This indicator records the people, 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, or problems related to old age. This includes people who are in receipt of a Carer Allowance or Carer Payment. It does not include work carried out through a voluntary organisation or group.

**Calculation:**
Data is expressed as a percentage (%).

**Numerator** – Number of respondents (aged 15+) identifying that they provide unpaid care, help or assistance because of a disability

**Denominator** – Total number of respondents (aged 15+)

**How data is presented:**
- The 2006 and 2011 proportion of South Australians who provided unpaid care, help or assistance to a person with a disability compared to Australia.
- The 2011 proportion of South Australians who provided unpaid care, help or assistance to a person with a disability compared to all States and Territories and the national average.
- The 2011 proportion of South Australian males and females who provided unpaid care, help or assistance to a person with a disability by age band.

#### Caveats
The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

#### Reporting Schedule
The Census of Population and Housing is carried out every 5 years.
### 3-10-5. Aboriginal Unpaid Care, Help, or Assistance Because of a Disability

#### Rationale

People providing unpaid care are at an increased risk of being socially isolated due to their responsibilities and can experience a low sense of wellbeing and poor health (OECD, 2011).


#### Factors contributing to the outcome

Support network. Age. Access to services.

#### SA Target

n/a.

#### Data Source


#### Definition and Calculation

**Definition:**

Data is obtained from the Census of Population and Housing and relates to persons aged 15+.

This indicator records the people, 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, or problems related to old age. This includes people who are in receipt of a Carer Allowance or Carer Payment. It does not include work carried out through a voluntary organisation or group.

**Calculation:**

Data is expressed as a percentage (%).

Numerator – Number of respondents (aged 15+) identifying that they provide unpaid care, help or assistance because of a disability

Denominator – Total number of respondents (aged 15+)

**How data is presented:**

- The 2006 and 2011 proportion of Aboriginal South Australians who provided unpaid care, help or assistance to a person with a disability compared to Australia.
- The 2011 proportion of Aboriginal South Australians who provided unpaid care, help or assistance to a person with a disability compared to all States and Territories and the national average.
- The 2011 proportion of Aboriginal South Australian males and females who provided unpaid care, help or assistance to a person with a disability by age band.

#### Caveats

The Australian Census is self-enumerated. This means that householders are required to complete the Census form themselves, rather than having the help of a Census Collector. The Census form may be completed by one household member on behalf of others. Error can be introduced if the respondent does not understand the question, or does not know the correct information about other household members. Self-enumeration carries the risk that wrong answers could be given, either intentionally or unintentionally.

#### Reporting Schedule

The Census of Population and Housing is carried out every 5 years.
### 3-10-6. Disability and Impairment of Activity in South Australia

**Rationale**  
Studies reveal that people with a disability are more likely than people without disabilities to report poorer overall health status, less access to adequate health care, and smoking and physical activity. People with disabilities are also at greater risk of secondary conditions such as injury, overweight and obesity, pain, mental health and depression and fatigue (Centres for Disease Control and Prevention, 2011).

Centres for Disease Control and Prevention (2011) Disability and Health [Internet] Available from:  

**Factors contributing to the outcome**  
Age. Socioeconomic Status.

**SA Target**  
n/a.

**Data Source**  
Data is unpublished and was requested from:  
[Accessed: August 2012]

**Definition and Calculation**  
**Definition:**  
Data is obtained through the SAMSS survey and relates to persons aged 16+. Survey respondents are asked: ‘Are you limited in any way in any activities because of an impairment or health problem?’ This question includes physical, mental, or emotional problems and limitations that people may have in daily life.

**Calculation:**  
Data is expressed as a percentage (%)

Numerator – Number of respondents who identified that they were limited in activities because of an impairment or health problem.

Denominator – Total number of respondents.

**How data is presented:**

- The 2002 – 2011 trend of South Australians limited in any way due to an impairment or health problem by metropolitan Adelaide and Country SA area of residence.
- The proportion of South Australian males and females limited in any way due to an impairment or health problem by specific age band.
- The proportion of South Australians limited in any way due to an impairment or health problem by quintile of socioeconomic status (also includes 95% confidence intervals).

**Caveats**  
SAMSS data does not allow for interstate comparisons.

**Reporting Schedule**  
Collected and reported monthly through SAMSS.
### 3-10-7. Disability Clients in South Australia

#### Rationale
This data represents the number of individuals with a disability who have accessed a disability service which therefore gives an indication of service use due to disability in South Australia.

#### Factors contributing to the outcome
Support network. Access to services.

#### SA Target
Target 25. To triple the number of people with a disability able to access self-managed funding by 2016 (South Australian Strategic Plan).

#### Data Source


[Accessed: 16/05/2012]

#### Definition and Calculation

**Definition:**

**Primary disability type:** The primary disability group is one that most clearly expresses the experience of disability by a person. The primary disability group can also be considered as the disability group causing the most difficulty to the person (overall difficulty in daily life, not just within the context of support offered by the service).

**Carer:** An informal carer is a person such as a family member, friend or neighbour who provides regular and sustained care and assistance to the person requiring support. This includes people who may receive a pension or benefit associated with their caring role, but does not include people, either paid or voluntary, whose services are arranged by formal service organisation. Informal carers can be defined as primary if they help with one or more of the activities of daily living: self-care, mobility or communication.

**Calculation:**
Data is expressed as either a rate per 100,000 population or a percentage (%).

**How data is presented:**
- 2005/06 – 2009/10 trend of disability clients in South Australia by Metropolitan Adelaide and Country SA area of residence (rate per 100,000 population aged 0-64 years).
- The relative proportion of disability clients in South Australia by sex between 2005/06 and 2009/10.
- The relative proportion of disability clients in South Australia by age band between 2005/06 and 2009/10.
- The relative proportion of disability clients in South Australia by primary disability type between 2005/06 and 2009/10.
- The proportion of disability clients in South Australia supported by carers between 2005/06 and 2009/10.

#### Caveats
Clients can receive more than one service type during the financial year and therefore the total number of clients is less than total services provided during the reporting period.

#### Reporting Schedule
Annually through the Australian Institute of Health and Welfare.
### 3-11-1. Deafness (complete or partial) in South Australia

#### Rationale

The ability to communicate is an essential part of living in human society and people experiencing hearing problems can be impacted in their day to day activities and may experience a loss of self-esteem and confidence (World Health Organisation, 2012).


#### Factors contributing to the outcome

Age. Head injuries. Ear infections.

#### SA Target

n/a.

#### Data Source


#### Definition and Calculation

**Definition:**

Data was obtained from the 2011 Australian Health Survey and relates to persons aged 15+. Refers to complete and partial deafness.

Respondents were asked whether they had any hearing problems or problems with their ears which had lasted, or was expected to last for six months or more. A list of conditions were provided and included:

- Total deafness
- Deaf in one ear
- Hearing loss/partially deaf
- Tinnitus
- Meniere’s Disease
- Otitis Media
- Other (one other hearing or ear problem could be recorded)

**Calculation:**

Data is expressed as a percentage (%).

Numerator – Number of respondents with complete or partial deafness.

Denominator – Total number of respondents.

**How data is presented:**

- The proportion of people in South Australia with complete or partial deafness in 2011-12 compared to other States and Territories.

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule

Unknown. The previous National Health Survey was in 2007-08.
### 3-11-2. Aboriginal Ear/Hearing Problems

#### Rationale
The ability to communicate is an essential part of living in human society and people experiencing hearing problems can be impacted in their day to daily activities and may experience a loss of self-esteem and confidence (World Health Organisation, 2012).


#### Factors contributing to the outcome
Age. Head injuries. Ear infections.

#### SA Target
n/a.

#### Data Source
Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey, 2004-05. Cat.no. 4715.4.55.005. Table 1: Indigenous Persons: Summary health characteristics, by remoteness, South Australia, 2004-05.


#### Definition and Calculation
**Definition:**
Data was obtained through the 2004/05 National Aboriginal and Torres Strait Islander Health Survey and relates to persons of all ages.

Respondents were asked if they had any hearing problems or problems with their ears that have lasted, or are expected to last, for 6 months or more. Ear and hearing problems included:

- Total deafness
- Deaf in 1 ear
- Hearing loss/partially deaf
- Ringing in your ears (Tinnitus)
- Ear infections (Otitis Media)
- Other (Specify)
- Don’t know (Type of problem)
- No problems

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of Aboriginal respondents with ear/hearing problems.

Denominator – Total number of Aboriginal respondents.

**How data is presented:**
- The proportion of Aboriginal South Australians with ear/hearing problems in 2004-05 compared to all other States and Territories and the national average.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule
Unknown.
### 3-11-3. Eye Disease in South Australia

**Rationale**
South Australia is characterised with an ageing population, which is recognised as a risk factor for visual impairment. Certain groups of the population are at a greater risk of developing eye disease; these include Aboriginal persons, people with diabetes and marginalised and disadvantaged people. Eye disease can have a considerable financial and social cost to the community. It can shorten life, increase the risk of other conditions and restrict social participation and independence ([Australian Institute of Health and Welfare, 2007](http://www.aihw.gov.au/publication-detail/?id=6442468311&tab=2)).

**Factors contributing to the outcome**
Age, Family History, Socioeconomic Status, Indigenous Status, Diabetes.

**SA Target**
n/a.

**Data Source**

**Definition and Calculation**

**Definition:**
Data was obtained from the 2011 Australian Health Survey and refers to persons aged 15+. Respondents were asked a number of questions relating to eyesight. After ascertaining whether the respondent was colour blind (not conceptually considered a long term condition), respondents were asked whether they wore glasses or contact lenses to correct or partially correct their eyesight. Persons who did so were shown the following prompt card listing a number of sight conditions which are currently corrected or partially corrected by glasses or contact lenses, and asked to select any conditions they may have had.

- Astigmatism
- Short sightedness/Myopia/difficulty seeing objects in the distance
- Macular degeneration
- Other age related sight problems/Presbyopia
- Long sightedness/Hyperopia/difficulty seeing objects close up
- Other (one other eye sight problem could be recorded).

All persons were then asked whether they had any other sight problems. A list of conditions was provided to interviewers to make it easier to record the information; however this may have led to some conditions being recorded in categories that were not entirely appropriate. The listed categories were:

- Astigmatism
- Short sightedness/Myopia/difficulty seeing objects in the distance
- Macular degeneration
- Other age related sight problems/Presbyopia
- Long sightedness/Hyperopia/difficulty seeing objects close up
- Totally blind in both eyes
- Totally blind in one eye
- Partially blind in both eyes
- Partially blind in one eye
- Glaucoma
- Cataracts
- Trachoma
- Lazy eye/Strabismus
- Retinopathy
- Other (one other eye sight problem could be recorded)

**Calculation:**
Data is expressed as a Numerator – Number of respondents with an eye disease Denominator – Total number of respondents.

**How data is presented:**
- The proportion of South Australians with a disease of the eye in 2011-12 compared to other States and Territories and the national average.
## Caveats

Sample surveys are subject to both sampling and non-sampling error.

## Reporting Schedule

Unknown. The previous National Health Survey was in 2007-08.
### 3-11-4. Aboriginal Eye/Sight Problems

**Rationale**

South Australia is characterised with an ageing population, which is recognised as a risk factor for visual impairment. Certain groups of the population are at a greater risk of developing eye disease; these include Aboriginal persons, people with diabetes and marginalised and disadvantaged people. Eye disease can have a considerable financial and social cost to the community. It can shorten life, increase the risk of other conditions and restrict social participation and independence (*Australian Institute of Health and Welfare, 2007*)


**Factors contributing to the outcome**


**SA Target**

n/a.

**Data Source**

Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey 2004-05. Cat.No. 4715.4.55.005. Table 1. Indigenous Persons: Summary health characteristics, by remoteness, South Australia, 2004-05.


**Definition and Calculation**

**Definition:**

This data was obtained from the National Aboriginal and Torres Strait Islander Health Survey and relates to persons of all ages.

Respondents were asked:

‘Do you currently wear glasses or contact lenses to correct, or partially correct your eyesight?’

‘What sight problems do your glasses or contact lenses correct, or partially correct?’:

- Astigmatism
- Short-sightedness/Myopia/difficulty seeing objects in the distance.
- Macular degeneration
- Other age related sight problems/Presbyopia
- Long sightedness/Hyperopia/difficulty seeing objects close up.
- Totally blind in both eyes
- Totally blind in 1 eye
- Partially blind in both eyes
- Partially blind in 1 eye
- Glaucoma
- Cataracts
- Trachoma
- Lazy eye/Strabismus
- Retinopathy
- Other – specify
- Don’t know

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of Aboriginal respondents identifying that they have an eye/sight problem

Denominator – Total number of Aboriginal respondents

**How data is presented:**

- The proportion of Aboriginal South Australians identifying that they have an eye/sight problem compared to all States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Unknown.
### 3-11-5. Decayed, Missing or Filled Teeth in Adults

#### Rationale
Dental caries reflect untreated dental disease, while the number of missing and filled teeth reflects the history of dental health problems and treatment. Decayed teeth can cause illness and pain. The loss of permanent teeth can lead to difficulties in chewing, discomfort while eating and subsequent nutritional problems, embarrassment and social isolation (Department of Health and Ageing, 2012).


#### Factors contributing to the outcome

#### SA Target
n/a

#### Data Source


#### Definition and Calculation
**Definition:**
Data was obtained through the National Survey of Adult Oral Health (2004-06) and relates to persons aged 15+.

**Calculation:**
Data is expressed as a mean (average).

**Numerator** – Total number of DMFT in respondents

**Denominator** – Total number of respondents

**How data is presented:**
- The mean number of decayed, missing or filled teeth per person in South Australian as compared to all States and Territories and the national average (with 95% confidence intervals).

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule
Unknown.
### 3-11-6. Aboriginal Adults with Missing Teeth

<table>
<thead>
<tr>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing and teeth reflects the history of dental health problems and treatment. The loss of permanent teeth can lead to difficulties in chewing, discomfort while eating and subsequent nutritional problems, embarrassment and social isolation (Department of Health and Ageing, 2012).</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Factors contributing to the outcome</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SA Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey, 2004-05. Cat.no. 4715.4.55.005. Table 15: Indigenous Persons aged 15 years and over: oral health actions, by remoteness and age, 2004-05.</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Definition and Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong></td>
</tr>
<tr>
<td>Data was obtained through the National Survey of Adult Oral Health (2004-06) and relates to persons aged 15+.</td>
</tr>
<tr>
<td>Respondents were asked if they had lost any of their natural teeth (excluding wisdom teeth).</td>
</tr>
</tbody>
</table>

**Calculation:** |
| Data is expressed as a percentage (%). |
| Numerator – Number of respondents who had lost one or more of their natural teeth. |
| Denominator – Total number of respondents. |

**How data is presented:** |
| The proportion of Aboriginal South Australian with one or more natural teeth missing as compared to all States and Territories and the national average. |

<table>
<thead>
<tr>
<th>Caveats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample surveys are subject to both sampling and non-sampling error.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
</tr>
</tbody>
</table>
3-11-7. Incidence of Falls in South Australia

Rationale

Among older adults, falls are a major cause of fractures, hospital admissions and loss of independence. Fractures can lead to hospital stays, disability and may be fatal (World Health Organisation, 2010).


Factors contributing to the outcome

Age. Mobility. Physical Environment. Alcohol or Substance use.

SA Target

n/a.

Data Source


Data is unpublished and was requested from: http://health.adelaide.edu.au/pros/data/samss/#data [Accessed: February 2012]

Definition and Calculation

Definition:

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the aged 65+ population.

Question: ‘How many falls (including slips, trips and falls to the ground) did you have in the past year?’

Question: ‘Did you receive medical treatment for injuries from any of these falls or did you limit your usual activity for more than two days due to injuries from any of these falls?’

Calculation:

Data is expressed as a percentage (%).

Numerator – Number of respondents having at least one fall in the past year resulting in either medical treatment or limit to activity.

Denominator – Total number of respondents.

How data is presented:

- The 2002 – 2011 proportion of South Australians aged 65+ having at least one fall (in the previous 12 months) according to Metropolitan Adelaide and Country SA area of residence.
- The proportion of South Australian males and females aged 65+ having at least one fall (in the last 12 months).
- The proportion of South Australians aged 65+ having at least one fall (in the last 12 months) by quintile of socioeconomic status.

Caveats

Sample surveys are subject to both sampling and non-sampling error.

Reporting Schedule

SAMSS data is collected and reported monthly.
### 3-11.8. Current Long Term Conditions Due to an Injury – National Comparison

#### Rationale
In Australia, injury is a major cause of death in people under 45 years of age, and a leading cause of mortality, morbidity and permanent disability. While injuries cause a range of physical, cognitive and psychological disabilities and are a major source of health care costs, there are significant opportunities for reducing the burden of injury through the implementation of prevention strategies (Australian Bureau of Statistics, 2001).


#### Factors contributing to the outcome
- Socioeconomic Status
- Alcohol Consumption
- Work-related Injury
- Sport
- Accidents

#### SA Target
n/a.

#### Data Source
Australian Bureau of Statistics (ABS), Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.0.55.001. Released at 11.30am (AEST) 29/10/2012.


#### Definition and Calculation
**Definition:**
Data was obtained from the 2011 Australian Health Survey and relates to persons aged 15+.

Respondents who had reported one or more long-term conditions (or conditions which were assumed to be current and long term) were asked whether that/any of the condition(s) was the result of an injury.

**Calculation:**
Data is expressed as a percentage (%).

Numerator – Number of respondents with one or more long-term conditions that were the result of an injury.

Denominator – Total number of respondents with one or more long-term condition.

**How data is presented:**
- The proportion of South Australians with a long term condition due to an injury compared to all States and Territories and the national average.

**Caveats**
Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**
Unknown. The previous National Health Survey was in 2007-08.
## 3-11-9. Work Injury Claims

### Rationale
Work related injuries can have a serious impact upon worker, their families, communities and employers. Work related injuries can result in short or long-term pain, disability or even death. They have an impact on financial situation through health expenses and loss of income. Furthermore, employers incur costs due to workplace injuries through lost or reduced productivity and workers compensation insurance (Australian Bureau of Statistics, 2007).


### Factors contributing to the outcome
- Occupation
- Mobility
- Age
- Health Status

### SA Target
South Australian Strategic Plan Target 21. Greater safety at work:
Achieve a 40% reduction in injury by 2012 and a further 50% reduction by 2022.

### Data Source


### Definition and Calculation
#### Definition:
Serious injury includes accepted workers compensation claims for temporary incapacity involving one or more week’s compensation plus all claims for fatality and permanent incapacity.

#### Calculation:
Data is expressed as claims per 1,000 employees.

- **Numerator** – Total number of serious injury and musculoskeletal claims
- **Denominator** – Total number of employees

**How data is presented:**
- The work injury incidence rate (per 1,000 employees) in South Australia compared to all jurisdictions.

### Caveats
Data may differ from jurisdictional annual reports due to the use of different definitions and the application of adjustment factors to aid the comparability of data.

### Reporting Schedule
Unknown.
### 3-11-10. People with a Mental Illness in Employment

**Rationale**

Some people with a mental illness benefit from vocational rehabilitation and this can be achieved through participation in the workforce (Mental Health Council of Australia, 2007). This indicator can therefore illustrate whether the needs of people with a mental illness are being adequately addressed.


**Factors contributing to the outcome**

Education/literacy. Socioeconomic Status. Employer legislation

**SA Target**

n/a.

**Data Source**


[Accessed: 13/08/2012]

**Definition and Calculation**

**Definition:**

This information is collected through the 2011 Australian Health Survey and relates to persons aged 16-64.

People with a mental illness in this indicator are defined as self-reported mental and behaviour problems that have last for six months, or which the respondent expects to last for six months.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of respondents with a mental illness who were employed.

Denominator – Total number of respondents.

**How data is presented:**

- The proportion of South Australians aged 16-64 with a self-reported mental illness who are in employment compared to all States and Territories and the national average.

**Caveats**

Identification of mental illness was self-reported and therefore subject to respondent bias or understanding of question.

Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Unknown. The previous National Health Survey was in 2007-08.
### 3-12. Health Risk Factors – Multiple Risk Factors

#### 3-12.1. Persons Living with Multiple Risk Factors in South Australia

<table>
<thead>
<tr>
<th><strong>Rationale</strong></th>
<th>Behavioural risk factors such as smoking, alcohol consumption, and nutrition are among those that are responsible for a large proportion of disease burden. Through identifying how many South Australians are living with two or more risk factors allows us to determine those that may be at risk of diseases developing such as CVD, CHD, COPD, stroke, cancer, and diabetes (Australian Institute of Health and Welfare, 2005).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors contributing to the outcome</strong></td>
<td>Health Literacy, Education, Socioeconomic Status, Indigenous Status</td>
</tr>
<tr>
<td><strong>SA Target</strong></td>
<td>n/a.</td>
</tr>
</tbody>
</table>

**Data Source**


**Definition and Calculation**

**Definition:**

This indicator is defined as the number of respondents who were identified as having two or more health risk factors. These risk factors include the following:

- Blood Pressure – ‘current high blood pressure and/or on medication’
- Cholesterol – ‘current high cholesterol (including medication)’
- Smoking – ‘current smoker’
- Alcohol Risk – ‘long term, high-very high’
- Height and Weight – Body Mass Index (BMI) – Obese (BMI >30)
- Physical Activity – ‘no activity or activity but not sufficient’
- Insufficient Fruit Consumption – ‘0 fruit or 1 or less vegetable’

**Calculation:**

Data is expressed as a percentage (%).

Numerator – Number of respondents with 2 or more risk factors

Denominator – Total number of respondents

**How data is presented:**

- Trend of the proportion of South Australians with two or more risk factors from 2002 – 2011 by metropolitan Adelaide and country SA area of residence.
- The proportion of South Australians with: no risk factors, one risk factor, two risk factors, or three or more risk factors by metro and country area of residence.
- The proportion of males and females with two or more risk factors by specific age band.
- The proportion of South Australians with two or more risk factors by quintile of socioeconomic status (also with 95% confidence intervals).

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

No national benchmarks available from SAMSS.

**Reporting Schedule**

SAMSS data is collected and reported monthly basis.
3-13. Health Risk Factors – Alcohol Consumption

3-13-1. Short Term Risk of Harm from Alcohol in South Australia

**Rationale**

Alcohol is the second largest cause of preventable death and hospitalisation in Australia. A number of chronic diseases can arise as a result of regular alcohol consumption in addition to an early death (University of Adelaide, 2011).

Short term risks of alcohol consumption are also a significant issue and these mainly include harm from accidents and injuries. Drinking can lead to a risk of injury, not only to the individual but also to other people in the community (Australian Bureau of Statistics, 2010).

This information can help us to understand the levels of alcohol consumption among South Australians and identify those at risk.

University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011, Justification of topics.


**Driver of the outcome**

Socioeconomic Status, Indigenous Status, Health Literacy, Education

**Target**

Target 81. To reduce the proportion of South Australians who drinks at risky levels by 30% by 2020 (South Australian Strategic Plan).

**Data Source**


**Definition and Calculation**

Definition:

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Respondents were asked: ‘How often do you usually drink alcohol?’ and ‘On a day when you drink alcohol, how many drinks do you usually have?’

The responses are then used to calculate the risk of harm from alcohol in the short term according to guidelines on alcohol consumption by the National Health and Medical Research Council (NHMRC)

Respondents were deemed to be at risk of harm in the short term based on the following criteria:

**Males** – 7 or more standard drinks on any one day, or up to 6 standard drinks on any one day on 4 or more days per week.

**Females** – 5 or more standard drinks on any one day, or up to 4 standard drinks on any one day on 4 or more days per week.

Calculation:

Data is expressed as a percentage (%)

Numerator – Number of male and female respondents drinking at harmful levels as defined above.

Denominator – Total number of respondents.

How data is presented:

- The trend of the proportion of South Australians at risk of short term harm from alcohol between 2002 – 2011 according to metro and country area of residence.
- The proportion of males and females at risk of short term harm from alcohol (2011) according to specific age band.
- The proportion of South Australians at risk of short term harm from alcohol (2011) according to quintile of socioeconomic status (also with 95% confidence intervals).

**Caveats**

Sample surveys are subject to both sampling and non-sampling error

**Reporting Schedule**

SAMSS data is collected and reported on a monthly basis.
Rationale

Alcohol is the second largest cause of preventable death and hospitalisation in Australia. A number of chronic diseases can arise as a result of regular alcohol consumption in addition to an early death (University of Adelaide, 2011).

Factors associated with risky and high risk alcohol consumption include cirrhosis of the liver, stroke, suicide, alcohol independence, injury, and violence (Australian Institute of Health and Welfare, 2012).

This information can help us to understand the levels of alcohol consumption among South Australians and identify those at risk.

Factors contributing to the outcome

Socioeconomic Status, Indigenous Status, Education.

Target

Target 81. To reduce the proportion of South Australians who drinks at risky levels by 30% by 2020 (South Australian Strategic Plan).

Data Source


Data is unpublished and was requested from: http://health.adelaide.edu.au/pros/data/samss/#data

Definition and Calculation

Definition:

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Respondents were asked: “How often do you usually drink alcohol?” and “On a day when you drink alcohol, how many drinks do you usually have?”

The responses are then used to calculate the risk of harm from alcohol in the long term according to guidelines on alcohol consumption by the National Health and Medical Research Council (NHMRC)

Respondents were deemed to be at risk of harm in the long term based on the following criteria:

Males – 5 or more standard drinks per day on an average day, or 29 or more standard drinks per week.

Females – 3 or more standard drinks per day on an average day, or 15 or more standard drinks per week.

Calculation:

Data is expressed as a percentage (%)

Numerator – Number of male and female respondents drinking at harmful levels as defined above.

Denominator – Total number of respondents.

How data is presented:

• The trend of the proportion of South Australians at risk of long term harm from alcohol between 2002 – 2011 according to metro and country area of residence.

• The proportion of males and females at risk of long term harm from alcohol (2011) according to specific age band.

• The proportion of South Australians at risk of long term harm from alcohol (2011) according to quintile of socioeconomic status (also with 95% confidence intervals).

Caveats

Sample surveys are subject to both sampling and non-sampling error

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 3-12-3.).

Reporting Schedule

SAMSS data is collected and reported on a monthly basis.
### 3-13-3. At Risk of Long Term Harm from Alcohol – National Comparison

#### Rationale
The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

Alcohol is the second largest cause of preventable death and hospitalisation in Australia. A number of chronic diseases can arise as a result of regular alcohol consumption in addition to an early death (University of Adelaide, 2011).

Factors associated with risky and high risk alcohol consumption include cirrhosis of the liver, stroke, suicide, alcohol independence, injury, and violence (Australian Institute of Health and Welfare, 2012).

This information can help us to understand the levels of alcohol consumption among South Australians and identify those at risk.

University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011, Justification of topics.


#### Factors contributing to the outcome
Socioeconomic Status, Indigenous Status, Education, Health literacy.

#### Target
Target 81. To reduce the proportion of South Australians who drinks at risky levels by 30% by 2020 (South Australian Strategic Plan).

#### Data Source
Australian Bureau of Statistics (ABS), Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.


[Accessed: 09/11/2012]

#### Definition and Calculation
**Definition:**
Alcohol consumption risk levels in the long term were derived from the average daily consumption of alcohol by persons aged 15 years and over for 3 days prior to interview and are grouped into relative risk levels as defined by the National Health and Medical Research Council (NHMRC) in 2001 as follows:

<table>
<thead>
<tr>
<th>Alcohol risk level (consumption per day)</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk</td>
<td>50 mLs or less</td>
<td>25 mLs or less</td>
</tr>
<tr>
<td>Risky</td>
<td>More than 50 mLs, up to 75 mLs</td>
<td>More than 25 mLs, up to 50 mLs</td>
</tr>
<tr>
<td>High risk</td>
<td>More than 75 mLs</td>
<td>More than 50 mLs</td>
</tr>
</tbody>
</table>

Respondents were asked: ‘How long ago did you last have an alcoholic drink?’

Those who reported that they had a drink within the previous week were asked the days in that week on which they had consumed alcohol (excluding the day on which the interview was conducted), and for each of the most recent three days in the last week on which they drank, the types and quantities (number and size) of drinks they had consumed.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of respondents drinking at risky or high risk levels

Denominator – Total number of respondents.

**How data is presented:**
The proportion of South Australians drinking alcohol at risky/high risk level compared to all States and Territories and the national average.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error

It should be noted that risk level as defined by the NHMRC is based on regular consumption levels of alcohol whereas estimates of risk from the NHS do not take into account whether consumption in the reference week was more, less or the same as usual.

#### Reporting Schedule
Unknown. The previous National Health Survey was in 2007-08.
### 3-13-4. Aboriginal Long Term Harm Risk from Alcohol Consumption

#### Rationale

The National Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

Alcohol is the second largest cause of preventable death and hospitalisation in Australia. A number of chronic diseases can arise as a result of regular alcohol consumption in addition to an early death (University of Adelaide, 2011).

Factors associated with risky and high risk alcohol consumption include cirrhosis of the liver, stroke, suicide, alcohol independence, injury, and violence (Australian Institute of Health and Welfare, 2012).

This information can help us to understand the levels of alcohol consumption among Aboriginal South Australians and identify those at risk.

University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011, Justification of topics.


#### Driver of the outcome


#### SA Target

Target 81. To reduce the proportion of South Australians who drinks at risky levels by 30% by 2020 (South Australian Strategic Plan)

#### Data Source


#### Definition and Calculation

**Definition:**

Data was collected from the 2004-05 National Aboriginal and Torres Strait Islander Health Survey.

Data relates to Indigenous population aged 18+.

**Calculation:**

Data is expressed as an age standardised percentage (%)

Numerator – Number of Aboriginal people aged 18+ drinking amounts of alcohol known to be at risky levels (at risk of long term harm).

Denominator – Number of Indigenous people aged 18+.

Standardised to the 2001 Estimated Resident population.

**How data is presented:**

- The proportion of Aboriginal South Australians at risk of long term harm due to alcohol compared to non-Aboriginal South Australians and also compared to Australia as a whole.
- 95% confidence intervals are also illustrated.

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

Data for Victoria and ACT should be interpreted with cause due to RSEs of between 25% and 50%.

#### Reporting Schedule

Unknown.
### 3-14. Health Risk Factors – Obesity

#### 3-14-1. Obesity in South Australia

**Rationale**

Obesity can cause a range of health problems which essentially adds to Australia’s health costs significantly. People who are obese have higher rates of mortality and morbidity than those who have a healthy body weight. Being overweight increases the risk of illness overall, such as coronary heart disease, type 2 diabetes, gall bladder disease, ischemic stroke, osteoporosis, sleep apnoea and some cancers ([Australian Institute of Health and Welfare, 2012](http://www.aihw.gov.au/obesity-health-priority-area/))

**Factors contributing to the outcome**


**SA Target**

Target 82: Increase by 5% points the proportion of South Australian adults and children at a healthy body weight by 2017.

**Data Source 1**


Data is unpublished and was requested from: [http://health.adelaide.edu.au/pros/data/samss/#data](http://health.adelaide.edu.au/pros/data/samss/#data)

[Accessed: February 2012]

**Definition and Calculation**

**Definition:**

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Questions were asked to ascertain self-reported height and weight of adults aged 18 years and over. Body Mass Index (BMI) was then calculated, and classified according to the World Health Organisation definition:

\[ \text{BMI} = \frac{\text{weight in kilograms}}{\text{squared height in metres}} \]

The following categories were then used:

<table>
<thead>
<tr>
<th>BMI</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>Up to 18.5</td>
</tr>
<tr>
<td>Normal</td>
<td>&gt;18.5 and &lt;25</td>
</tr>
<tr>
<td>Overweight</td>
<td>&gt;25 and &lt;30</td>
</tr>
<tr>
<td>Obese</td>
<td>&gt;30</td>
</tr>
</tbody>
</table>

This indicator includes only data where respondents had a BMI of >30.

**Calculation:**

Data is expressed as a percentage (%).

Numerator – Number of respondents with a BMI >30.

Denominator – Total number of respondents.

**How data is presented:**

- The prevalence of obesity in South Australian males and females in 2011 according to age band.
- The prevalence of obesity ion South Australia according to quintile of socioeconomic disadvantage (also with 95% confidence intervals).

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 3-14-2.).
### 3-14-1. (cont’d) Obesity in South Australia

<table>
<thead>
<tr>
<th>Reporting Schedule</th>
<th>SAMSS data is collected and reported on a monthly basis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition and Calculation</strong></td>
<td>Definition: Data relates to 2009 and refers to persons aged 15+. Adults with a body mass index (BMI) of 30 or above are defined as obese. Calculation: Data is expressed as a percentage (%). Numerator – Number of respondents with a BMI &gt;30. Denominator – Total number of respondents. How data is presented: • The OECD average proportion of persons who were obese.</td>
</tr>
<tr>
<td><strong>Caveats</strong></td>
<td>BMI classification of 30+ may not be suitable for all ethnic groups, who may have equivalent levels of risk at lower or higher BMI. For most countries, overweight and obesity rates are self-reported through estimates of height and weight from population-based health interview surveys. However, around one-third of OECD countries derive their estimates from health examinations. These differences limit data comparability.</td>
</tr>
<tr>
<td><strong>Reporting Schedule</strong></td>
<td>Annually.</td>
</tr>
</tbody>
</table>
### 3-14-2. & 3-14-3. Obesity – National Comparison

#### Rationale

The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

Obesity can cause a range of health problems which essentially adds to Australia’s health costs significantly. People who are obese have higher rates of mortality and morbidity than those who have a healthy body weight. Being overweight increases the risk of illness overall, such as coronary heart disease, type 2 diabetes, gall bladder disease, ischemic stroke, osteoporosis, sleep apnoea and some cancers (Australian Institute of Health and Welfare, 2012).


#### Factors contributing to the outcome

- Lifestyle
- Physical Activity
- Nutrition
- Health Literacy
- Socioeconomic Status

#### SA Target

Target 82: Increase by 5% points the proportion of South Australian adults and children at a healthy body weight by 2017.

#### Data Source

Australian Bureau of Statistics (ABS), Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. To. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.


#### Definition and Calculation

**Definition:**

This data is collected through the 2011 Australian Health Survey and includes the 18+ population only.

Physical measurements were taken towards the end of the survey. Interviewers used digital scales to measure weight, a stadiometer to measure height.

**BMI** = (weight in kilograms/squared height in metres).

The following categories were then used:

<table>
<thead>
<tr>
<th>BMI</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>Up to 18.5</td>
</tr>
<tr>
<td>Normal</td>
<td>&gt;18.5 and &lt;25</td>
</tr>
<tr>
<td>Overweight</td>
<td>&gt;25 and &lt;30</td>
</tr>
<tr>
<td>Obese</td>
<td>&gt;30</td>
</tr>
</tbody>
</table>

This indicator includes only data where subjects had a BMI of >30.

**Calculation:**

Data is expressed as a percentage (%)

- Numerator – Number of respondents with a BMI of >30.
- Denominator – Total number of respondents.

**How data is presented:**

- The proportion of South Australians who were obese compared to all States and Territories and the national average.
- The proportion of South Australian males and females who were obese compared to all States and Territories and the national average.

**Caveats**

- Physical BMI measurements were voluntary.
- Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Unknown. The previous National Health Survey was in 2007-08.
3-14.4. Obesity in the Aboriginal Population

Rationale

Obesity can cause a range of health problems which essentially adds to Australia’s health costs significantly. People who are obese have higher rates of mortality and morbidity than those who have a healthy body weight. Being overweight increases the risk of illness overall, such as coronary heart disease, type 2 diabetes, gall bladder disease, ischemic stroke, osteoporosis, sleep apnoea and some cancers (Australian Institute of Health and Welfare, 2012).


Factors contributing to the outcome


SA Target

Target 82: Increase by 5% points the proportion of South Australian adults and children at a healthy body weight by 2017.

Data Source


Definition and Calculation

Definition:

Data is obtained from the 2004-05 National Aboriginal and Torres Strait Islander Health Survey and relates to persons aged 18+. Questions were asked to ascertain self-reported height and weight of adults aged 18 years and over. Body Mass Index (BMI) was then calculated, and classified according to the World Health Organisation definition:

\[
\text{BMI} = \frac{\text{weight in kilograms}}{\text{squared height in metres}}
\]

The following categories were then used:

<table>
<thead>
<tr>
<th>BMI Category</th>
<th>BMI Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>Up to 18.5</td>
</tr>
<tr>
<td>Normal</td>
<td>&gt;18.5 and &lt;25</td>
</tr>
<tr>
<td>Overweight</td>
<td>&gt;25 and &lt;30</td>
</tr>
<tr>
<td>Obese</td>
<td>&gt;30</td>
</tr>
</tbody>
</table>

This indicator includes only data where respondents had a BMI of >30.

Calculation:

Data is expressed as an age standardised percentage (%) (Rates are age standardised by State and Territory, to the 2001 Estimated Resident Population (10 year ranges from 18)).

Numerator – Number of Aboriginal respondents with a BMI >30

Denominator – Total number of Aboriginal respondents

How data is presented:

- The prevalence of obesity among Aboriginal South Australians compared to all States and Territories and the national average.

Caveats

Sample surveys are subject to both sampling and non-sampling error.

Reporting Schedule

Unknown.
3-15. Health Risk Factors – High Blood Pressure

### 3-15-1. Prevalence of High Blood Pressure in South Australia

**Rationale**

This indicator is essential for monitoring risk factors for heart, stroke and vascular disease. High blood pressure is a major risk factor or CHD, stroke, and peripheral vascular disease. The risk of stroke or coronary heart disease is up to four times greater among people with a high blood pressure than among non-affected people of the same age. People on treatment for high blood pressure are also at an increased risk *(University of Adelaide, 2011)*.

University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011, Justification of topics

**Factors contributing to the outcome**

Socioeconomic Status. Unhealthy Behaviours (e.g. smoking and drinking). Stress and Anxiety. Age.

**SA Target**

n/a.

**Data Source**


Data is unpublished and was requested from: [http://health.adelaide.edu.au/pros/data/samss/#data](http://health.adelaide.edu.au/pros/data/samss/#data)

[Accessed: February 2012]

**Definition and Calculation**

**Definition:**

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Current blood pressure was assessed using questions regarding diagnosis and medication in accordance with the National Health Priority Area Indicator for Hypertension.

Respondents were asked: ‘Have you ever been told by a doctor or a nurse that you have high blood pressure?’ Responses include: Yes, no, don’t know, or never measured.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of respondents who had high blood pressure or were on medication for high blood pressure.

Denominator – Total number of respondents.

**How data is presented:**

- The 2002 – 2011 trend of the proportion of South Australians who had high blood pressure or were on medication for high blood pressure according to metropolitan Adelaide and country SA area of residence.

- The proportion of South Australian males and females who had high blood pressure or were on medication for high blood pressure in 2011 according to specific age band.

- The proportion of South Australians who had high blood pressure or were on medication for high blood pressure in 2011 according to quintile of socioeconomic status (also with 95% confidence intervals).

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey data on Hypertensive Disease is also considered (indicator number: 3-14-2.).

**Reporting Schedule**

SAMSS data is collected and reported on a monthly basis.
### 3-15-2. Prevalence of Hypertensive Disease – National Comparison

| Rationale | The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for. This indicator is essential for monitoring risk factors for heart, stroke and vascular disease. High blood pressure is a major risk factor or CHD, stroke, and peripheral vascular disease. The risk of stroke or coronary heart disease is up to four times greater among people with a high blood pressure than among non-affected people of the same age. People on treatment for high blood pressure are also at an increased risk *(University of Adelaide, 2011).* |
| Factors contributing to the outcome | Socioeconomic Status. Unhealthy Behaviours (e.g. smoking and drinking). Stress and Anxiety. Age. |
| SA Target | n/a. |
| Data Source | *Australian Bureau of Statistics (ABS), Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.*
| Definition and Calculation | **Definition:**
This data is collected through the 2011 Australian Health Survey and refers to persons of all ages.
The indicator refers to people ever told by a doctor or nurse that they have hypertension.
Hypertension prevalence is defined in this indicator as being current at the time of survey and which had lasted at least six months, or which the respondent expected to last for six months or more.

**Calculation:**
Data is expressed as a percentage (%)
Numerator – Number of respondents with hypertension
Denominator – Total number of respondents

**How data is presented:**
- The proportion of South Australians who had hypertension compared to other States and Territories and the national average. |
| Caveats | Sample surveys are subject to both sampling and non-sampling error. |
| Reporting Schedule | Unknown. The previous National Health Survey was in 2007-08. |
### 3-15-3. Aboriginal Prevalence of High Blood Pressure

| **Rationale** | This indicator is essential for monitoring risk factors for heart, stroke, and vascular disease. High blood pressure is a major risk factor for CHD, stroke, and peripheral vascular disease. The risk of stroke or coronary heart disease is up to four times greater among people with a high blood pressure than among non-affected people of the same age. People on treatment for high blood pressure are also at an increased risk (University of Adelaide, 2011). |
| **Factors contributing to the outcome** | Socioeconomic Status. Unhealthy Behaviours (e.g. smoking and drinking). Stress and Anxiety. Age. |
| **SA Target** | n/a. |

### Data Source


**Definition and Calculation**

**Definition:**
This indicator is collected through the South Australian Aboriginal Health Survey (SAAHS) and represents the Aboriginal population in South Australia aged 15 years and over.

Respondents were asked, ‘In the past 12 months only have you been told by a doctor or health worker that you have high blood pressure?’

Data are as at 2011 when the survey collection took place.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of respondents living with doctor-diagnosed high blood pressure.

Denominator – Total number of respondents

**How Data are presented:**
- Proportion of Aboriginal South Australians with a diagnosis of high blood pressure by metropolitan Adelaide and Country SA area of residence.

**Caveats**
Sample surveys are subject to both sampling and non-sampling error.

The weighting of data can result in rounding discrepancies or totals not adding SAAHS data does not allow for interstate comparisons.

**Reporting Schedule**

n/a.
### 3-16-1. Prevalence of High Cholesterol in South Australia

**Rationale**

High blood cholesterol levels are a major risk factor for coronary heart disease and stroke (Australian Institute of Health and Welfare, 2012).


**Factors contributing to the outcome**

Diet and Nutrition.

**SA Target**

n/a.

**Data Source**


Data is unpublished and was requested from: [Link](http://health.adelaide.edu.au/pros/data/samss/#data) [Accessed: February 2012]

**Definition and Calculation**

**Definition**:

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and refers to persons aged 16+.

The prevalence of current cholesterol was assessed by asking questions about diagnosis of high cholesterol.

Respondents are asked: ‘Have you ever been told by a doctor or nurse that you have high cholesterol?’

For this indicator, prevalence of cholesterol includes respondents who had a current high cholesterol diagnosis and/or were on medication for high cholesterol.

**Calculation**:

Data is expressed as a percentage (%)

Numerator – Number of respondents who had a high cholesterol diagnosis or were on medication for high cholesterol.

Denominator – Total number of respondents.

**How data is presented**:

- The 2002 – 2011 trend of the proportion of South Australians who had a high cholesterol diagnosis or were on medication for high cholesterol according to metropolitan Adelaide and country SA area of residence.

- The proportion of South Australian males and females who had a high cholesterol diagnosis or were on medication for high cholesterol in 2011 according to specific age band.

- The proportion of South Australians who had a high cholesterol diagnosis or were on medication for high cholesterol in 2011 according to quintile of socioeconomic status (also with 95% confidence intervals).

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey data is also considered (indicator number: 3-15-2.).

**Reporting Schedule**

SAMSS data is collected and reported on a monthly basis.
### 3-16-2. Prevalence of High Cholesterol – National Comparison

| Rationale | The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.  
High blood cholesterol levels are a major risk factor for coronary heart disease and stroke(Australian Institute of Health and Welfare, 2012).  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Diet and Nutrition.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
</tbody>
</table>
| Data Source | Australian Bureau of Statistics (ABS), Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.  
| Definition and Calculation | **Definition:**  
This data is collected through the 2011 Australian Health Survey and refers to persons of all ages.  
The indicator refers to people ever told by a doctor or nurse that they have high cholesterol.  
Data includes only those with a current diagnosis at the time of survey and which had lasted at least six months, or which the respondent expected to last for six months or more.  
**Calculation:**  
Data is expressed as a percentage (%)  
Numerator – Number of respondents who had a diagnosis of high cholesterol  
Denominator – Total number of respondents  
**How data is presented:**  
- The proportion of South Australians with a diagnosis of high cholesterol compared to all States and Territories and the national average. |
| Caveats | Sample surveys are subject to both sampling and non-sampling error. |
| Reporting Schedule | Unknown. The previous National Health Survey was in 2007-08. |
3-17. Health Risk Factors – Smoking

3-17-1. Smoking Prevalence in South Australia

Rationale
Smoking is the single largest preventable cause of premature death and disease in Australia. Smoking is associated with cardiovascular disease (South Australia’s biggest killer), diabetes, cancer and respiratory diseases (*University of Adelaide, 2011*).

University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011, Justification of topics.

Factors contributing to the outcome

SA Target
Target 80: To reduce the smoking rate to 10% of the population and halve the smoking rate of Aboriginal South Australians by 2018 (*South Australian Strategic Plan*).

Data Source 1

Data is unpublished and was requested from:
[Accessed: February 2012]

Definition and Calculation

**Definition:**
This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Respondents are asked: 'Which of the following best describes your smoking status?: I smoke daily, I smoke occasionally, I don’t smoke now but I used to, I’ve tried it a few times but never smoked regularly, I’ve never smoked'.

Current smokers in this indicator include those who respond as a daily and occasionally smokers.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of respondents who smoke daily or smoke occasionally.

Denominator – Total number of respondents.

**How data is presented:**
- The 2002-2011 trend of the proportion of South Australians who are 'current' smokers according to Metropolitan Adelaide and Country SA area of residence.
- The proportion of South Australian males and females who are 'current' smokers by age band.
- The proportion of South Australians who are 'current' smokers according to quintile of socioeconomic status (also with 95% confidence intervals).

**Caveats**
Sample surveys are subject to both sampling and non-sampling error.

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 3-16-2.).

**Reporting Schedule**
SAMSS data is collected and reported on a monthly basis.
### 3-17-1. (cont’d) Smoking Prevalence in South Australia

| --- | --- |

<table>
<thead>
<tr>
<th>Definition and Calculation</th>
<th><strong>Definition:</strong> Data refers to persons aged 15+ who reported smoking every day. <strong>Calculation:</strong> Data is expressed as a percentage (%). <strong>Numerator – Number of people smoking every day</strong> <strong>Denominator – Total number of people</strong> <strong>How data is presented:</strong> - The OECD average proportion of daily smokers aged 15+.</th>
</tr>
</thead>
</table>

| Caveats | International comparability is limited due to the lack of standardisation in the measurement of smoking habits in health interview surveys across OECD countries. |

| Reporting Schedule | Annually. |
### 3-17-2. Current Smokers – National Comparison

#### Rationale
The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

Smoking is the single largest preventable cause of premature death and disease in Australia. Smoking is associated with cardiovascular disease (South Australia’s biggest killer), diabetes, cancer and respiratory diseases. *(University of Adelaide, 2011).*

*University of Adelaide (2011) South Australian Monitoring and Surveillance System (SAMSS) November 2011, Justification of topics.*

#### Factors contributing to the outcome
- Socioeconomic Status
- Indigenous Status
- Health Literacy

#### SA Target
Target 80. To reduce the smoking rate to 10% of the population and halve the smoking rate of Aboriginal South Australians by 2018 *(South Australian Strategic Plan).*

#### Data Source
*Australian Bureau of Statistics (ABS), Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.*


#### Definition and Calculation
**Definition:**
Data is collected from the 2011 Australian Health Survey and refers to population aged 18+.

Data includes manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excluding chewing tobacco and smoking of non-tobacco products. The topic focused on ‘regular smoking’, where ‘regular’ was defined as one or more cigarettes (or pipes or cigars) per day as reported by the respondent.

Respondents were asked whether they currently smoke. Respondents who answered yes were asked whether they smoked daily. Those who did not smoke daily were asked whether they smoked at least once a week. Along with respondents who reported that they did not currently smoke, they were then asked whether they had:

- ever smoked regularly (that is, at least once a day),
- smoked at least 100 cigarettes in their life, and
- smoked pipes, cigars or other tobacco products at least 20 times in their life.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of respondents who were current smokers.

Denominator – Total number of respondents.

**How data is presented:**
- The proportion of South Australian current smokers compared to all States and Territories and the national average.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule
Unknown. The previous National Health Survey was in 2007-08.
## 3-17-3. Aboriginal Smoking Prevalence – Current Smokers

### Rationale

Smoking is the single largest preventable cause of premature death and disease in Australia. Smoking is associated with cardiovascular disease (South Australia’s biggest killer), diabetes, cancer and respiratory diseases *(University of Adelaide, 2011)*.

*University of Adelaide (2011)* South Australian Monitoring and Surveillance System (SAMSS) November 2011, Justification of topics.

### Factors contributing to the outcome

- Socioeconomic Status
- Indigenous Status
- Health Literacy

### SA Target

Target 80. To reduce the smoking rate to 10% of the population and halve the smoking rate of Aboriginal South Australians by 2018 *(South Australian Strategic Plan)*.

### Data Source

Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Social Survey 2008, Cat. No. 4714.0, South Australian State Tables


[Accessed: 30/05/2012]

### Definition and Calculation

**Definition:**

Data was collected from the National Aboriginal and Torres Strait Islander Social Survey 2008 and relates to those aged 15+.

Smoking refers to the regular smoking of tobacco products, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excluding chewing tobacco and the smoking of non-tobacco products (e.g. marijuana). Based on this information, people were characterised as:

- **Current smoker** - they currently smoke daily, weekly or other regular pattern (but less than weekly);
- **Ex-smoker** - they previously smoked daily or had smoked 100 or more cigarettes in their lifetime or had smoked pipes, cigars or other tobacco products at least 20 times in their lifetime; or
- **Never smoked** - they had never smoked daily.

**Calculation:**

Data is expressed as a percentage (%)

- **Numerator** – Number of Aboriginal respondents aged 15+ who were current smokers
- **Denominator** – Total number of Aboriginal respondents aged 15+.

**How data is presented:**

- The proportion of Aboriginal South Australians who were current smokers in 2008 compared to all other States and Territories and the national average.

### Caveats

Sample surveys are subject to both sampling and non-sampling error.

### Reporting Schedule

Unknown.
### 3-17-4. Smoking - Awareness of the Health Effects of Active Smoking

#### Rationale
This indicator is essential in establishing how many South Australian smokers understand the full extent of the health risks. The World Health Organisation report that both smokers and non-smokers underestimate the addictiveness of tobacco and the risk it poses to health.

World Health Organisation: *Warm about the dangers of tobacco* [Internet] Available from: [www.who.int/tobacco/mpower/.../en_tfi_mpower_brochure_w.pdf](http://www.who.int/tobacco/mpower/.../en_tfi_mpower_brochure_w.pdf) [Accessed: 16/08/2012]

#### Factors contributing to the outcome

#### SA Target
Target 80. To reduce the smoking rate to 10% of the population and halve the smoking rate of Aboriginal South Australians by 2018 (*South Australian Strategic Plan*).

#### Data Source


#### Definition and Calculation
**Definition:**
Data is obtained from the South Australian Health Omnibus Survey and refers to persons aged 15+.

**Calculation:**
Data is expressed as a percentage (%).

**Numerator** – Number of respondents who believe that active smoking will cause illness and/or damage to the body (total population and smokers).

**Denominator** – Total number of respondents (total population and smokers).

**How data is presented:**
- The proportion of the total population and smokers who believe that active smoking will cause illness and/or damage to the body in 2007, 2008 and 2010.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule
Unknown.
### 3-17-5. Smoking Cessation

#### Rationale
There is a plethora of research which has established that quitting smoking has immediate as well as long-term health benefits for men and women of all ages, reducing risks for diseases caused by smoking and improving health in general (Scollo & Winstanley, 2008).


#### Factors contributing to the outcome
- Health literacy
- Socioeconomic Status
- Public Health Campaigns

#### SA Target
Target 80. To reduce the smoking rate to 10% of the population and halve the smoking rate of Aboriginal South Australians by 2018 *(South Australian Strategic Plan)*.

#### Data Source

[Accessed: 13/08/2012]

#### Definition and Calculation
**Definition:**
Data is obtained from the South Australian Health Omnibus Survey and relates to persons aged 15+.

The survey asks smokers about any quit attempts they had made or intend to make:

- If they had ever tried to quit
- Had made a quit attempt in the last year
- Had seriously considered quitting in the next 6 months.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of smokers who had ever tried to quit/had made a quit attempt in the last year/had considered quitting in the next 6 months.

Denominator – Total number of smokers.

**How data is presented:**
- Proportion of South Australian smokers who attempted to quit or are planning to quit smoking between 2007 and 2010.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule
Unknown.
### 3-18. Health Risk Factors – Illicit Drug Use

#### 3-18-1. Illicit Drug Use (in the last 12 months)

| Rationale | Illicit drug use is linked to adverse health and wellbeing outcomes, both in the short term, such as overdose, and in the long term, such as mental health problems or inadequate diet (Australian Bureau of Statistics, 2001). |


| SA Target | n/a. |


#### Definition and Calculation

**Definition:**
This indicator is collated through the 2010 National Drug Strategy Household Survey and relates to persons aged 12+.

Includes illegal drugs, drugs and volatile substances used illicitly, and pharmaceuticals used for non-medical purposes. The survey included questions on the following illicit drugs:

- Pain-killers/analgesics
- Tranquillisers/sleeping pills
- Steroids
- Meth/amphetamines
- Cannabis
- Heroin
- Methadone or buprenorphine
- Other opiates (opioids)
- Cocaine
- Hallucinogens
- Ecstasy
- Ketamine
- GHB
- Inhalants
- (any) Injected drug (not medically prescribed to inject)

For further definitions please refer to the report: http://www.aihw.gov.au/publication-detail/?id=32212254712

**Calculation:**
Data is expressed as a percentage (%)

**Numerator** – Number of respondents using any illicit drug at least once in the last 12 months.

**Denominator** – Total number of respondents.

**How data is presented:**
- The proportion of South Australians using illicit drugs in the previous 12 months in 2007 and 2010 compared to the national average.
- The proportion of South Australians using illicit drugs in the previous 12 months by age group.
- The proportion of South Australians using illicit drugs in the previous 12 months compared to all States and Territories and the national average.

**Caveats**
Illicit drug use is illegal and therefore drug users are marginalised and are a difficult to reach group. As such the estimates of illicit drug use are likely to be an underestimate of actual practice.
Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**
The National Drug Strategy Household Survey is carried out every 3 years.
### 3-19. Health Risk Factors – Psychological Distress

#### 3-19-1. Psychological Distress in South Australia

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Psychological distress can have a major effect on people’s ability to work, study, and manage their daily activities. Research shows that there is also a strong association between psychological distress and anxiety and affective disorders (Australian Institute of Health and Welfare, 2012).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Socioeconomic Status. Health and Wellbeing.</td>
</tr>
<tr>
<td>SA Target</td>
<td>Target 86: Equal or lower than the Australian average for psychological distress by 2014 (South Australian Strategic Plan).</td>
</tr>
<tr>
<td>Definition and Calculation</td>
<td><strong>Definition:</strong> This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes persons aged 16+. Respondents were asked questions relating to how they have been feeling in the last 4 weeks. Psychological distress was measured using the Kessler 10 Item Psychological Distress Questionnaire. Four levels of psychological distress were calculated, and then a psychological distress variable was derived combining low and moderate psychological distress (no psychological distress), and high and very high distress (psychological distress). <strong>Calculation:</strong> Data is expressed as a percentage (%). Numerator – Number of respondents reporting high or very high distress Denominator – Total number of respondents <strong>How data is presented:</strong> - The 2002 – 2011 trend of psychological distress in South Australia by metropolitan Adelaide and Country SA area of residence. - The proportion of South Australian males and females who were experiencing psychological distress in 2011 by specific age band. - The proportion of South Australians who were experiencing psychological distress in 2011 by quintile of socioeconomic status (also with 95% confidence intervals).</td>
</tr>
<tr>
<td>Caveats</td>
<td>Sample surveys are subject to both sampling and non-sampling error. SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 3-18-2.).</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>SAMSS data is collected and reported on a monthly basis.</td>
</tr>
</tbody>
</table>

### 3-19-2. Psychological Distress – National Comparison

#### Rationale

The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

Psychological distress can have a major effect on people’s ability to work, study, and manage their daily activities. Research shows that there is also a strong association between psychological distress and anxiety and affective disorders (*Australian Institute of Health and Welfare, 2012*).


#### Factors contributing to the outcome

Socioeconomic Status. Health and Wellbeing.

#### SA Target

Target 86: Equal or lower than the Australian average for psychological distress by 2014 (*South Australian Strategic Plan*).

#### Data Source

Australian Bureau of Statistics (ABS), Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.


#### Definition and Calculation

**Definition:**

Data is collected from the 2011 Australian Health Survey and relates to the 15+ population. Respondents were asked questions relating to how they have been feeling in the last 4 weeks. Psychological distress was measured using the Kessler 10 Item Psychological Distress Questionnaire. Four levels of psychological distress were calculated, and then a psychological distress variable was derived combining low and moderate psychological distress (no psychological distress), and high and very high distress (psychological distress).

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of respondents reporting high or very high distress

Denominator – Total number of respondents

**How data is presented:**

- The proportion of South Australians who experienced high or very high psychological distress compared to 6 other States and Territories and the national average.

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule

Unknown. The previous National Health Survey was in 2007-08.
### 3-19-3. Aboriginal Psychological Distress

#### Rationale

Psychological distress can have a major effect on people’s ability to work, study, and manage their daily activities. Research shows that there is also a strong association between psychological distress and anxiety and affective disorders (Australian Institute of Health and Welfare, 2012).


#### Factors contributing to the outcome

Socioeconomic Status. Health and Wellbeing.

#### SA Target

Target 86: Equal or lower than the Australian average for psychological distress by 2014 (South Australian Strategic Plan).

#### Data Source


#### Definition and Calculation

**Definition:**

The indicator was taken from the 2008 National Aboriginal and Torres Strait Islander Social Survey and relates to persons aged 15+.

The K5 is a subset of questions derived from the K10, which incorporates minor working changes for Aboriginal and Torres Strait Islander people’s surveys. The questions in the K5 were refined with a range of experts, including State and Territory health authorities who had used a modified Kessler scale in other surveys.

The K5 questions are as follows:

1. In the last 4 weeks about how often did you feel nervous?
2. In the last 4 weeks about how often did you feel without hope?
3. In the last 4 weeks about how often did you feel restless or jumpy?
4. In the last 4 weeks about how often did you feel everything was an effort?
5. In the last 4 weeks about how often did you feel so sad that nothing could cheer you up?

Responses from the five questions were then put together, resulting in a minimum possible score of 5 and a maximum possible score of 25. Low scores indicate low levels of psychological distress and hi scores indicate high levels of psychological distress.

Relates to Indigenous population aged 15+.


**Calculation:**

Data is expressed as a percentage (%)

- Numerator – Number of Aboriginal respondents reporting high or very high distress
- Denominator – Total number of Aboriginal respondents

**How data is presented:**

- The proportion of Aboriginal South Australians with high or very high psychological distress compared to all States and Territories and the national average.

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule

Unknown.
## 3-20. Health Risk Factors – Suicidal Ideation

### 3-20-1. Suicidal Ideation in South Australia

| Rationale | Reduction in suicide rates should not be the only outcome indicator for the effectiveness of a preventive programme. Other suicide-related outcomes such as suicidal ideation and depression should also be considered (World Health Organisation, 2010). World Health Organisation (2010) Towards Evidence-based Suicide Prevention Programmes[Internet] Available from: http://www.wpro.who.int/mnh/TowardsEvidencetbasedSPP.pdf [Accessed: 15/08/2012] |
| SA Target | n/a. |

| Data Source | South Australian Monitoring and Surveillance System. Data is unpublished and was requested from: http://health.adelaide.edu.au/pros/data/samss/#data [Accessed: February 2012] |

| Definition and Calculation | Definition: This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes persons aged 16+. Respondents are asked: ‘Over the past few weeks, have you felt that life isn’t worth living?’ ‘Have you thought of the possibility that you might do away with yourself?’ ‘Have you found yourself wishing you were dead and away from it all?’ ‘Have you found that the idea of taking your own life kept coming into your mind?’ Calculation: Data is expressed as a percentage (%) Numerator – Number of respondents reporting feelings of suicidal ideation Denominator – Total number of respondents How data is presented: • The 2002 – 2011 trend of the proportion of South Australians reporting feelings of suicidal ideation according to metropolitan Adelaide and Country SA area of residence. • The proportion of South Australian males and females reporting feelings of suicidal ideation in 2011 by specific age band. • The proportion of South Australians reporting feelings of suicidal ideation in 2011 by quintile of socioeconomic status (also with 95% confidence intervals). |

| Caveats | Respondents can refuse to answer these questions. Sample surveys are subject to both sampling and non-sampling error. No national benchmark is available. |

| Reporting Schedule | SAMSS data is collected and reported on a monthly basis. |
# 3-21. Sexually Transmissible Diseases

## 3-21-1 – 3-21-12. Incidence of Sexually Transmissible Diseases

### Rationale

The incidence of sexually transmissible infections and blood-borne viruses are an important health issue. They can cause harmful and sometimes irreversible complications such as reproductive health problems, fetal and perinatal health problems (World Health Organisation, 2012).

STIs are at large preventable through population behaviour changes and STI testing.


### Factors contributing to the outcome


### SA Target

n/a.

### Data Source


### Definition and Calculation

**Definition:**

Data is obtained from the National Notifiable Diseases Surveillance System and relates to persons of all ages.

Incidence data is presented for the following STDs:

- Syphilis
- HIV
- Hepatitis B
- Hepatitis C
- Chlamydia
- Gonococcal Infection

**Calculation:**

Data is expressed as an age standardised rate per 100,000 population.

**Numerator – Number of notifications of new diagnosis of syphilis, HIV, hepatitis B, hepatitis C, chlamydia, and gonococcal infection.**

**Denominator – Total population**

**How data is presented:**

- Incidence rates per 100,000 population in South Australia for 2008, 2009 and 2010 compared to Australia (for each STD).
- The incidence rate per 100,000 population in South Australia for 2010 compared to all States and Territories and the national average (for each STD)
- The incidence rate per 100,000 Aboriginal population in South Australia for 2010 compared to available States and Territories and the national average (for each STD)

### Caveats

- **Syphilis** is limited to notifications of less than two years duration, and includes notifications of congenital syphilis.
- HIV data contains notifications of newly diagnosed HIV infection and includes HIV infections known to have been newly acquired.
- Hepatitis B and C data contains notifications of newly diagnosed infections, including diagnoses known to have been newly acquired.
- Chlamydia and gonococcal notifications may include diagnoses that are not sexually acquired.

### Reporting Schedule

Data are available annually.
3-22. Burden of Disease – Healthy Life Lost to Disability

3-22-1. Years of Healthy Life Lost to Disability in South Australia

Rationale
This indicator describes the overall impact of disability on healthy years of life due to specific conditions for the South Australian population. Illustrating the top diseases groups in terms of years lost to disability enables a side by side comparison of what is contributing to healthy years lost among South Australians.

Factors contributing to the outcome

SA Target
n/a

Data Source
South Australian Burden of Disease, 3 year average estimates, 2005 – 2007
[Accessed: 17/05/2012]

Definition and Calculation
Definition:
The burden for people living with a condition (the morbidity burden) is described in terms of Years of Healthy Life Lost to Disability, or YLDs. Disability in this context refers to any departure from a state of perfect health, not just the group of conditions traditionally included under the heading of 'disabilities'.

As a year with less than perfect health is considered to contribute less to the disease burden than a year lost to premature mortality, YLDs are weighted according to the severity of the condition. Each condition has a severity weighting in the range 0 to 1 with 1 being the most severe. For example, the common cold has a severity weight of 0.014, whereas end stage cancer has a severity weight of 0.93.

Calculation:
YLDs are calculated according to the formula YLD = I*SW*L where:
- I = the number of incident cases of the condition in South Australia in 2000
- SW = the severity weight of the condition and
- L = the average duration (in years) of the condition

Data is expressed as relative proportion of total YLDs.

How data is presented:
- The relative proportion of YLD in South Australia by the top 15 disease groups and metropolitan Adelaide and Country SA area of residence.

Caveats
No national comparators available.
SA Health advises that the Burden of Disease information and material displayed in the State of Our Health are an information resource only and whilst all reasonable care has been taken in its preparation, SA Health does not make any representations or warranties as to its accuracy or otherwise. SA Health excludes all liability and or loss whatever its cause and to whomever arising directly or indirectly from its use.

Reporting Schedule
Unknown.
3-22-2. & 3-22-3. Burden of Disease – Top 5 Disability Adjusted Life Years (DALYS) (ages 20-64 and 65+ years)

<table>
<thead>
<tr>
<th>Rationale</th>
<th>This indicator describes the overall impact of and overall health loss due to specific conditions for the South Australia population. Ranking the top 5 causes in terms of burden of disease area to specific age bands enables the comparison of what is contributing to health years of life lost at different stages in life.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Accessible communities. Housing. Socioeconomic Status</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

**Data Source**

South Australian Burden of Disease, 3 year average estimates, 2006 – 2008


[Accessed: 17/05/2012]

**Definition and Calculation**

**Definition:**

DALYs refer to overall disease burden, taking into account both people living with a condition and people dying from a condition, is described in terms of Disability Adjusted Life Years or DALYs.

One DALY represents one lost year of ‘healthy’ life. DALYs are simply the sum of years of life lost due to premature mortality (YLL) and the equivalent ‘healthy’ years of life lost due to disability (YLD).

DALYs are calculated according to the formula \( \text{DALY} = \text{YLL} + \text{YLD} \).

For example, if asthma has a morbidity burden of 4121 YLDs and a mortality burden of 398 YLLs, then the overall disease burden of asthma in South Australia is \( 4121 + 398 = 4522 \) DALYs.

**Calculation:**

Data is expressed as the relative proportion of DALYs

Numerator – Number of DALYs by specific disease area

Denominator – Total DALYs

**How data is presented:**

- The top 5 conditions contributing to burden of disease in South Australia by sex and age group (24 – 64 years and 65+ years).

**Caveats**

No national comparators available.

SA Health advises that the Burden of Disease information and material displayed in the State of Our health are an information resource only and whilst all reasonable care has been taken in its preparation, SA Health does not make any representations or warranties as to its accuracy or otherwise. SA Health excludes all liability and or loss whatever its cause and to whomever arising directly or indirectly from its use.

**Reporting Schedule**

Unknown.
3-23. Cancer

### 3-23-1. Prevalence of Cancer in South Australia

<table>
<thead>
<tr>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer is one of the leading causes of mortality in South Australia and incidence rates provide us with information about the number of new cases being diagnosed in the population. The World Health Organisation (2012) states that ‘at least one third of all cancer cases are preventable’.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factors contributing to the outcome</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SA Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Source</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Definition and Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong> This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and refers to persons aged 2+. ‘Have you or your child ever been told by a doctor that you have/they have cancer?’ ‘What type of cancer was it?’ ‘How old were you or your child when first diagnosed with cancer?’ <strong>Calculation:</strong> Data is expressed as a percentage (%) <strong>Numerator</strong> – Number of respondents ever told that they have cancer <strong>Denominator</strong> – Total number of respondents <strong>How data is presented:</strong></td>
</tr>
<tr>
<td>- The proportion of South Australians ever told that they have cancer in 2010 and 2011 by metropolitan Adelaide and Country SA area of residence. - The proportion of South Australian males and females ever told that they have cancer in 2011 by age band. - The proportion of South Australians ever told that they have cancer in 2011 by type of cancer. - The proportion of South Australians ever told that they have cancer in 2011 by quintile of socioeconomic status (also with 95% confidence intervals).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Caveats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample surveys are subject to both sampling and non-sampling error. No national comparators available through SAMSS.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMSS data is collected and reported on a monthly basis.</td>
</tr>
</tbody>
</table>
### 3-23-2., 3-23-4., 3-23-6., 3-23-8., & 3-23-10. Incidence of Cancer – National Comparisons (by type of cancer)

#### Rationale

Cancer is one of the leading causes of mortality in South Australia and incidence rates provide us with information about the number of new cases being diagnosed in the population. The World Health Organisation (2012) states that ‘at least one third of all cancer cases are preventable’.


#### Factors contributing to the outcome

- Smoking
- Diet
- Physical Activity
- Overweight and Obesity
- Alcohol
- Infections
- Screening
- Socioeconomic Status
- Age

#### SA Target

n/a.

#### Data Source


#### Definition and Calculation

**Definition:**

Data is obtained from the Australian Institute of Health and Welfare (AIHW) Cancer Database and refers to persons of all ages.

**Incidence data is presented in the report for the following cancers:**

- Breast Cancer
- Bowel Cancer
- Lung Cancer
- Melanoma
- Cervical Cancer

**Calculation:**

Data is expressed as an age standardised rate per 100,000 population.

**Rate per 100,000 of new cases of cancer (by type of cancer)**

Using ABS estimated resident population, 30 June 2008.

**How data is presented (for each cancer):**

- Incidence rate of cancer per 100,000 population in South Australia between 2006 and 2008 compared to the national rate.
- Incidence rate of cancer per 100,000 population in South Australia in 2008 compared to all States and Territories and the national average.

#### Caveats

Data collection and coding practices are standardised when state and territory data are compiled into a single, national database. This is done through the following quality control measures at the AIHW:

- notifying and adjusting the data for variations in coding procedures;
- identifying and eliminating potential errors in the data; and
- undertaking a de-duplication of the ACD so that duplicate records of cases recorded in more than one registry are removed.

#### Reporting Schedule

Unknown.
### 3-23-3., 3-23-5., 3-23-7., 3-23-9., & 3-23-11. Aboriginal Incidence of Cancer (by type of cancer)

**IMPORTANT NOTE:** The AIHW is currently preparing a national Aboriginal and Torres Strait Islander (ATSI) cancer incidence report and, after investigation of the matter, has decided to exclude South Australian data due to the incompleteness of the ATSI marker on the South Australian Cancer Registry.

Due to concerns that the information may be inaccurate and/or misleading, the Health Performance Council has chosen not to reproduce data on cancer incidence for the Aboriginal population in the *State of Our Health* report at this time.

| SA Target | n/a. |

### Data Source


### Definition and Calculation

**Definition:**

Data is obtained from the Australian Institute of Health and Welfare (AIHW) Cancer Database and refers to persons of all ages. Incidence data is presented in the report for the following cancers:

- Bowel Cancer
- Lung Cancer
- Melanoma
- Female Breast Cancer
- Cervical Cancer

**Calculation:**

Data is expressed as an age standardised rate per 100,000 Aboriginal population.

Rate per 100,000 of new cases of cancer (by type of cancer)

Using ABS estimated resident population, 30 June 2007.

**How data is presented (for each cancer):**

- Incidence rate of cancer per 100,000 Aboriginal population in South Australia in 2007 compared to five other States and Territories and the national average.

### Caveats

Data collection and coding practices are standardised when state and territory data are compiled into a single, national database. This is done through the following quality control measures at the AIHW:

- notifying and adjusting the data for variations in coding procedures;
- identifying and eliminating potential errors in the data; and
- undertaking a de-duplication of the ACD so that duplicate records of cases recorded in more than one registry are removed.

### Reporting Schedule

Unknown.
## Chapter 4. Living with Chronic Conditions Technical Appendix

### 4-1. Living with Multiple Chronic Conditions in South Australia

#### 4-1-1. Living with Multiple Chronic Conditions in South Australia

#### Rationale

Living with chronic conditions can be accompanied with ongoing pain and tiredness. Those with multiple chronic conditions are at an increased risk of depression (Australian Government, 2012).


#### Factors contributing to the outcome

Age, Health Behaviours (e.g. smoking, nutrition, physical activity).

#### SA Target

n/a.

#### Data Source


#### Definition and Calculation

**Definition:**

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Multiple chronic conditions were based on National Health Priority Area conditions, namely Diabetes, Asthma, Cardiovascular Disease (heart attack, angina, heart disease, and stroke), Arthritis, Osteoporosis, and Mental Health condition (medically diagnosed and/or receiving treatment).

This indicator includes respondents who stated that they had been diagnosed with two or more of the following chronic conditions: Asthma, Cardiovascular Disease, Arthritis, Osteoporosis, and Mental Health.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Total number of respondents living with at least two chronic diseases.

Denominator – Total number of respondents

**How Data is presented:**

- 2002 – 2011 trend of the proportion of South Australians living with two or more chronic conditions according to metropolitan Adelaide and country SA area of residence.
- Proportion of South Australians with a chronic condition according to the number of conditions they have (none, one, two, three +).
- The proportion of males and females who were living with two or more chronic conditions (2011) according to specific age band.
- The proportion of South Australians living who were living with two or more chronic conditions (2011) according to quintile of socioeconomic status (also with 95% confidence intervals).

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator 4-1-2).

#### Reporting Schedule

SAMSS data is collected and reported on a monthly basis.
### 4-1-2. Living with Multiple Chronic Conditions – National Comparison

#### Rationale

The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

Living with chronic conditions can be accompanied with ongoing pain and tiredness. Those with multiple chronic conditions are at an increased risk of depression (Australian Government, 2012).


#### Factors contributing to the outcome

Age, Health Behaviours (e.g. smoking, nutrition, physical activity).

#### SA Target

n/a.

#### Data Source

Australian Bureau of Statistics (ABS) Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001, Released at 11:30am (AEST) 29/10/2012.


#### Definition and Calculation

**Definition:**

Data refers to 2011-12 and is collected through the 2011-13 Australian Health Survey.

Data includes persons of all ages.

Long-term conditions are defined as medical conditions (illnesses, injuries or disabilities) which were current at the time of the survey and which had lasted at least six months, or which the respondent expected to last for six months or more, including:

- Long-term conditions from which only infrequent attacks may occur;
- Long-term conditions which may be under control, for example, through the continuing use of medication;
- Conditions which, although present, may not be generally considered ‘illness’ because they are not necessarily debilitating, e.g. reduced sight; and
- Long-term or permanent impairments or disabilities.

Long term conditions include arthritis, asthma, back pain/problems, deafness, diabetes mellitus, hay fever and allergic rhinitis, heart stroke and vascular disease, hypertensive disease, long sightedness, malignant neoplasms (cancer), mental and behavioural problems, osteoporosis, and short sightedness.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Total number of respondents living with three or more long term conditions.

Denominator – Total number of respondents

**How Data is presented:**

- The proportion of South Australians with three or more long term conditions compared to other States and Territories and the national average.

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule

Unknown. The previous National Health Survey was in 2007-08.
## 4-1-3. Aboriginal People Living with Three or More Long Term Health Conditions

### Rationale


### Factors contributing to the outcome

Age, Health Behaviours (e.g. smoking, nutrition, physical activity).

### SA Target

n/a.

### Data Source


### Definition and Calculation

**Definition:**

This indicator is collected through the 2004-05 National Aboriginal and Torres Strait Islander Health Survey 2004-05 and relates to persons aged 15+.

Long term conditions include: Arthritis, Asthma, Back pain/problems n.e.c, disc disorders, Diabetes/high sugar problems, Eye/sight problems, Ear/hearing problems, Heart and circulatory problems/diseases, Kidney disease, Neoplasms/cancer, Osteoporosis, No long term condition.

Long-term conditions were defined as medical conditions (illnesses, injuries or disabilities) which have lasted at least six months, or which the respondent expects to last for six months or more.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Total number of Aboriginal respondents living with at least one long term condition.

Denominator – Total number of respondents

**How Data is presented:**

- The proportion of Aboriginal South Australians with at least one long term condition compared to all States and Territories and the national average.

### Caveats

Sample surveys are subject to both sampling and non-sampling error.

### Reporting Schedule

Unknown. Previous National Aboriginal and Torres Strait Islander Health Survey was carried out in 2001.
4-2. Arthritis

4-2-1. Arthritis in South Australia

Rationale

Arthritis is a very common condition in Australia affecting people of all ages and from all walks of life. Its symptoms often have a big impact on the daily lives of people (Arthritis Australia, 2012).


Factors contributing to the outcome

Previous injury. High level physical activity. Joint infections

SA Target

n/a.

Data Source


Data is unpublished and was requested from:

[Accessed: February 2012]

Definition and Calculation

Definition:

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Respondents were asked: ‘Have you ever been told by a doctor that you have arthritis?’

Arthritis included: osteoarthritis, rheumatoid arthritis, juvenile rheumatoid arthritis, and any other types.

Calculation:

Data is expressed as a percentage (%)

Numerator – Number of people with a diagnosis of arthritis.

Denominator – Total number of respondents

How Data is presented:

- 2002 – 2011 trend of the proportion of South Australians with a diagnosis of arthritis according to metropolitan Adelaide and country SA area of residence.
- The proportion of males and females with a diagnosis of arthritis (2011) according to specific age band.
- The proportion of South Australians with a diagnosis of arthritis (2011) according to quintile of socioeconomic status (also with 95% confidence intervals).

Caveats

Sample surveys are subject to both sampling and non-sampling error.

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 4-2-2).

Reporting Schedule

SAMSS data is collected and reported on a monthly basis.
### 4-2-2. Arthritis – National Comparison

| **Rationale** | The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for. Arthritis is a very common condition in Australia affecting people of all ages and from all walks of life. Its symptoms often have a big impact on the daily lives of people (Arthritis Australia, 2012). Arthritis Australia (2012) [Internet] Available from: http://www.arthritisaustralia.com.au/ [Accessed: 23/08/2012] |
| **Factors contributing to the outcome** | Previous injury. High level physical activity. Joint infections. |
| **SA Target** | n/a. |


| **Definition and Calculation** | **Definition:** This indicator is collected through the 2011 Australian Health Survey and includes persons of all ages. Respondents were asked whether they have, or had ever had gout, rheumatism or arthritis. Those who reported arthritis were asked the type of arthritis - osteoarthritis, rheumatoid arthritis, and/or other type (specified). **Calculation:** Data is expressed as a percentage (%) Numerator – Number of people with a diagnosis of arthritis. Denominator – Total number of respondents **How Data is presented:** - The proportion of South Australians with arthritis compared to all States and Territories and the national average. |

| **Caveats** | Sample surveys are subject to both sampling and non-sampling error. Because this is a household-based survey, those people with arthritis resident in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey. As a result the survey under-represents those with more severe complications of the condition, and the elderly. |
| **Reporting Schedule** | Unknown. The previous National Health Survey was in 2007-08. |
### 4-2-3. Aboriginal Prevalence of Arthritis

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors contributing to the outcome</strong></td>
<td>Previous injury. High level physical activity. Joint infections.</td>
</tr>
<tr>
<td><strong>SA Target</strong></td>
<td>n/a.</td>
</tr>
<tr>
<td><strong>Definition and Calculation</strong></td>
<td><strong>Definition:</strong> Data was collected through the National Aboriginal and Torres Strait Islander Health Survey, 2004-05 and relates to persons of all ages. The survey asked respondents the following questions: <em>Do you have, or have you ever had: Gout?</em> <em>Do you have, or have you ever had: Rheumatism?</em> <em>Do you have, or have you had: Osteoarthritis?</em> <em>Do you have, or have you had: Rheumatoid arthritis?</em> <em>Do you have, or have you had: Any other type of arthritis?</em> <em>Has your condition lasted, or is it expected to last, for six months or more?</em> See the ABS official explanatory notes for more detail: <a href="http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4715.0Explanatory%20Notes12004-05?OpenDocument">http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4715.0Explanatory%20Notes12004-05?OpenDocument</a> <strong>Calculation:</strong> Data expressed as a percentage (%) Numerator – Number of respondents with arthritis or arthritis related condition. Denominator – Total number of survey respondents. <strong>How data is presented:</strong> * The Aboriginal prevalence rate of arthritis or arthritis related conditions in South Australia compared to all States and Territories and the national average.</td>
</tr>
<tr>
<td><strong>Caveats</strong></td>
<td>Sample surveys are subject to both sampling and non-sampling error.</td>
</tr>
<tr>
<td><strong>Reporting Schedule</strong></td>
<td>Unknown. Previous National Aboriginal and Torres Strait Islander Health Survey was carried out in 2001</td>
</tr>
</tbody>
</table>
### 4-3. Mental Health Conditions

#### 4-3-1. Mental Health Conditions in South Australia

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Socioeconomic Status. Education. Employment. Alcohol/drug use. Income</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

| --- | --- |

**Definition and Calculation**

**Definition:**

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population. Respondents were asked a number of questions that enabled a determination of whether they had ever suffered, or currently suffered a mental health condition. These questions included:

- 'In the last 12 months have you been told by a doctor that you have any of the following conditions: Anxiety, depression, a stress related problem, any other mental health problem?'
- 'Do you still have [this/any of these] condition(s)?'
- 'Are you currently receiving treatment for anxiety, depression, stress related problems or any other mental health problem?'

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Number of respondents living with a diagnosed mental health condition.

Denominator – Total number of respondents

**How Data is presented:**

- 2002 – 2011 trend of the proportion of South Australians with a diagnosis of a mental health condition according to metropolitan Adelaide and country SA area of residence.
- The proportion of males and females with a diagnosis of a mental health condition (2011) according to specific age band.
- The proportion of South Australians with a diagnosis of a mental health condition (2011) according to quintile of socioeconomic status (also with 95% confidence intervals).

**Caveats**

Sample surveys are subject to both sampling and non-sampling error. SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 4-3-2).

**Reporting Schedule**

SAMSS data is collected and reported on a monthly basis.
### 4-3-2. Mental Health – National Comparison

| Factors contributing to the outcome | Socioeconomic Status. Education. Employment. Alcohol/drug use. Income | |
| SA Target | n/a. | |
| Definition and Calculation | Definition: This indicator is collected through the 2011 Australian Health Survey and includes persons of all ages. Respondents were asked if they had ever been diagnosed with a mental health condition. Calculation: Data is expressed as a percentage (%) Numerator – Number of respondents living with a diagnosed mental health condition Denominator – Total number of respondents How Data is presented: * The proportion of South Australians with a diagnosis of a mental health condition compared to other States and Territories and the national average. | |
| Caveats | Sample surveys are subject to both sampling and non-sampling error. Because this is a household-based survey, those people with arthritis resident in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey. As a result the survey under-represents those with more severe complications of the condition, and the elderly. | |
| Reporting Schedule | Unknown. The previous National Health Survey was in 2007-08. | |
4-3-3. Aboriginal Prevalence of Mental Health Problems

Rationale
A number of social, environmental, biological and psychological factors can impact on a person’s mental health. Mental health can interfere with social functioning and daily life. Many mental health symptoms require treatment or hospitalisation (Australian Institute of Health and Welfare, 2012).

Factors contributing to the outcome
Socioeconomic Status. Education. Employment. Alcohol/drug use. Income

SA Target
n/a.

Data Source

Definition and Calculation
Definition:
This indicator is collected through the South Australian Aboriginal Health Survey (SAAHS) and represents the Aboriginal population in South Australia aged 15 years and over.

Respondents were asked, ‘Have you ever been told by a doctor, psychiatrist, psychologist, or other mental health worker that you have a mental health problem?’

Data are as at 2011 when the survey collection took place.

Calculation:
Data is expressed as a percentage (%)

Numerator – Number of respondents living with a doctor-diagnosed mental health problem.

Denominator – Total number of respondents

How Data are presented:
- Proportion of Aboriginal South Australians with a diagnosis of a mental health problem by metropolitan Adelaide and Country SA area of residence.

Caveats
Sample surveys are subject to both sampling and non-sampling error.
The weighting of data can result in rounding discrepancies or totals not adding
SAAHS data does not allow for interstate comparisons.

Reporting Schedule
n/a.
### 4-3-4. Projected Prevalence of Dementia for South Australia, 2011-2020

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Dementia has been recognised as one of the biggest health issues that is currently facing Australia. Due to an ageing population this is especially true for South Australia (Australian Institute of Health and Welfare, 2007). Australian Institute of Health and Welfare (AIHW) 2006. Dementia in Australia: National data analysis and development. AIHW Cat. No. AGE 53. Canberra: AIHW.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver of the outcome</td>
<td>Age. Diseases and infections. Stroke</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

#### Data Source


#### Definition and Calculation

**Definition:**
Deloitte Access Economic was commission by Alzheimer’s Australia to provide updated dementia prevalence estimates and projections for Australia.

The estimated numbers provided by Deloitte Access Economic were applied to ABS population projections from the SA Department of Planning and Local Government in order to give an estimated prevalence rate.

Data relates to the population over aged 65+.

**Calculation:**

Data is expressed as a rate per 1,000 population

Numerator – Projected number of people expected to have dementia.

Denominator – Population projection figures.

**How Data is presented:**

- The projected prevalence trend is presented for South Australia and the national average between 2011 and 2020.

#### Caveats

Data are projections only and do not necessarily reflect that true future prevalence rates.

#### Reporting Schedule

Unknown.
### 4-4. Asthma Prevalence

#### 4-4-1. Asthma Prevalence in South Australia

| Factors contributing the outcome | Environment (e.g. exposure to smoke and tobacco, polluted air). Stress or Emotions. Physical Activity |
| SA Target | n/a. |

#### Data Source


#### Definition and Calculation

**Definition:**
This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Questions were asked to determine the current prevalence of asthma in the population, using the ACAM (Australian Centre for Asthma Monitoring) definition. This is defined as the respondent having been diagnosed with asthma and experiencing symptoms and/or receiving treatment in the last 12 months.

Respondents were asked: ‘Have you ever been told by a doctor that you have asthma?’ , ‘During the past 12 months did you have symptoms of asthma?’ , ‘During the past 12 months did you take asthma medication that was prescribed or given to you by a doctor?’

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Total number of respondents with a diagnosis of asthma

Denominator – Total number of respondents

**How Data is presented:**
- 2002 – 2011 trend of the proportion of South Australians with a diagnosis of asthma according to metropolitan Adelaide and country SA area of residence.
- The proportion of males and females with a diagnosis of asthma (2011) according to specific age band.
- The proportion of South Australians with a diagnosis of asthma (2011) according to quintile of socioeconomic status (also with 95% confidence intervals).

#### Caveats

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 4-4-2.). Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule

SAMSS data is collected and reported on a monthly basis.
## 4-4-2. Asthma Prevalence – National Comparison

### Rationale

The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

People with asthma can experience reduced quality of life and require a range of health services from consultations in primary care to casualty/emergency department visits to hospital inpatient care (Australian Institute of Health and Welfare, 2012).


### Factors contributing to the outcome

Environment (e.g. exposure to smoke and tobacco, polluted air). Stress or Emotions. Physical Activity.

### SA Target

n/a.

### Data Source

Australian Bureau of Statistics (ABS) Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.


### Definition and Calculation

**Definition:**

This indicator is collected through the 2011 Australian Health Survey and includes persons of all ages.

Data refers to those ever told by a doctor or a nurse that they have asthma, whose asthma may be considered as a current condition. For asthma to be identified as current, the respondent must have been told by a doctor or nurse that they have asthma, and have had symptoms or taken treatment for asthma in the 12 months prior to interview.

**Calculation:**

Data is expressed as a percentage (%)

- **Numerator** – Total number of respondents with a diagnosis of asthma
- **Denominator** – Total number of respondents

**How Data is presented:**

- The proportion of South Australians with asthma compared to all States and Territories and the national average.

### Caveats

Almost all current asthma cases identified are those which the respondent reported as being medically diagnosed, however cases are essentially self-reported, and hence may not agree with data from other sources using different approaches to the definition of asthma and the collection of data.

Sample surveys are subject to both sampling and non-sampling error.

### Reporting Schedule

Unknown. The previous National Health Survey was in 2007-08.
### 4-4-3. Aboriginal Prevalence of Asthma

**Rationale**
People with asthma can experience reduced quality of life and require a range of health services from consultations in primary care to casualty/emergency department visits to hospital inpatient care (*Australian Institute of Health and Welfare*, 2012).


**Factors contributing to the outcome**
Environment (e.g. exposure to smoke and tobacco, polluted air). Stress or Emotions. Physical Activity.

**SA Target**
n/a.

**Date Source**
Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey 2004-05, South Australia, Cat. No. 4715.4.55.005. Released at 11.30am (AEST) 11/04/2006

**Definition and Calculation**

**Definition:**
Data relates to persons aged 15+ and was obtained through the 2004-05 National Aboriginal and Torres Strait Islander Health Survey.
The survey asked respondents if they had ever been told by a doctor or nurse that they have asthma, and if they still regard their asthma as a current condition.

**Calculation:**
Data expressed as a percentage (%)
Numerator – Number of respondents with asthma
Denominator – Total number of survey respondents.

**How data is presented:**
- The prevalence of Asthma for Aboriginal South Australians compared to all States and Territories and the national average.

**Caveats**
Data for the Northern Territory was not published but is included in the Australia total.
Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**
Unknown. Previous National Aboriginal and Torres Strait Islander Health Survey was carried out in 2001.
Diabetes can lead to serious complications, such as cardiovascular disease and end-stage kidney disease as well as loss of vision, limb amputation and even death (Australian Institute of Health and Welfare, 2012).

Type 1 diabetes occurs when the pancreas is unable to make enough insulin. Type 2 diabetes is the most common form of diabetes and is closely related to lifestyle behaviours such as overweight and obesity, lack of physical activity and unhealthy food choices.

People with diabetes are at an increased risk of diabetic kidney disease, diabetic retinopathy, and diabetic neuropathy (World Health Organisation, 2011).

Factors contributing to the outcome

- Body Mass Index (BMI)
- Physical Activity
- Nutrition

Definition and Calculation

**Definition:**
This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population. Respondents were asked: ‘Have you ever been told by a doctor that you have diabetes?’

**Calculation:**
Data is expressed as a percentage (%)

- **Numerator** – Total number of respondents who had been told by a doctor that they had diabetes.
- **Denominator** – Total number of respondents

How Data is presented:
- 2002 – 2011 trend of the proportion of South Australians with a diagnosis of diabetes according to metropolitan Adelaide and country SA area of residence.
- The proportion of males and females with a diagnosis of diabetes (2011) according to specific age band.
- The proportion of South Australians with a diagnosis of diabetes (2011) according to quintile of socioeconomic status (also with 95% confidence intervals).

Caveats

Sample surveys are subject to both sampling and non-sampling error. SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 4-5-2.).

Reporting Schedule

SAMSS data is collected and reported on a monthly basis.
### 4-5-2. Diabetes Prevalence – National Comparison

**Rationale**

Diabetes can lead to serious complications, such as cardiovascular disease and end-stage kidney disease as well as loss of vision, limb amputation and even death (Australian Institute of Health and Welfare, 2012).

Type 1 diabetes occurs when the pancreas is unable to make enough insulin. Type 2 diabetes is the most common form of diabetes and is closely related to lifestyle behaviours such as overweight and obesity, lack of physical activity and unhealthy food choices.

People with diabetes are at an increased risk of diabetic kidney disease, diabetic retinopathy, and diabetic neuropathy (World Health Organisation, 2011).


**Factors contributing to the outcome**

Body Mass Index (BMI), Physical Activity, Nutrition

**SA Target**

n/a.

**Data Source**

Australian Bureau of Statistics (ABS) Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.


[Accessed: 09/11/2012]

**Definition and Calculation**

**Definition:**

This indicator is collected through the 2011 Australian Health Survey and relates to persons of all ages. Respondents were asked if they had ever been told by a doctor or nurse that they had diabetes and the type of diabetes they were told they had.

Where the respondent had reported they currently had Type 1 or Type 2 diabetes those conditions were assumed to be of six months or more duration.

**Calculation:**

Data is expressed as a percentage (%)

Numerator – Total number of respondents who had been told by a doctor that they had diabetes.

Denominator – Total number of respondents

**How Data is presented:**

- The proportion of South Australians with diabetes compared to other States and Territories and the national average.
- The proportion of South Australians with type 2 diabetes compared to other States and Territories and the national average.
- The proportion of South Australians with diabetes having their feet checked in the past 12 months compared to other States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

Because this is a household-based survey, those people with diabetes resident in hospitals, nursing or convalescent homes, or similar accommodation are outside the scope of this survey. As a result, the survey will under-represent those with more severe complications of the condition.

Gestational diabetes is not considered a long-term condition.

**Reporting Schedule**

Unknown. The previous National Health Survey was in 2007-08.
### 4-5-3. Aboriginal Prevalence of Diabetes/High Sugar Levels

#### Rationale
Diabetes can lead to serious complications, such as cardiovascular disease and end-stage kidney disease as well as loss of vision, limb amputation and even death (Australian Institute of Health and Welfare, 2012).

Type 1 diabetes occurs when the pancreas is unable to make enough insulin. Type 2 diabetes is the most common form of diabetes and is closely related to lifestyle behaviours such as overweight and obesity, lack of physical activity and unhealthy food choices.

People with diabetes are at an increased risk of diabetic kidney disease, diabetic retinopathy, and diabetic neuropathy (World Health Organisation, 2011).


#### Factors contributing to the outcome
Body Mass Index (BMI), Physical Activity, Nutrition.

#### SA Target
n/a.

#### Date Source
Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey 2004-05, South Australia, Cat. No. 4715.4.55.005. Released at 11.30am (AEST) 11/04/2010 First Issue.


#### Definition and Calculation
**Definition:**
Data was collected through the National Aboriginal and Torres Strait Islander Health Survey, 2004-05.

Data refers to persons of all ages.

The survey asked respondents the following questions:

‘Do you ever been told by a doctor or nurse you have Diabetes?’

‘Have you ever been told by a doctor or nurse that you have high sugar levels in your blood or urine?’

‘What type of diabetes were you told you have? Answers include: Type I, Type II, Gestational, Diabetes insipidus, other or type unknown.

See the ABS official explanatory notes for more detail:


**Calculation:**
Data expressed as a percentage (%)

Numerator – Number of respondents with diabetes/high sugar levels.

Denominator – Total number of survey respondents.

How data is presented:
- The Aboriginal prevalence rate of diabetes in South Australia compared to all States and Territories and the national average.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule
Unknown. Previous National Aboriginal and Torres Strait Islander Health Survey was carried out in 2001
### 4-5-4. Lower Limb Amputation with Principal or Additional Diagnosis of Type 2 Diabetes

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Diabetes complications include nerve damage and poor blood circulation. These problems can make the feet vulnerable to ulcer. A non-healing ulcer that causes severe damage to tissues and bone may require amputation or a toe, foot, or part of a leg. Effective diabetes management and careful foot care can essentially help to prevent foot ulcers (Diabetes Australia, 2012).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Early detection of limb problems. Regular feet checks for people with diabetes. Foot care</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
<tr>
<td>Definition and Calculation</td>
<td><strong>Definition:</strong> Includes unspecified diabetes. The figures are based on the ICD-10-AM classification. The codes used are ICD-10-AM diagnosis codes E11.x for diabetes, and ICD-10-AM procedure block 1533 and procedure codes 44370-00, 44373-00, 44367-00, 44367-01 and 44367-02 for lower limb amputation. The data refers to persons of all ages. A <strong>separation</strong> is an episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). Separation also means the process by which an admitted patient completes an episode of care either by being discharged, dying, transferring to another hospital or changing type of care</td>
</tr>
<tr>
<td></td>
<td><strong>Calculation:</strong> Data is expressed as an age standardised separation rate per 100,000 (standardised to the Australian resident population at 30 June 2001). <strong>How Data is presented:</strong> The Separation rates per 100,000 population in South Australia compared to four other States and Territories and the national average.</td>
</tr>
<tr>
<td>Caveats</td>
<td>Data for the Northern Territory, Tasmania, and the Australian Capital Territory were not published (due to private hospital confidentiality arrangements) but are included in the total for Australia.</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>Unknown.</td>
</tr>
</tbody>
</table>
4-6. Cardiovascular Disease

4-6-1. Cardiovascular Disease in South Australia

| Rationale | Cardiovascular disease (CVD) refers to diseases of the heart and blood vessels and is the leading cause of death in South Australia. CVD includes conditions such as coronary heart disease (CHD), cerebrovascular disease (stroke), heart failure, rheumatic heart disease and hypertension (high blood pressure). |
| Factors contributing the outcome | Smoking. Physical inactivity. Poor diet. Risky alcohol consumption. Obesity and Diabetes |
| SA Target | n/a. |


| Definition and Calculation | Definition: This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population. Respondents were asked: 'Have you ever been told by a doctor that you have had any of the following conditions? Heart attack, angina, heart disease, stroke'. Calculation: Data is expressed as a percentage (%) Numerator – Number of respondents with Cardiovascular Disease. Denominator – Total number of respondents. How Data is presented: • 2002 – 2011 trend of the proportion of South Australians with a diagnosis of CVD according to metropolitan Adelaide and country area of residence. • The proportion of males and females with a diagnosis of CVD (2011) according to specific age band. • The proportion of South Australians with a diagnosis of CVD (2011) according to quintile of socioeconomic status (also with 95% confidence intervals). |

| Caveats | Sample surveys are subject to both sampling and non-sampling error. SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 4-6-2). |

| Reporting Schedule | SAMSS data is collected and reported on a monthly basis. |
### 4-6-2. Cardiovascular Disease – National Comparison

| **Rationale** | The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for. Cardiovascular disease (CVD) refers to diseases of the heart and blood vessels and is the leading cause of death in South Australia. CVD includes conditions such as coronary heart disease (CHD), cerebrovascular disease (stoke), heart failure, rheumatic heart disease and hypertension (high blood pressure). |
| **Driver of the outcome** | Smoking, Physical inactivity, Poor diet, Risky alcohol consumption, Obesity and Diabetes |
| **Target** | n/a. |


| **Definition and Calculation** | **Definition:** This data is collected from the 2011 Australian Health Survey and includes persons of all ages. Data refers to persons ever told by a doctor or nurse that they have one or more heart or circulatory conditions, who consider they currently have one or more such conditions. Respondents were asked if they had ever been told by a doctor or nurse that they had a heart or circulatory condition. Including: Rheumatic heart disease, heart attack, heart failure, stroke, angina, high blood pressure or hypertension, low blood pressure or hypotension, hardening or the arteries, fluid problems, high cholesterol, rapid or irregular heartbeats, heart murmur, haemorrhoids, varicose veins. **Calculation:** Data is expressed as a percentage (%) Numerator – Number of respondents with a heart or circulatory condition. Denominator – Total number of respondents. **How Data is presented:** Proportion of South Australians with a heart or circulatory condition compared to other States and Territories and the national average. |

| **Caveats** | Sample surveys are subject to both sampling and non-sampling error. |
| **Reporting Schedule** | Unknown. The previous National Health Survey was in 2007-08. |
### 4-6-3. Aboriginal Prevalence of Heart and Circulatory Problems/Diseases

#### Rationale
Cardiovascular disease in indigenous Australians is 30% more common than in non-Indigenous Australians (Australian Institute of Health and Welfare, 2012). Circulatory disease is the biggest killer among the South Australian Indigenous population.


#### Factors contributing to the outcome
Literacy, Socioeconomic status, Smoking status, Alcohol consumption, Physical inactivity, Poor diet and nutrition

#### SA Target
n/a

#### Date Source
Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey 2004-05, South Australia, Cat. No. 4715.4.55.005. Released at 11.30am (AEST) 11/04/2006 First Issue.


#### Definition and Calculation
**Definition:**
The survey asked respondents the following questions:
‘Including conditions which can be controlled by medication, have you ever been told by a doctor or nurse that you have any heart or circulatory condition?’
‘What are the names of these conditions’

Responses include: Rheumatic heart disease, heart attack, stroke (including after effects of stroke), angina, high blood pressure/hypertension, low blood pressure/hypotension, hardening of the arteries/atherosclerosis/arteriosclerosis, fluid problems/fluid retention/oedema, high cholesterol, rapid or irregular heartbeats/tachycardia/palpitations, heart murmur, heart valve disorder, haemorrhoids, varicose veins, and other.


**Calculation:**
Data expressed as a percentage (%)

Numerator – Number of respondents identifying a heart and circulatory problem/disease.
Denominator – Total number of survey respondents.

**How data is presented:**
- The prevalence rate for heart and circulatory problems/diseases is presented for South Australia compared to all States and Territories.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

People with heart or circulatory conditions who are resident in hospitals, nursing homes or convalescent homes, are outside the scope of this survey. As a result, the survey will under-represent those with more severe conditions.

#### Reporting Schedule
Unknown. Previous National Aboriginal and Torres Strait Islander Health Survey was carried out in 2001.
4-7. Osteoporosis

4-7-1. Osteoporosis in South Australia

Rationale

Osteoporosis is a systemic skeletal disease which causes the bones to become thin, weak and fragile that a minor bump or accident can cause a serious fracture. The disease impairs density of the bone as well as its structural quality.

Osteoporosis is a major cause of fractures, deformity and mobility limitations among the elderly (especially females). Around 50% of people with one fracture due to osteoporosis will have another (Osteoporosis Australia, 2011).


Factors contributing to the outcome

Age, Ethnicity, Eating disorders. Physical inactivity

SA Target

n/a

Data Source


Data is unpublished and was requested from: Available from: http://health.adelaide.edu.au/pros/data/samss/#data [Accessed: February 2012]

Definition and Calculation

Definition:

This indicator is collected through the South Australian Monitoring and Surveillance System (SAMSS) and includes only the age 16+ population.

Respondents were asked: ‘Have you ever been told by a doctor that you have osteoporosis?’

Calculation:

Data is expressed as a percentage (%)

Numerator – Number of respondents with a diagnosis of osteoporosis.

Denominator – Total number of respondents

How Data is presented:

- 2002 – 2011 trend of the proportion of South Australians with a diagnosis of osteoporosis according to metropolitan Adelaide and country SA area of residence.
- The proportion of males and females with a diagnosis of osteoporosis (2011) according to specific age band.
- The proportion of South Australians with a diagnosis of osteoporosis (2011) according to quintile of socioeconomic status (also with 95% confidence intervals).

Caveats

Sample surveys are subject to both sampling and non-sampling error.

Often people do not know they have osteoporosis because the condition lacks overt symptoms.

SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 4-7-2.).

Reporting Schedule

SAMSS data is collected and reported on a monthly basis.
### 4-7-2. Osteoporosis – National Comparison

#### Rationale

The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

Osteoporosis is a systemic skeletal disease which causes the bones to become thin, weak and fragile that a minor bump or accident can cause a serious fracture. The disease impairs density of the bone as well as its structural quality.

Osteoporosis is a major cause of fractures, deformity and mobility limitations among the elderly (especially females). Around 50% of people with one fracture due to osteoporosis will have another (Osteoporosis Australia, 2011).


#### Factors contributing to the outcome


#### SA Target

n/a.

#### Data Source

Australian Bureau of Statistics (ABS) Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.


#### Definition and Calculation

**Definition:**

This indicator is collected through the 2011 Australian Health Survey and refers to persons of all ages.

Data refers primarily to those ever told by a doctor or nurse they have osteoporosis or osteopenia (a mild loss of bone mass density that may progress to osteoporosis).

**Calculation:**

Data is expressed as a percentage (%)

**Numerator** – Number of respondents with a diagnosis of osteoporosis.

**Denominator** – Total number of respondents

**How Data is presented:**

- The proportion of South Australians with osteoporosis compared to all States and Territories and the national average.

#### Caveats

Sample surveys are subject to both sampling and non-sampling error.

Often people do not know they have osteoporosis because the condition lacks overt symptoms.

Because this is a household based survey, those people with osteoporosis or osteopenia resident in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey. As a result, the survey under-represents those with more severe complications of the condition, and the elderly.

#### Reporting Schedule

Unknown. The previous National Health Survey was in 2007-08.
# 4-7.3. Aboriginal Prevalence of Osteoporosis

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Osteoporosis is a systemic skeletal disease which causes the bones to become thin, weak and fragile that a minor bump or accident can cause a serious fracture. The disease impairs density of the bone as well as its structural quality. Osteoporosis is a major cause of fractures, deformity and mobility limitations among the elderly (especially females). Around 50% of people with one fracture due to osteoporosis will have another (Osteoporosis Australia, 2011).</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Definition and Calculation</th>
<th>Definition: This indicator is collected through the 2004-05 National Aboriginal and Torres Strait Islander Health Survey and refers to persons of all ages. Data refers primarily to those ever told by a doctor or nurse they have osteoporosis or osteopenia (a mild loss of bone mass density that may progress to osteoporosis). Calculation: Data is expressed as a percentage (%) Numerator – Number of respondents with a diagnosis of osteoporosis. Denominator – Total number of respondents How Data is presented: The proportion of Aboriginal South Australians with osteoporosis compared to 6 other States and Territories and the national average.</th>
</tr>
</thead>
</table>

| Caveats | Data for the Northern Territory was unavailable. Sample surveys are subject to both sampling and non-sampling error. Often people do not know they have osteoporosis because the condition lacks overt symptoms. Because this is a household based survey, those people with osteoporosis or osteopenia resident in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey. As a result, the survey will under-represent those with more severe complications of the condition, and the elderly. |

| Reporting Schedule | Unknown |
4-8. Chronic Bronchitis or Emphysema

4-8-1. Chronic Bronchitis or Emphysema in South Australia

| Rationale | Chronic bronchitis and emphysema are common long term lung diseases which cause shortness of breath. A risk factor for bronchitis and emphysema is smoking. Shortness of breath can affect day to day activities such as walking up stairs or ever walking along flat ground (Australian Institute of Health and Welfare, 2012). |
| Factors contributing to the outcome | Smoking. |
| SA Target | n/a |

| Definition and Calculation | Definition: Data relates to persons aged 16+. The SAMSS Survey asked respondents: ‘Have you ever been told by a doctor that you have chronic bronchitis or emphysema? ‘How old were you when you were first diagnosed with chronic bronchitis or emphysema? Calculation: Data is expressed as a percentage. Numerator – Number of respondents who had been told by a doctor that they had chronic bronchitis or emphysema. Denominator – Total number of respondents. How Data is presented: 2002 – 2011 trend of the proportion of South Australians with chronic bronchitis or emphysema according to metropolitan Adelaide and country SA area of residence. The proportion of South Australian males and females with chronic bronchitis or emphysema (2011) according to specific age band. The proportion of South Australians with chronic bronchitis or emphysema (2011) according to quintile of socioeconomic status (also with 95% confidence intervals). |
| Caveats | Sample surveys are subject to both sampling and non-sampling error. SAMSS data does not allow for interstate comparisons and therefore the 2011 Australian Health Survey is also considered (indicator number: 4-8-2.). |
| Reporting Schedule | SAMSS data is collected and reported on a monthly basis. |
### 4-8-2. Bronchitis or Emphysema – National Comparison

| Rationale | The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for. Chronic bronchitis and emphysema are common long term lung diseases which cause shortness of breath. A risk factor for bronchitis and emphysema is smoking. Shortness of breath can affect day to day activities such as walking up stairs or even walking along flat ground (Australian Institute of Health and Welfare, 2012). |
| Factors contributing to the outcome | Smoking. |
| SA Target | n/a |


| Definition and Calculation | Definition: This indicator is collected through the 2011 Australian Health Survey and includes persons of all ages. Respondents were asked to report any conditions that they have from a list, which had lasted, or were expected to last, for six months or more. Included on this list was bronchitis and emphysema. Calculation: Data is expressed as a percentage (%). Numerator – Number of respondents with Bronchitis or Emphysema. Denominator – Total number of respondents. How Data is presented: The proportion of South Australians with a diagnosis of Bronchitis or Emphysema compared to other States and Territories and the national average. |

| Caveats | Sample surveys are subject to both sampling and non-sampling error. |
| Reporting Schedule | Unknown. The previous National Health Survey was in 2007-08. |
### 4-8-3. Aboriginal Prevalence of Bronchitis.

**Rationale**

The Australian Health Survey data has been included to give an interstate comparison, which local SAMSS data does not allow for.

Chronic bronchitis and emphysema are common long term lung diseases which cause shortness of breath. A risk factor for bronchitis and emphysema is smoking. Shortness of breath can affect day to day activities such as walking up stairs or ever walking along flat ground (Australian Institute of Health and Welfare, 2012).


**Factors contributing to the outcome**

Smoking

**SA Target**

n/a

**Date Source**

Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey 2004-05, South Australia, Cat. No. 4715.4.55.005. Released at 11.30am (AEST) 11/04/2006 First Issue.


**Definition and Calculation**

**Definition:**

Data was obtained from the 2004-05 National Aboriginal and Torres Strait Islander Health Survey and relates to persons aged 15+.

The survey asked respondents if they had a current diagnosis of bronchitis.


**Calculation:**

Data expressed as a percentage (%)

Numerator – Number of respondents with bronchitis.

Denominator – Total number of survey respondents.

**How data is presented:**

- The prevalence rate of bronchitis for Aboriginal South Australians compared to all States and Territories and the national average.

**Caveats**

Sample surveys are subject to both sampling and non-sampling error.

**Reporting Schedule**

Unknown. Previous National Aboriginal and Torres Strait Islander Health Survey was carried out in 2001.
## 4-9. Back Pain

### Rationale
Back pain constitutes a major public health problem as it affects a large number of people each year and is the cause of great discomfort and economic loss (Dougherty, Egan, & Baird, 2008).


### Factors contributing to the outcome
- Injury
- Age

### SA Target
n/a

### Data Source
Australian Bureau of Statistics (ABS) Australian Health Survey: First Results, 2011-13, Tables 1-17: South Australia, Cat. No. 4362.055.001. Released at 11.30am (AEST) 29/10/2012.


### Definition and Calculation
**Definition:**
This indicator is collected through the 2011 Australian Health Survey and refers to persons of all ages.

Respondents were asked to report any back pain problems, which had lasted, or was expected to last, for six months or more.

**Calculation:**
Data is expressed as a percentage (%)

Numerator – Number of respondents with back pain

Denominator – Total number of respondents

**How Data is presented:**
- The proportion of South Australians with back pain compared to other States and Territories and the national average.

### Caveats
Sample surveys are subject to both sampling and non-sampling error.

Because this is a household based survey, those people with back pain or problems resident in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey. As a result, the survey under-represents those with more severe complications of the condition, and the elderly.

### Reporting Schedule
Unknown. The previous National Health Survey was in 2007-08.
## 4-10. Kidney Disease

### 4-10.1 End-Stage Kidney Disease

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Data Source**


**Definition and Calculation**

**Definition:**
Incidence refers to new cases of the disease during a certain period of time.

Most recent data relates to 2004-07 and is available also for 2003-07.

**Calculation:**
Data is expressed as a standardised rate per 100,000 population

Numerator – Number of cases of end state kidney disease
Denominator – Population figures.

**How Data is presented:**
• Standardised incidence rates per 100,000 population for South Australia and Australia are presented for 2003-07 and 2004-07.

**Caveats**

Data related to small numbers.

**Reporting Schedule**

Unknown.
### 4-10-2. Aboriginal Kidney Disease

#### Rationale
End stage kidney disease is the most severe form of chronic kidney disease and kidney replacement therapy (KRT) is required for survival when kidney function is no longer sufficient to sustain life (Australian Institute of Health and Welfare, 2012).


#### Driver of the outcome

#### SA Target
n/a

#### Data Source
Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey 2004-05, South Australia, Cat. No. 4715.4.55.005. Released at 11.30am (AEST) 11/04/2006 First Issue.


#### Definition and Calculation
**Definition:**
Data was collected through the National Aboriginal and Torres Strait Islander Health Survey, 2004-05.

Data was obtained from the 2004-05 National Aboriginal and Torres Strait Islander Health Survey and relates to persons of all ages.

The survey asked respondents if they had ever been told by a doctor or nurse that they have kidney disease and whether they still had the condition.

**Calculation:**
Data is expressed as a percentage.

Numerator – Number of Aboriginal survey respondents with kidney disease

Denominator – Total number of Aboriginal survey respondents.

**How Data is presented:**
- The proportion of Aboriginal South Australians with kidney disease compared to all States and Territories and the national average.

#### Caveats
Sample surveys are subject to both sampling and non-sampling error.

#### Reporting Schedule
Unknown.
Chapter 5. End of Life Technical Appendix

5-1. Death Rate

5-1-1. Death Rate in South Australia

| Rationale                                                                 | Analysing the death rates over time for metropolitan and country South Australia allows us to identify any differing patterns or trends emerging between the two areas and to identify any further analysis for a specific area.
|                                                                          | Similarly, analysing male and female death rate trends allows us to identify any differing trends emerging by sex. |
| SA Target                                                               | n/a. |

Data Source 1


Definition and Calculation

Definition:
Includes deaths from all causes and relates to persons of all ages.

Data relates to deaths registered during the calendar year.

Data are Indirectly Standardised Rates (refer to ‘Statistical Glossary for definition’)

Refer to the following link for further explanatory notes:

Calculation:
Data is expressed as an indirectly standardised rate per 1,000 population

Calculation:
(\text{Observed number of deaths in metropolitan and country South Australia} \div \text{SUM of (age specific rate in the standard population x population by age group in metropolitan and country South Australia)})

How Data is presented:

Caveats
Issues of completeness, coverage and quality of death registration data.

Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS)
### 5-1-1. (cont’d) Death Rate in South Australia

**Data Source 2**

| --- |

**Definition and Calculation**

**Definition:** Includes deaths from all causes and relates to persons of all ages.

Data relates to deaths registered during the calendar year (2010)

Data are Indirectly Standardised Rates (refer to ‘Statistical Glossary for definition’)


**Calculation:**

Data is expressed as an indirectly standardised rate per 1,000 population

Calculation:

\[
\text{(Observed number of deaths in metropolitan and country South Australia / SUM of (age specific rate in the standard population x population by age group and sex))}
\]

**How Data is presented:**


**Caveats**

Issues of completeness, coverage and quality of death registration data.

**Reporting Schedule**

Annually through the Australian Bureau of Statistics (ABS)

---

**Data Source 3**

| --- |

**Definition and Calculation**

**Definition:** Includes deaths from all causes and relates to persons of all ages.

Data relates to the average annual number of deaths at midyear (2011)

Data are Crude Rates (refer to ‘Statistical Glossary for definition’)

**Calculation:**

Data is expressed as a rate per 1,000 population

Calculation:

\[
\text{(Observed number of deaths / population estimate) x 1,000}
\]

**Caveats**

The World death rate is not directly comparable to the South Australia and Australia death rates but is provided merely as an indication.

**Reporting Schedule**

Unknown.
### 5-1-2. Aboriginal Death Rate

| Rationale | Analysing Aboriginal death rates compared to non-Aboriginal death rates Australia allows us to identify the mortality gap between the two populations and how this is changing over time. |
| SA Target | n/a |

#### Data Source 1


#### Definition and Calculation

**Definition:**
Includes deaths from all causes and relates to persons of all ages.

Data relates to deaths registered during the calendar year.

Data are age standardised rates (refer to ‘Statistical Glossary for definition’)


**Calculation:**

Data is expressed as deaths per 1,000 standard population. Total persons in the 2001 Australian population are used as the standard population.

\[
\text{(Observed number of deaths/ standard population)} \times 1,000
\]

**How Data is presented:**

- The trend of Aboriginal and non-Aboriginal death rates from 2001-05 to 2005-09 (five year rolling average).

**Caveats**

Due to potential over-reporting of WA Aboriginal deaths for 2007, 2008 and 2009, WA mortality data are not included in the report.

Non-Aboriginal rates include deaths of those for whom Indigenous status was not stated.

**Reporting Schedule**

Annually.
5-1-2. (cont’d) Aboriginal Death Rate

Data Source 2
[Accessed: 27/07/2012]

Definition and Calculation
Definition:
Includes deaths from all causes and relates to persons of all ages.
Data relates to deaths registered during the calendar year Data are Indirectly Standardised Rates (refer to ‘Statistical Glossary for definition’).
Refer to the following link for further explanatory notes:

Calculation:
Data is expressed as an indirectly standardised rate per 100,000 population.
Calculation:
(Observed number of deaths in metropolitan and country South Australia / SUM of (age specific rate in the standard population x population by age group and sex).

How Data is presented:
• The Aboriginal age standardised mortality rate from all causes in South Australia compared to three other States and Territories.

Caveats
Issues of completeness, coverage and quality of death registration data.
Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia were unpublished.

Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS).
### 5-2. Median Age at Death

#### 5-2-1. Median Age at Death in South Australia

| Rationale | Median age at death provides a crude way to compare mortality experiences over time. It is expected that median age at death will have increased over the years as a result of improvements in education, prevention, detection, and treatment for chronic and infectious diseases. Essentially, median age at death is a proxy for life expectancy that allows for simple trend analysis by sex and comparisons between populations can also be made (New Jersey Department of Health and Senior Services, 2004). New Jersey Department of Health and Senior Services (2004) Trends in Median Age at Death, Centre for Health Statistics. January 2004. |
| Factors contributing to the outcome | Advances in medicine/health care. Health promotion/initiatives. Healthier population. Healthy lifestyle. Health literacy |
| SA Target | n/a. |

| Definition and Calculation | **Definition:** Data relates to deaths registered during the calendar year (2010). Refer to statistical glossary for definition of median age at death. Refer to the following link for further explanatory notes: [http://www.abs.gov.au/AUSSTATS/abs@.nsf/ExplanatoryNotes/3302.0ExplanatoryNotes12010?OpenDocument&tabname=Notes&prodno=3302.0&issue=2010&num=&view=]  |
| Calculation: Data is expressed as age at death in years. **How Data is presented:** The trend of median age at death by sex for South Australia compared to Australia as a whole between 2000 and 2010. **Caveats:** Issues of completeness, coverage and quality of death registration data. **Reporting Schedule:** Annually through the Australian Bureau of Statistics (ABS). |
### 5-3. Age-Specific Death Rate

#### 5-3-1. Age-Specific Death Rate in South Australia

<table>
<thead>
<tr>
<th><strong>Rationale</strong></th>
<th>Age specific death rates allow the comparison between different age bands in terms of mortality.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors contributing to the outcome</strong></td>
<td>Advances in medicine/health care. Health promotion/initiatives. Healthier population. Healthy behaviours. Health literacy</td>
</tr>
<tr>
<td><strong>SA Target</strong></td>
<td>n/a.</td>
</tr>
</tbody>
</table>

#### Data Source

- Australian Bureau of Statistics, Deaths, Australia (cat. no. 3302.0) data cubes, Table 2: Death rates, Summary, States and Territories – 2000-2010. Released at 11.30am (AEST) Thurs 10 Nov 2011.

#### Definition and Calculation

**Definition:**
- Data relates to deaths registered during the calendar year (2010).
- Data is expressed as an age-specific rate per 1,000 population
- Refer to statistical glossary for definition of ‘age specific death rate’.

**Calculation:**
- Numerator – Number of observed deaths by specific age band and sex.
- Denominator – Total estimated resident population by specific age band and sex.

**How Data is presented:**
- The death rate per 1,000 population (by specific age) for South Australians by sex.

#### Caveats

- Only allows a comparison between males and females in South Australia – no benchmark included.
- Issues of completeness, coverage and quality of death registration data.

#### Reporting Schedule

- Annually through the Australian Bureau of Statistics (ABS).
# 5-4. Perinatal Deaths

## 5-4-1. Perinatal Deaths

### Rationale

The perinatal mortality indicator plays an important role in providing information needed to improve the health status of pregnant women and essentially to ensure that every child born in South Australian is ‘starting well’.

### Factors contributing to the outcome


### SA Target

n/a.

### Data Source


[Accessed: 08/06/2012]

### Definition and Calculation

**Definition:**

Data relates to 2009.

Perinatal deaths comprise all fetal deaths (of at least 20 weeks gestation or at least 400 grams birth weight), and all neonatal deaths (all live born babies who die within 28 completed days of birth, regardless of gestation or birth weight.


**Calculation:**

Data is expressed as a rate per 1,000 births.

Numerator – Number of perinatal deaths

Denominator – Total number of births

**How Data is presented:**

- The rate of perinatal deaths per 1,000 births in South Australia compared to all States and Territories and the national average.
- The 2007-2009 trend of perinatal deaths per 1,000 births in South Australia compared to Australia.

### Caveats

2009 data is preliminary and may be subject to revision.

Issues of completeness, coverage and quality of death registration data.

### Reporting Schedule

Annually through the Australian Bureau of Statistics (ABS).
### 5-4-2. Aboriginal Perinatal Deaths

| Rationale | The perinatal mortality indicator plays an important role in providing information needed to improve the health status of pregnancy women and essentially to ensure that every child born in South Australian is ‘starting well’. |
| SA Target | n/a. |

#### Data Source


#### Definition and Calculation

**Definition:**

Data relates to 2006-2010.

Perinatal deaths comprise all fetal deaths (of at least 20 weeks gestation or at least 400 grams birth weight), and all neonatal deaths (all live born babies who die within 28 completed days of birth, regardless of gestation or birth weight.


**Calculation:**

Data is expressed as a rate per 1,000 births.

Numerator – Number of Aboriginal perinatal deaths

Denominator – Total number of Aboriginal births

**How Data is presented:**

- The rate of Aboriginal perinatal deaths per 1,000 births in South Australia compared to four other States and Territories and the national average.

#### Caveats

2009 data is preliminary and may be subject to revision.

Issues of completeness, coverage and quality of death registration data.

Data for Australian Capital Territory, Victoria and Tasmania were unpublished.

#### Reporting Schedule

Annually through the Australian Bureau of Statistics (ABS).
## 5-5. Infant Mortality

### 5-5.1. Infant Mortality in South Australia

#### Rationale
Infant mortality represents an important component of under 5 mortality as it measures child survival. Infant mortality rates also reflect the social, economic and environmental conditions in which children live, including their health care (World Health Organisation, 2012).


#### Factors contributing to the outcome

#### SA Target
n/a.

#### Data Source 1

**Definition and Calculation**

**Definition:**
Infant death is defined as deaths of those under 1 year of age. Data relates to deaths registered during the calendar year (2010). Refer to the following link for further explanatory notes: http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/3302.0Explanatory%20Notes12010?opendocument&tabname=Notes&prodno=3302.0&issue=2010&num=&view=

**Calculation:**
Data is expressed as a rate per 1,000 live births. Numerator – Number of deaths from children aged under 1 year of age. Denominator – Number of live births.

**How Data is presented:**
- The infant death rate per 1,000 live births by sex for South Australia compared to Australia as a whole between 2000 and 2010.
- The infant death rate per 1,000 live births in South Australian compared to all States and Territories and the national average.

**Caveats**
For some infant deaths, only limited information on age at death is known. Issues of completeness, coverage and quality of death registration data.

**Reporting Schedule**
Annually through the Australian Bureau of Statistics (ABS).

#### Data Source 2

**Definition and Calculation**
Infant death is defined as deaths of those under 1 year of age. Data relates to deaths registered during the calendar year (2010).

**Caveats**
Some of the international variation in infant and neonatal mortality rates may be due to variations among countries in registering practices of premature infants. Most countries have no gestational age or weight limits for mortality registration. However, some countries specify limits based on some combination of gestational age, birth weight or survival.

**Reporting Schedule**
Annually.

---

WORKING DRAFT FOR DISCUSSION (MAY 2013) – HPC State of Our Health – Technical Appendix

Chapter 5: End of Life

- 216 -
### 5-5-2. Aboriginal Infant Mortality

#### Rationale
Infant mortality represents an important component of under 5 mortality as it measures child survival. Infant mortality rates also reflect the social, economic and environmental conditions in which children live, including their health care (World Health Organisation, 2012).


#### Factors contributing to the outcome
Fertility, Respiratory distress syndrome, Premature birth, Congenital anomalies

#### SA Target
n/a.

#### Data Source
[Accessed: 27/07/2012]

#### Definition and Calculation
**Definition:**
Infant death is defined as deaths of those under 1 year of age.
Data relates to deaths registered during the calendar year for between 2006 and 2010 (five year average).

Refer to the following link for further explanatory notes:

**Calculation:**
Data is expressed as a rate per 1,000 Aboriginal live births.

- **Numerator** – Number of deaths from Aboriginal children aged under 1 year of age.
- **Denominator** – Number of Aboriginal live births.

**How Data is presented:**
- The Aboriginal infant death rate per 1,000 live births in South Australia compared to three other States and Territories.
- The 2003-07 to 2006-10 trend of Aboriginal infant deaths per 1,000 live births in South Australia compared to non-Aboriginal infant deaths.

#### Caveats
For some infant deaths, only limited information on age at death is known.
Issues of completeness, coverage and quality of death registration data.
Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia were unpublished.

#### Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS).
### 5-6. Child Mortality – Aboriginal vs. Non-Aboriginal

#### Rationale
Child mortality represents an important component of under 5 mortality as it measures child survival. Child mortality rates also reflect the social, economic and environmental conditions in which children live, including their health care (World Health Organisation, 2012).


#### Factors contributing to the outcome
Fertility, Respiratory distress syndrome. Premature birth. Congenital anomalies

#### SA Target
n/a.

#### Data Source

#### Definition and Calculation
**Definition:**
Child mortality is defined as deaths of those aged 1-4 years.
Data relates to deaths registered during the calendar year (2006-2010).

**Calculation:**
Data is expressed as a rate per 100,000 children aged 1-4 years.
Numerator – Number of deaths from Aboriginal children aged 1-4 years
Denominator – Total number of Aboriginal children aged 1-4 years

**How Data is presented:**
- The rate of Aboriginal and non-Aboriginal child mortality (aged 1-4 years) in South Australia between 2003-07 and 2006-10.
- The rate of Aboriginal and non-Aboriginal child mortality (aged 1-4 years) in South Australia compared to three other States and Territories.

#### Caveats
Issues of completeness, coverage and quality of death registration data.
Aboriginal data for 2003-07 was unpublished.
Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia were unpublished.

#### Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS).
### 5-7. Leading Causes of Death

#### 5-7-1. Leading Causes of Death by Age Group in South Australia

| Rationale | This indicator allows us to establish the causes which contribute most to mortality in specific age groups. The information provides an important role in establishing causes which may need further public health intervention and potentially highlights the need for further analysis and investigation. |
| Factors contributing to the outcome | Advances in medicine/health care. Health promotion/initiatives. Healthier population. Healthy behaviours. Health literacy |
| SA Target | n/a. |

| Definition and Calculation | **Definition:**
Data relates to deaths registered during the calendar year (2010).
Refer to the following link for further explanatory notes:

**Calculation:**
Data is expressed as an age specific death rate per 1,000 live births for under 1 year of age.
Data is expressed an age specific death rate per 100,000 population for ages 1 year and over.

**How Data is presented:**
The top three underlying causes of death according to specific age cohort and sex in South Australia. |
| Caveats | No comparison data is presented.
Issues of completeness, coverage and quality of death registration data. |
| Reporting Schedule | Annually through the Australian Bureau of Statistics (ABS). |
5-8. Deaths from Circulatory Diseases in South Australia

5-8.1 & 5.8.2 Deaths from Circulatory Diseases

**Rationale**  
Circulatory disease is the leading cause of death in South Australia.

**Factors contributing to the outcome**  
Healthy behaviours (smoking, diet, physical activity). Health literacy. Socioeconomic status. Type 2 Diabetes. Indigenous Status

**SA Target**  
n/a.

**Data Source**  
Australian Bureau of Statistics, Causes of Death, Australia 2010, Cat no. 3303.0. Data Cubes: Underlying causes of death. Released at 11.30am (AEST) 20/03/2012. Available from:  
[Accessed: 27/07/2012]

**Definition and Calculation**

**Definition:**  
Data relates to deaths registered during the calendar year (2010). Mortality from circulatory diseases are defined using ICD 10 codes I00 – I99. Refer to the following link for further explanatory notes:  

**Calculation:**  
Data is expressed as an age standardised death rate (SDR) per 100,000 population (refer to statistical glossary for definition). The current ABS standard population is all persons in the Australian population at 30 June 2001. SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over.

**How Data is presented:**

**All Persons:**  
- The trend of mortality due to circulatory disease per 100,000 population between 2005 and 2010 for South Australia compared to the national average.
- The rate of mortality due to circulatory disease per 100,000 population in South Australia compared to all States and Territories and the national average.

**Males:**  
- The trend of male mortality due to circulatory disease per 100,000 males between 2007 and 2010 for South Australia compared to the national average.
- The rate of male mortality due to circulatory disease per 100,000 males in South Australia compared to all States and Territories and the national average.

**Females:**  
- The trend of female mortality due to circulatory disease per 100,000 females between 2007 and 2010 for South Australia compared to the national average.
- The rate of female mortality due to circulatory disease per 100,000 females in South Australia compared to all States and Territories and the national average.

**Caveats**  
Causes of death data for 2010 are preliminary and subject to a revisions process.

**Reporting Schedule**  
Annually through the Australian Bureau of Statistics (ABS).
### 5.8.3. Aboriginal Deaths from Circulatory Diseases of the Circulatory System

#### Rationale
Circulatory disease is the leading cause of death in South Australia.

#### Factors contributing to the outcome

#### SA Target
n/a.

#### Data Source

#### Definition and Calculation
**Definition:**
Data relates to deaths registered during the calendar year (2005-2009)
Mortality from circulatory diseases are defined using ICD 10 codes I00 – I99

**Calculation:**
Data is expressed as an age standardised death rate (SDR) per 100,000 population (refer to statistical glossary for definition).
The current ABS standard population is all persons in the Australian population at 30 June 2001
SDRs have been calculated using the direct method, age standardised by 5 year age group to 75 years and over.

**How Data is presented:**
- The rate of mortality from circulatory diseases per 100,000 Aboriginal population in South Australia for Aboriginal and non-Aboriginal persons, compared to three other States and Territories.

#### Caveats
Causes of death data for 2009 are preliminary and subject to a revisions process.
Although most deaths of Aboriginal people are registered, it is likely that some are not accurately identified as Aboriginal. Therefore, these data are likely to underestimate the Aboriginal mortality rate.
Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia are unpublished.

#### Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS).
5-9. Deaths from Cancer in South Australia

5-9.1 & 5.9.2 Deaths from Cancer

Rationale

Cancer is the second highest cause of death in South Australia. Mortality is a direct measure of health care need indicating the overall cancer burden on the population and reflecting both the incidence of disease and the ability to treat it.

Factors contributing to the outcome

Unhealthy behaviours (e.g. alcohol, smoking, poor diet). Age. Sunlight. Family history. Access to screening services/Early intervention. Indigenous Status

SA Target

n/a

Data Source


Definition and Calculation

Definition:

Data relates to deaths registered during the calendar year (2010). Mortality from malignant neoplasms (cancer) are defined using ICD 10 codes C00 – C97.

Refer to the following link for further explanatory notes: http://www.abs.gov.au/Ausstats/abs@.nsf/Previousproducts/3303.0ExplanatoryNotes12009?opendocument&tabname=Notes&prodno=3303.0&issue=2009&num=&view=

Calculation:

Data is expressed as an age standardised death rate (SDR) per 100,000 population. The current ABS standard population is all persons in the Australian population at 30 June 2001.

SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over.

How Data is presented:

All Persons:

- The trend of mortality from cancer per 100,000 population between 2005 and 2010 for South Australia compared to the national average.
- The rate of mortality from cancer per 100,000 population in South Australia compared to all States and Territories and the national average.

Males

- The trend of male mortality from cancer per 100,000 males between 2007 and 2010 for South Australia compared to the national average.
- The rate of male mortality from cancer per 100,000 males in South Australia compared to all States and Territories and the national average.

Females

- The trend of female mortality from cancer per 100,000 females between 2007 and 2010 for South Australia compared to the national average.
- The rate of female mortality from cancer per 100,000 females in South Australia compared to all States and Territories and the national average.

Caveats

Causes of death data for 2010 are preliminary and subject to a revisions process.

Reporting Schedule

Annually through the Australian Bureau of Statistics (ABS).
### 5-9-3. Aboriginal Deaths from Cancer

| Rationale                                                                 | Cancer is the second highest cause of death in South Australia. Mortality is a direct measure of health care need indicating the overall cancer burden on the population and reflecting both the incidence of disease and the ability to treat it. |
|                                                                           |                                                                                                                   |
| Factors contributing to the outcome                                      | Unhealthy behaviours (e.g. Alcohol, smoking, poor diet). Age. Sunlight. Family history. Access to screening services/Early intervention. Indigenous Status |
| SA Target                                                                | n/a                                                                                                               |
| **Definition and Calculation**                                           | Definition: Data relates to deaths registered during the calendar year (2005-2009). Mortality from cancers are defined using ICD 10 codes C00 – D48. Calculation: Data is expressed as an age standardised death rate (SDR) per 100,000 population (refer to statistical glossary for definition). The current ABS standard population is all persons in the Australian population at 30 June 2001 SDRs have been calculated using the direct method, age standardised by 5 year age group to 75 years and over. How Data is presented: **All Persons:** The rate of mortality from cancer per 100,000 Aboriginal population in South Australia for Aboriginal and non-Aboriginal persons, compared to three other States and Territories. |
| Caveats                                                                  | Causes of death data for 2009 are preliminary and subject to a revisions process. Although most deaths of Aboriginal people are registered, it is likely that some are not accurately identified as Aboriginal. Therefore, these data are likely to underestimate the Aboriginal mortality rate. Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia are unpublished. |
| **Reporting Schedule**                                                   | Annually through the Australian Bureau of Statistics (ABS). |
5-10. Deaths from Lung Cancer in South Australia

5-10-1. & 5-10-2. Deaths from Lung Cancer

Rationale
Lung cancer causes more deaths than any other cancer in both males and females. Its high mortality rate results from both a high incidence rate and low survival (Australian Institute of Health and Welfare, 2011).

Factors contributing to the outcome

SA Target
n/a.

Data Source
Australian Bureau of Statistics Causes of Death, Australia 2010, Cat. No. 3303.0, Data Cubes: Underlying causes of death. Released at 11.30am (AEST) 20/03/2012.
Available from: [Accessed: 27/07/2012]

Definition and Calculation
Definition:
Data relates to deaths registered during the calendar year (2010).
Mortality from lung cancer is defined using ICD 10 codes C33 – C34.
Refer to the following link for further explanatory notes: [Accessed: 27/07/2012]

Calculation:
Data is expressed as an age standardised death rate (SDR) per 100,000 population
The current ABS standard population is all persons in the Australian population at 30 June 2001
SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over.

How Data is presented:
All Persons:
- The trend of mortality from lung cancer per 100,000 population between 2007 and 2010 for South Australia compared to the national average.
- The rate of mortality from lung cancer per 100,000 population in South Australia compared to all States and Territories and the national average.

Males
- The trend of male mortality from lung cancer per 100,000 males between 2007 and 2010 for South Australia compared to the national average.
- The rate of male mortality from lung cancer per 100,000 males in South Australia compared to all States and Territories and the national average.

Females
- The trend of female mortality from lung cancer per 100,000 females between 2007 and 2010 for South Australia compared to the national average.
- The rate of female mortality from lung cancer per 100,000 females in South Australia compared to all States and Territories and the national average.

Caveats
Causes of death data for 2010 are preliminary and subject to a revisions process.

Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS).
### 5-10-3. Aboriginal Deaths from Lung Cancer

| Factors contributing to the outcome | Smoking. Passive Smoking. Lung Diseases. |
| SA Target | n/a. |
| Definition and Calculation | Definition: Data relates to deaths registered during the calendar year (2006-2010). Mortality from lung cancer is defined using ICD 10 codes C33 – C34. Calculation: Data is expressed as an age standardised death rate (SDR) per 100,000 Aboriginal population (refer to statistical glossary for definition). The current ABS standard population is all persons in the Australian population at 30 June 2001 SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over. How Data is presented: The rate of mortality from lung cancer per 100,000 Aboriginal population in South Australia for Aboriginal and non-Aboriginal persons, compared to four other States and Territories. |
| Caveats | Causes of death data for 2010 are preliminary and subject to a revisions process. Although most deaths of Aboriginal people are registered, it is likely that some are not accurately identified as Aboriginal. Therefore, these data are likely to underestimate the Aboriginal mortality rate. Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia were unpublished. |
| Reporting Schedule | Annually through the Australian Bureau of Statistics (ABS). |
### 5-11. Deaths from Prostate Cancer in South Australia

#### Rationale
Prostate cancer is the most common cancer diagnosed in Australia and the third most common cause of cancer death (Cancer Council Australia, 2012).


#### Factors contributing to the outcome
Age. Family History.

#### SA Target
n/a.

#### Data Source
Australian Bureau of Statistics, Causes of Death, Australia 2010 (Cat no 3303.0) Data cubes: Underlying causes of death. Released at 11.30am (AEST) 20/03/2012.


#### Definition and Calculation
**Definition:**
Data relates to deaths registered during the calendar year.

Mortality from prostate cancer is defined using ICD 10 codes C61

**Calculation:**
Data is expressed as an age standardised death rate (SDR) per 100,000 population (refer to statistical glossary for definition).

The current ABS standard population is all persons in the Australian population at 30 June 2001

SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over.

**How Data is presented:**
- The trend of male mortality from prostate cancer per 100,000 males between 2007 and 2010 for South Australia compared to the national average.
- The 2010 rate of male mortality from prostate cancer per 100,000 males in South Australia compared to all States and Territories and the national average.

#### Caveats
Causes of death data for 2010 are preliminary and subject to a revisions process.

#### Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS).
## 5-12. Deaths from Female Breast Cancer in South Australia

### Rationale

Breast cancer is the most common cancer in women in Australia and the second most common cancer to cause death in women, after lung cancer (Cancer Council Australia, 2012).


### Factors contributing to the outcome


### SA Target

n/a.

### Data Source


### Definition and Calculation

**Definition:**

Data relates to deaths registered during the calendar year.

Mortality from breast cancer is defined using ICD 10 codes C50.

**Calculation:**

Data is expressed as an age standardised death rate (SDR) per 100,000 population (refer to statistical glossary for definition).

The current ABS standard population is all persons in the Australian population at 30 June 2001

SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over.

**How Data is presented:**

- The trend of female mortality from breast cancer per 100,000 females between 2007 and 2010 for South Australia compared to the national average.
- The 2010 rate of female mortality from breast cancer per 100,000 females in South Australia compared to all States and Territories and the national average.

### Caveats

Causes of death data for 2010 are preliminary and subject to a revisions process.

### Reporting Schedule

Annually through the Australian Bureau of Statistics (ABS).
5-13. Deaths from Colon Cancer in South Australia

5-13-1 & 5-13-2. Deaths from Colon Cancer

Rationale
Colon cancer is the second most common cancer in both men and women in Australia (Cancer Council Australia, 2012).


Factors contributing to the outcome

SA Target
n/a.

Data Source
Australian Bureau of Statistics, Causes of Death, Australia 2010 (Cat no 3303.0) Data cubes: Underlying causes of death. Released at 11.30am (AEST) 20/03/2012.

Definition and Calculation
Definition:
Data relates to deaths registered during the calendar year.
Mortality from colon cancer is defined using ICD 10 codes C18.

Calculation:
Data is expressed as an age standardised death rate (SDR) per 100,000 population (refer to statistical glossary for definition).
The current ABS standard population is all persons in the Australian population at 30 June 2001
SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over.

How Data is presented:
All Persons:
- The trend of mortality from colon cancer per 100,000 population between 2007 and 2010 for South Australia compared to the national average.
- The 2010 rate of mortality from colon cancer per 100,000 population in South Australia compared to all States and Territories and the national average.

Males:
- The trend of male mortality from colon cancer per 100,000 males between 2007 and 2010 for South Australia compared to the national average.
- The 2010 rate of male mortality from colon cancer per 100,000 males in South Australia compared to all States and Territories and the national average.

Females:
- The trend of female mortality from colon cancer per 100,000 females between 2007 and 2010 for South Australia compared to the national average.
- The 2010 rate of female mortality from colon cancer per 100,000 females in South Australia compared to all States and Territories and the national average.

Caveats
Causes of death data for 2010 are preliminary and subject to a revisions process.

Reporting Schedule
Annually through the Australian Bureau of Statistics (ABS).
### 5-14. Deaths from Cervical Cancer in South Australia

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Cancer can be reduced and controlled by implementing evidence-based strategies for cancer prevention, early detection of cancer and management of patients with cancer. Many cancers, like cervical cancer have a high chance of cure if detected early and treated adequately (World Health Organisation, 2012).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Smoking. Screening.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>
| Definition and Calculation | **Definition:**  
Data relates to deaths registered during the calendar year.  
Mortality from cervical cancer is defined using ICD 10 codes C53.  
**Calculation:**  
Data is expressed as an age standardised death rate (SDR) per 100,000 females (refer to statistical glossary for definition).  
The current ABS standard population is all persons in the Australian population at 30 June 2001.  
SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over.  
**How Data is presented:**  
- The trend of female mortality from cervical cancer per 100,000 females between 2007 and 2010 for South Australia compared to the national average.  
- The 2010 rate of female mortality from cervical cancer per 100,000 females in South Australia compared to all States and Territories and the national average. |
| Caveats | Causes of death data for 2010 are preliminary and subject to a revisions process. |
| Reporting Schedule | Annually through the Australian Bureau of Statistics (ABS). |
5-15. Deaths from Respiratory Diseases in South Australia

5-15-1. & 5-15-2. Deaths from Respiratory Diseases

| Rationale | Each year in Australia, chronic respiratory diseases disrupt the daily life and productivity of many individuals and contribute to thousands of deaths. Two major chronic respiratory diseases in Australia are chronic obstructive pulmonary disease (COPD) and asthma (Australian Institute of Health and Welfare, 2005). |
| Factors contributing to the outcome | Unhealthy behaviours (smoking). Indigenous Status. Age. |
| SA Target | n/a. |

Data Source

Australian Bureau of Statistics, Causes of Death, Australia, 2010 (Cat. No. 3303.0) Data cubes: Underlying causes of death. Released at 11.30am (AEST) 20/03/2012.


Definition and Calculation

Definition:
Mortality from respiratory diseases are defined using ICD 10 codes J00 – J99. Refer to the following link for further explanatory notes:

Calculation:
Data is expressed as an age standardised death rate (SDR) per 100,000 population. The current ABS standard population is all persons in the Australian population at 30 June 2001. SDRs have been calculated using the direct method, age standardised by 5 year age group to 95 years and over.

How Data is presented:

All Persons:
- The trend of mortality from respiratory diseases per 100,000 population between 2007 and 2010 for South Australia compared to the national average.
- The 2010 rate of mortality from respiratory diseases per 100,000 population in South Australia compared to all states/territories and the national average.

Males:
- The trend of male mortality from respiratory diseases per 100,000 males between 2007 and 2010 for South Australia compared to the national average.
- The 2010 rate of male mortality from respiratory diseases per 100,000 males in South Australia compared to all states/territories and the national average.

Females:
- The trend of female mortality from respiratory diseases per 100,000 females between 2007 and 2010 for South Australia compared to the national average.
- The 2010 rate of female mortality from respiratory disease per 100,000 females in South Australia compared to all states/territories and the national average.

Caveats

Causes of death data for 2009 are preliminary and subject to a revisions process.

Reporting Schedule

Annually through the Australian Bureau of Statistics (ABS).
### 5-15-3. Aboriginal Deaths from Respiratory Disease

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Each year in Australia, chronic respiratory diseases disrupt the daily life and productivity of many individuals and contribute to thousands of deaths. Two major chronic respiratory diseases in Australia are chronic obstructive pulmonary disease (COPD) and asthma (<em>Australian Institute of Health and Welfare, 2005</em>).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Unhealthy behaviours (smoking). Indigenous Status. Age.</td>
</tr>
<tr>
<td>South Australia Target</td>
<td>n/a.</td>
</tr>
<tr>
<td>Definition and Calculation</td>
<td>Definition: Data relates to deaths registered during the calendar year (2005-2009). Mortality from respiratory disease is defined using ICD 10 codes J00 – J99. Calculation: Data is expressed as an age standardised death rate (SDR) per 100,000 Aboriginal population (refer to statistical glossary for definition). The current ABS standard population is all persons in the Australian population at 30 June 2001. SDRs have been calculated using the direct method, age standardised by 5 year age group to 75 years and over. How Data is presented: The rate of mortality from respiratory diseases per 100,000 Aboriginal population in South Australia for Aboriginal and non-Aboriginal persons, compared to three other States and Territories.</td>
</tr>
<tr>
<td>Caveats</td>
<td>Causes of death data for 2009 are preliminary and subject to a revisions process. Although most deaths of Aboriginal people are registered, it is likely that some are not accurately identified as Aboriginal. Therefore, these data are likely to underestimate the Aboriginal mortality rate. Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia are unpublished.</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>Annually through the Australian Bureau of Statistics (ABS).</td>
</tr>
</tbody>
</table>
### 5-16. Aboriginal Deaths from External Causes

| Rationale | External causes, such as accidents, intentional self-harm (suicide) and assault are a leading cause of death in the community, and account for a disproportionately large number of deaths in the South Australian Aboriginal population, compared with the non-Aboriginal population. |
| Factors contributing to the outcome | Indigenous status. |
| South Australia Target | n/a. |

| Definition and Calculation | **Definition:**
Data relates to deaths registered during the calendar year (2005-2009).
Deaths from external causes is defined using ICD 10 codes V01 – Y98.

**Calculation:**
Data is expressed as an age standardised death rate (SDR) per 100,000 Aboriginal population (refer to statistical glossary for definition).
The current ABS standard population is all persons in the Australian population at 30 June 2001.
SDRs have been calculated using the direct method, age standardised by 5 year age group to 75 years and over.

**How Data is presented:**
- The rate of mortality from external causes per 100,000 Aboriginal population in South Australia for Aboriginal and non-Aboriginal persons, compared to three other States and Territories. |

| Caveats | Causes of death data for 2009 are preliminary and subject to a revisions process. Although most deaths of Aboriginal people are registered, it is likely that some are not accurately identified as Aboriginal. Therefore, these data are likely to underestimate the Aboriginal mortality rate. Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia are unpublished. |

| Reporting Schedule | Annually through the Australian Bureau of Statistics (ABS). |
### 5-17. Top Causes of Premature Death (Years of Life Lost) in South Australia

#### 5-17-1, 5-17-2 & 5-17-3. Top Causes of Premature Death (Years of Life Lost)

| Rationale | This indicator uses Years of Life Lost (YLL) as a measure of premature mortality. Premature mortality essentially provides useful information on the effectiveness of the health system. |
| Factors contributing to the outcome | Socioeconomic Status. Healthy lifestyles. |
| SA Target | n/a |

#### Data Source


#### Definition and Calculation

**Definition:**

Years of Life Lost (YLL) is a commonly used measure of the burden of disease on premature death. It is also referred to as the mortality burden of disease. YLLs represent the total number of years of life lost prematurely due to disease in the community.

Data relates to 2005-07.

**Calculation:**

Data is expressed as a proportion of total YLL.

Numerator – Number of YLL for specific disease group

Denominator – Total number of YLL

**How Data is presented:**

- **All Persons:**
  - The proportion of YLL by specific disease group for Metropolitan and Country South Australia.
- **Males:**
  - The top five causes of YLL for South Australian males
- **Females:**
  - The top five causes of YLL for South Australian females.

**Caveats**

The results reported for the Study use a 3% time discounting rate. This means that years of healthy life lost in the future are discounted by 3% per year. For example, a death at age 50, with an average of 32 years of life expectancy, contributes 32 YLLs with zero discounting, but only 20 YLLs with 3% discounting.

Issues of completeness, coverage and quality of death registration data.

**Reporting Schedule**

Unknown.
### 5-18. Potentially Avoidable (Preventable and Treatable) Deaths

#### 5-18-1., 5-18-3. & 5-18-5. Potentially Avoidable Deaths (Preventable and Treatable) in South Australia

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Avoidable deaths data enables the quantification of untimely and unnecessary deaths from diseases for which effective public health and medical interventions are available. A high rate of avoidable deaths should suggest limitations in the healthcare system which warrants further attention.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Healthy lifestyle (e.g. diet and exercise). Screening and early detection. Access to services. Effective surgery and treatment.</td>
</tr>
<tr>
<td>SA Target</td>
<td>n/a</td>
</tr>
</tbody>
</table>

#### Data Source

**Definition and Calculation**

**Definition:**

A potentially avoidable death is one that, theoretically, could have been avoided given an understanding of causation, the adoption of available disease prevention initiatives and the use of available health care.

Avoidable deaths include both treatable and preventable (include definitions).


**Calculation:**

Data is expressed as an age standardised mortality rate per 100,000 population under 75 years.

**How Data is presented:**

- The trend of potentially avoidable mortality per 100,000 population between 2007 and 2009 for South Australia compared to the national trend.
- The 2009 rate of potentially avoidable mortality per 100,000 population for South Australia compared to all States and Territories and Australia as a whole.

**Caveats**

Issues of completeness, coverage and quality of death registration data.

**Reporting Schedule**

Annually.

### 5-18-2., 5-18-4. & 5-18-6. Aboriginal Potentially Avoidable Deaths (Preventable and Treatable)

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Avoidable deaths data enables the quantification of untimely and unnecessary deaths from diseases for which effective public health and medical interventions are available. A high rate of avoidable deaths should suggest limitations in the healthcare system which warrants further attention.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors contributing to the outcome</td>
<td>Healthy lifestyle (e.g. diet and exercise). Screening and early detection. Access to services. Effective surgery and treatment.</td>
</tr>
<tr>
<td>South Australia Target</td>
<td>n/a.</td>
</tr>
</tbody>
</table>

|---|---|

<table>
<thead>
<tr>
<th>Definition and Calculation</th>
<th>Definition: A potentially avoidable death is one that, theoretically, could have been avoided given an understanding of causation, the adoption of available disease prevention initiatives and the use of available health care. Avoidable deaths include both treatable and preventable (include definitions). Refer to the following link for ICD-10 codes which are included in avoidable mortality rates: <a href="http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/3303.0Appendix32010?opendocument&amp;tabname=Notes&amp;prodno=3303.0&amp;issue=2010&amp;num=&amp;view=">http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/3303.0Appendix32010?opendocument&amp;tabname=Notes&amp;prodno=3303.0&amp;issue=2010&amp;num=&amp;view=</a> Calculation: Data is expressed as an age standardised mortality rate per 100,000 Aboriginal/non-Aboriginal population under 75 years. How Data is presented: • The 2009 rate of potentially avoidable mortality per 100,000 population for Aboriginal and non-Aboriginal South Australians compared to three other States and Territories.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caveats</td>
<td>Issues of completeness, coverage and quality of death registration data. Data for Australian Capital Territory, Tasmania, Victoria, and Western Australia are unpublished.</td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>Annually.</td>
</tr>
</tbody>
</table>
### 5-19. Suicide Rate

#### 5-19-1. Suicide Rate in South Australia

| **Rationale** | Suicide is a huge but preventable public health problem that contributes to a high number of years of life lost to premature death (due to a high rate in younger people) (World Health Organisation, 2004).  
| **SA Target** | n/a |

| **Data Source** | Australian Bureau of Statistics, Suicides, Australia 2010 (Cat. No. 3309.0) Table 4.2: Suicide, Number of deaths by geographic area and sex, age standardised death rate, rate ratio, Australia, 2001 – 2010. Released at 11.30am (AEST) 24 July 2012.  

| **Definition and Calculation** | **Definition:**  
Standardised death rates (SDRs) enable the comparison of death rates between populations with different age structures by relating them to a standard population.  
Data relates to deaths registered in the calendar year.  
Suicide ICD10 codes: X60 – X84, Y87.0  
**Calculation:**  
Data is expressed as a directly standardised death rate per 100,000 population (5 year rolling average).  
**How Data is presented:**  
2003/07 – 2006/10 trend of standardised mortality rates from suicide in South Australia compared to the national average by sex.  
The 2006/10 rate of mortality from suicide for South Australia compared to all other States and Territories and the national average.  
**Caveats** | Issues of completeness, coverage and quality of death registration data. |
| **Reporting Schedule** | Annually through the Australian Bureau of Statistics (ABS). |
### 5-19-2. Aboriginal Suicide Rate

**Rationale**

Suicide is a huge but preventable public health problem that contributes to a high number of years of life lost to premature death (due to a high rate in younger people) (World Health Organisation, 2004).


**Factors contributing to the outcome**


**SA Target**

n/a

**Data Source**

Australian Bureau of Statistics, Suicides. Australia 2010 (Cat. No. 3309.0) Table 6.2: Suicide, Number of deaths and age-standardised rate by geographic region and Indigenous status, NSW, Qld, SA, WA, NT, 2001 – 2010. Released at 11.30am (AEST) 24 July 2012.


**Definition and Calculation**

**Definition:**

Standardised death rates (SDRs) enable the comparison of death rates between populations with different age structures by relating them to a standard population.

Data relates to deaths registered in the calendar year.

Suicide ICD10 codes: X60 – X84, Y87.0

**Calculation:**

Data is expressed as a directly standardised death rate per 100,000 population (10 year rolling average).

**How Data is presented:**

- The 2001/10 Aboriginal and non-Aboriginal mortality rates from suicide in South Australia compared to four other States and Territories.

**Caveats**

Issues of completeness, coverage and quality of death registration data.

Data for Australian Capital Territory, Tasmania, and Victoria were unavailable.

**Reporting Schedule**

Annually through the Australian Bureau of Statistics (ABS).