Barwon South West Region Aboriginal Community 2009
This *Aboriginal Early childhood community profile* was prepared by the Office for Children and Portfolio Coordination, in the Victorian Government Department of Education and Early Childhood Development.

The series of *Early Childhood community profiles* draw on data on outcomes for children compiled through the Victorian Child and Adolescent Monitoring System (VCAMS).

The profiles are intended to provide local level information on the health, wellbeing, learning, safety and developmental outcomes of young Aboriginal children. They are published to aid Aboriginal organisations and local councils, as well as Best Start partnerships, with local service development, innovation and program planning to improve these outcomes.

The Department of Human Services, the Department of Education and Early Childhood Development and the Australian Bureau of Statistics provided data for this document.
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Introduction

The Aboriginal Early childhood community profiles are compiled by the Data, Outcomes and Evaluation Division of the Department of Education and Early Childhood Development (DEECD).

The profiles are intended to provide local level information on the health, wellbeing, learning, safety and developmental outcomes of young Aboriginal children. They are published to aid Aboriginal organisations and local councils, as well as Best Start partnerships, with local service development, innovation and program planning to improve these outcomes.

The Early Childhood Community Profiles, developed for all Local Government Areas (LGAs) in Victoria, the Aboriginal Early Childhood Community Profiles, developed for LGAs with large Aboriginal communities, and the Catalogue of evidence-based interventions, which provides evidence-based strategies to address the indicators reported in the profiles, are all products of the Victorian Child and Adolescent Monitoring System (VCAMS).

VCAMS is a comprehensive, across government, monitoring system that reports on the safety, health, development, learning and wellbeing of children and young people, aged 0 to 18, in Victoria. It is intended to underpin planning for improvement at a program, local government and statewide level, as well as to inform research and evaluation to generate new evidence on effectiveness.

What is included?

The 2009 Aboriginal Early childhood community profiles have been updated and expanded since the last release in 2007. Data are presented under the following two sections:

Aboriginal and Torres Strait Islander persons have been referred to as ‘Aboriginal’ throughout these profiles. For definitions on the populations used throughout this section, please refer to the glossary at Appendix C.

Please note that due to the small population of Aboriginal young children and their families in the local area, large percentage variations may be the result of minor changes in the actual data.

Part A: Child and family demographics

This section contains child and family demographics for the Aboriginal population within the LGA, sourced from the 2006 Census. This section has been expanded and updated since the previous edition of these profiles.

Please note that due to the introduced random error in large Census tables, totals presented in one section of these profiles may differ slightly to those presented in other sections, or some percentages may sum to greater than 100%. See ‘introduced random error’ in the glossary for more information.

Part B: Early Childhood Indicators

This section contains the most recent administrative data for a selection of health and wellbeing early childhood indicators. The indicators included in this section are a subset of the 150 indicators that form VCAMS.

Data included in this section span across 7 outcome areas within VCAMS. A total of 12 indicators of child health, development, learning, safety and wellbeing have been presented in these profiles. Four new indicators have been included in this edition:

- Maternal and Child Health home consultation visits
- Maternal and Child Health 3.5 year key ages and stages visit
- Hospitalisations for asthma
- Leading cause of hospitalisations

Some data presented have been pooled across numerous financial or calendar years due to the small numbers of the population being measured at an LGA level.

Data included in this edition of the profiles may not be comparable to the previous edition for the following reasons:

- pooled data for selected indicators have been aggregated for different reporting periods
- rate based calculations use a different population base as a new methodology to estimate the intercensal Aboriginal population was introduced (see Appendix A).
Demographics

A population profile

2006 Aboriginal population of the Barwon South West region

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal population</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Children aged 0-8</td>
<td>Total (all ages)</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>637</td>
<td>2,773</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>3,736</td>
<td>15,913</td>
</tr>
<tr>
<td>Victoria</td>
<td>6,650</td>
<td>30,143</td>
</tr>
</tbody>
</table>

Source: ABS 2006 Census of Population and Housing

• At the 2006 Census, 4,932,422 persons were enumerated in Victoria. Of these, 30,143 were Aboriginal, representing 0.6% of Victoria’s population.

• According to the 2006 Census, there were 2,773 Aboriginal persons in the Barwon South West region. This represents 0.8% of the total population of the Barwon South West region. This was greater than the percentage of Aboriginal persons in Victoria.

• In 2006, 556,791 children aged 0 to 8 years were counted in Victoria at the 2006 Census, representing 11.3% of Victoria’s total population. Of these, 6,650 (1.2%) were Aboriginal children.

• In 2006, 23.0% of the Aboriginal population in the Barwon South West region were aged 0 to 8 years, compared to 11.3% in the total population.

• The Barwon South West region was ranked 5 out of 9 regions in terms of the proportion of Aboriginal population aged 0 to 8 years. A rank of 1 was assigned to the region with the highest proportion of its Aboriginal population aged 0 to 8.

Figure 1: Percentage of children aged 0 to 8 years in the Barwon South West region compared to Rural Victoria and Victoria.

• The percentage of Aboriginal children aged 0 to 8 years in the Barwon South West region was 23.0%. This was less than the percentage of Aboriginal children aged 0 to 8 years in Rural Victoria (23.5%) and greater than the percentage of Aboriginal children in this age group in Victoria (22.1%).
Demographics

Measuring disadvantage

The Australian Bureau of Statistics (ABS) produces the Socio-Economic Indexes for Areas (SEIFA). These indexes are derived from data collected in the Census of Population and Housing. SEIFA 2006 comprises four indexes that measure different aspects of socio-economic conditions by geographic areas.

The Index of Relative Socio Economic Disadvantage (IRSED) is one part of SEIFA. It allows users to identify geographic areas that are relatively disadvantaged.

IRSED is derived from Census attributes believed to reflect disadvantage, such as:
- low income
- low educational attainment
- high unemployment
- proportion of work force in relatively unskilled occupations

A lower IRSED score means a more disadvantaged area.

The IRSED can be used to compare disadvantage across LGAs and within LGAs where the LGA consists of more than one Statistical Local Area (SLA).

IRSED scores are not derived for Departmental regions.

IRSED scores for the Local Government Areas contained within the Barwon South West region

There are 9 Local Government Areas contained within the Barwon South West region. The IRSED scores and ranks for these LGAs are listed in the table below.

<table>
<thead>
<tr>
<th>Local Government Area</th>
<th>IRSED Score</th>
<th>Rank out of 79 LGAs in Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colac-Otway (S)</td>
<td>967</td>
<td>18</td>
</tr>
<tr>
<td>Corangamite (S)</td>
<td>990</td>
<td>37</td>
</tr>
<tr>
<td>Glenelg (S)</td>
<td>962</td>
<td>14</td>
</tr>
<tr>
<td>Greater Geelong (C)</td>
<td>993</td>
<td>38</td>
</tr>
<tr>
<td>Moyne (S)</td>
<td>1013</td>
<td>54</td>
</tr>
<tr>
<td>Queenscliffe (B)</td>
<td>1049</td>
<td>67</td>
</tr>
<tr>
<td>Southern Grampians (S)</td>
<td>996</td>
<td>42</td>
</tr>
<tr>
<td>Surf Coast (S)</td>
<td>1065</td>
<td>74</td>
</tr>
<tr>
<td>Warrnambool (C)</td>
<td>993</td>
<td>41</td>
</tr>
</tbody>
</table>

A rank of 1 was assigned to the most disadvantaged Local Government Area in Victoria.
Demographics

Aboriginal households

- Based on the 2006 Census, there were 1,767,512 households in Victoria. Of these 14,154 or 0.8% were households with at least one Aboriginal person resident in that household on Census night.

Aboriginal households in the Barwon South West region.

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal households</th>
<th>Other Households (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aboriginal households with children aged 0 to 8 years</td>
<td>Total Aboriginal households</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>435</td>
<td>1,282</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>2,189</td>
<td>7,091</td>
</tr>
<tr>
<td>Victoria</td>
<td>4,708</td>
<td>14,154</td>
</tr>
</tbody>
</table>

Source: ABS 2006 Census of Population and Housing

(a) Other household includes Non-Aboriginal households and households where Aboriginal status of residents were not stated.

- The percentage of Aboriginal households in the Barwon South West region with children aged 0 to 8 was 33.9%. This was greater than the percentage of other households in the Barwon South West region with children aged 0 to 8 (17.7%) and greater than the percentage of Aboriginal households in Rural Victoria with children in this age group (30.9%).

Aboriginal families

- At the 2006 Census, 1,294,388 families were recorded in Victoria. Families with children under 15 years and/or dependent students aged 15 to 24 years accounted for just under half (48.2% or 623,647 families) of all families in Victoria. Of these, 7,222 were families with Aboriginal children under 15 years and/or dependent students aged 15-24 years, representing 1.2% of all families in this category.

- Of the 336,092 families in Victoria with children aged 0 to 8 years, 4,654 were families with Aboriginal children aged 0 to 8 years, representing 1.4% of families in this category. The percentage of families with Aboriginal children aged 0 to 8 years is higher in regional Victoria (2.8%) than in metropolitan Melbourne (0.9%).

Families with children in the Barwon South West region.

<table>
<thead>
<tr>
<th></th>
<th>Families with children under 15 years and/or dependent students aged 15-24 years</th>
<th>Families with at least one child aged 0 to 8 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aboriginal families</td>
<td>Total families</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>684</td>
<td>42,514</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>3,828</td>
<td>165,578</td>
</tr>
<tr>
<td>Victoria</td>
<td>7,222</td>
<td>623,647</td>
</tr>
</tbody>
</table>

Source: ABS 2006 Census of Population and Housing

- Of the 42,514 families counted in the Barwon South West region with children under 15 years and/or dependent students aged 15-24 years, 684 were Aboriginal families, representing 1.6% of all families with dependent children in the Barwon South West region.

- The percentage of Aboriginal families with children under 15 and/or dependent students aged 15-24 years in the Barwon South West region (1.6%) was less than that in Rural Victoria (2.3%) and greater than that in Victoria (1.2%).

- Of the 42,514 families counted in the Barwon South West region with children under 15 and/or dependent students, 53.7% had at least one child aged 0 to 8 years. 1.9% of these families were Aboriginal. This was greater than the proportion of Aboriginal families with at least one child aged 0 to 8 years in Victoria (1.4%).
Demographics

Families with Aboriginal children

- At the 2006 Census, there were 336,092 families with children aged 0 to 8 years old in Victoria. 4,654 were families with Aboriginal children aged 0 to 8 years, representing 1.4 per cent of families in this category.

- The percentage of families with Aboriginal children aged 0 to 8 years is higher in regional Victoria (2.8%) than in metropolitan Melbourne (0.9%)

Map 1: All Families with at least one Aboriginal child aged 0 to 8 years, within each LGA in Regional Victoria, as a percentage of all families with children aged 0 to 8 within each LGA.

- In the Barwon South West region, the percentage of families with Aboriginal children aged 0 to 8 years was 1.9%.

- In regional Victoria, the LGAs with the highest percentages of families with Aboriginal children aged 0 to 8 years, were Swan Hill (S) (8.5%), East Gippsland (S) (7.5%), Greater Shepparton (C) (6.8%) and Mildura (RC) (6.6%).

- The lowest percentages were in the LGAs of Surf Coast (S), Macedon Ranges (S) and Moorabool (S) (all under 1.0%).
Demographics

Families with Aboriginal children

Map 2: All Families with at least one Aboriginal child aged 0 to 8 years, within each LGA in Melbourne, as a percentage of all families with children aged 0 to 8 years within each LGA.

- The highest percentages of families with Aboriginal children aged 0 to 8 years in the metropolitan area were in the LGAs of Darebin (C) (1.9%), Frankston (C) (1.5%) and Whittlesea (C) (1.5%).

- The Inner-eastern and southern regions of Melbourne had the lowest percentages. This included the LGAs of Bayside (C), Boroondara (C), Glen Eira (C) and Manningham (C), all with 0.2%.
Demographics

Family composition

- The family composition of Aboriginal families with children aged 0 to 8 in Victoria was almost equally divided, with 51.0% couple families and 49.0% one parent families. In comparison, the majority of families with children aged 0 to 8 in Victoria were couple families (83.1%).

Figure 2: Families with at least one child aged 0 to 8 years in the Barwon South West region.

<table>
<thead>
<tr>
<th></th>
<th>Barwon South West Region</th>
<th>Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total families</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboriginal families</td>
<td>49.4%</td>
<td>50.6%</td>
</tr>
<tr>
<td></td>
<td>51.0%</td>
<td>49.0%</td>
</tr>
<tr>
<td></td>
<td>80.8%</td>
<td>19.2%</td>
</tr>
<tr>
<td></td>
<td>83.1%</td>
<td>16.9%</td>
</tr>
</tbody>
</table>

Source: ABS 2006 Census of Population and Housing

- There were more Aboriginal one parent families than Aboriginal couple families with children aged 0 to 8 in the Barwon South West region (50.6% compared to 49.4% couple families).

- The percentage of Aboriginal couple families with children aged 0 to 8 years in the Barwon South West Region (49.4%) was less than the percentage of Aboriginal couple families with children in this age group in Victoria (51.0%) and less than the percentage of all couple families with children aged 0 to 8 years in the Barwon South West Region (80.8%).

- The percentage of Aboriginal one parent families with children aged 0 to 8 years in the Barwon South West Region (50.6%) was greater than the percentage of Aboriginal one parent families with children in this age group in Victoria (49.0%) and greater than the percentage of all one parent families with children aged 0 to 8 years in the Barwon South West Region (19.2%).
Demographics

Family Income

• The median weekly family income of Aboriginal families in Victoria with at least one child aged 0 to 8 was $644. This was almost three times lower than the median weekly income of all families in Victoria with at least one child aged 0 to 8 years ($1889 per week).

Median weekly income for families with children aged 0 to 8 years in the Barwon South West region, by family type.

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal</th>
<th>Total Population</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Couple families</td>
<td>One parent families</td>
<td>Couple families</td>
</tr>
<tr>
<td>No. of families</td>
<td>Median weekly</td>
<td>No. of families</td>
<td>Median weekly</td>
</tr>
<tr>
<td></td>
<td>income</td>
<td>income</td>
<td>income</td>
</tr>
<tr>
<td>Barwon South West</td>
<td>179</td>
<td>$1,085</td>
<td>199</td>
</tr>
<tr>
<td>region</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>1004</td>
<td>$937</td>
<td>1163</td>
</tr>
<tr>
<td>Victoria</td>
<td>2013</td>
<td>$1,073</td>
<td>2019</td>
</tr>
</tbody>
</table>

Source: 2006 Census. Note: only those families that reported income are represented in this table.

• The median weekly family income for Aboriginal couple families in the Barwon South West region with at least one child aged 0 to 8 was $1,085. This is greater than the median weekly income of Aboriginal couple families with children aged 0 to 8 years in Rural Victoria ($937) and less than the median weekly income of all couple families in the Barwon South West region with children in this age group ($1,239).

• The median weekly family income for Aboriginal one parent families with at least one child aged 0 to 8 in the Barwon South West region was $343. This was less than the median weekly income of Aboriginal one parent families in Rural Victoria with children in this age group ($433) and less than the median weekly income of all one parent families in the Barwon South West region with at least one child aged 0 to 8 years ($541).

• The nine Departmental regions of Victoria were ranked on the median weekly family income for Aboriginal couple families with children aged 0 to 8 years. The Barwon South West region was ranked 5 on the median income for Aboriginal couple families with children aged 0 to 8 years. A rank of 1 was assigned to the region with the highest median income.

• The nine Departmental regions of Victoria were ranked on the weekly family income for Aboriginal one parent families with children aged 0 to 8. The Barwon South West region was ranked 9 on the median income for Aboriginal one parent families with children aged 0 to 8. A rank of 1 was assigned to the LGA with the highest median income.

Figure 3: Median weekly income of couple and one parent families with children aged 0 to 8 years in the Barwon South West region.

Source: 2006 Census. Note: only those families that reported income are represented in this table.
Demographics

Family employment

Employment status of couple families with children aged 0 to 8 years in the Barwon South West region.

<table>
<thead>
<tr>
<th></th>
<th>Couple Families</th>
<th>Both Parents Employed</th>
<th>Both Parents unemployed or not in the Labour Force</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of</td>
<td>Percentage of</td>
<td>Percentage of</td>
</tr>
<tr>
<td></td>
<td>Aboriginal</td>
<td>Aboriginal families</td>
<td>all couple</td>
</tr>
<tr>
<td></td>
<td>families</td>
<td></td>
<td>families</td>
</tr>
<tr>
<td></td>
<td>Number of Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>families</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barwon South West</td>
<td>210</td>
<td>41.9</td>
<td>13.3</td>
</tr>
<tr>
<td>Region</td>
<td>18,462</td>
<td>54.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>1,195</td>
<td>33.6</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>71,492</td>
<td>54.1</td>
<td>3.7</td>
</tr>
<tr>
<td>Victoria</td>
<td>2,373</td>
<td>39.0</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>279,377</td>
<td>52.3</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Source: 2006 Census. Note: not all families report on employment status

- Of the 210 Aboriginal couple families with children aged 0 to 8 years counted in the Barwon South West region during the 2006 Census, 41.9% had both parents employed. This was less than the percentage of all couple families in the Barwon South West region with at least one child in this age group, where 54.3% reported that both parents were employed and greater than the percentage of all Aboriginal couple families with one child aged 0 to 8 years in Victoria (39.0%) where both parents were employed.

- 9 regions in Victoria were ranked on terms of percentage of Aboriginal couple families with at least one child aged 0 to 8 and with both parents employed. The Barwon South West region was ranked 4 out of 9 regions. A ranking of 1 was assigned to the region with the highest percentage of Aboriginal couple families with at least one child aged 0 to 8 and with both parents employed.

- In 2006, of the Aboriginal couple families with at least one child aged 0 to 8 years in the Barwon South West region who reported their employment status in the 2006 Census, 13.3% stated that both parents were either unemployed or not in the labour force. This was greater than the percentage of all couple families in the Barwon South West region with at least one child in this age group, where 2.9% reported that both parents were either unemployed or not in the labour force, and less than the percentage of all Aboriginal couple families with one child aged 0 to 8 years in Victoria where both parents were either unemployed or not in the labour force (17.2%).

Figure 4: Employment status of couple families in Barwon South West Region with at least one child aged 0 to 8 years.

Source: 2006 Census. Note: only those families that reported employment status are represented in this table.

Notes:
1. Where there are less than five families within the relevant category, data is not reported for confidentiality reasons and will not be plotted in the figure above.
2. Percentages will not sum to 100% as the other category is not represented in the figure above.
Demographics

Family employment

Employment status of one parent families with children aged 0 to 8 in the Barwon South West region

<table>
<thead>
<tr>
<th>One parent Families</th>
<th>Parent Employed</th>
<th>Parent unemployed or not in Labour Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Aboriginal families</td>
<td>Number of Total families</td>
<td>Percentage of Aboriginal families</td>
</tr>
<tr>
<td>Barwon South West Region</td>
<td>215</td>
<td>4,378</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>1,298</td>
<td>18,202</td>
</tr>
<tr>
<td>Victoria</td>
<td>2,281</td>
<td>56,717</td>
</tr>
</tbody>
</table>

Source: 2006 Census. Note: not all families report on employment status

• In 22.8% of Aboriginal one parent families with children aged 0 to 8 years in the Barwon South West region, the parent was employed. This was less than the percentage of all one parent families with children in this age group in the Barwon South West region where the parent was employed (40.9%) and less than the percentage of Aboriginal one parent families in Victoria with at least one child aged 0 to 8 years and the parent employed (24.2%).

• 75.8% of Aboriginal one parent families with children aged 0 to 8 in the Barwon South West region were either unemployed or not in the labour force. This is higher than the percentage of all one parent families with at least one child aged 0 to 8 years in the Barwon South West region where the parent was either unemployed or not in the labour force (57.8%) and higher than the percentage of Aboriginal one parent families in Victoria with children in this age group, where the parent is either unemployed or not in the labour force (71.8%).

Figure 5: Employment status of one parent families in Barwon South West Region with at least one child aged 0 to 8 years.

Source: ABS 2006 Census of Population and Housing

Notes:
1. Where there are less than five families within the relevant category, data is not reported for confidentiality reasons and will not be plotted in the figure above.
2. Percentages will not sum to 100% as the other category is not represented in the figure above.
Demographics

**Education level of families**

Families with children aged 0 to 8 in the Barwon South West region where the highest school qualification of the parent/parents is less than Year 12 or equivalent.

<table>
<thead>
<tr>
<th></th>
<th>Couple families where both parents have not completed Year 12 or its equivalent</th>
<th>One parent families where the parent has not completed Year 12 or its equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aboriginal families</td>
<td>Total families</td>
</tr>
<tr>
<td>Barwon South West Region</td>
<td>44 21.5</td>
<td>5,117 27.7</td>
</tr>
<tr>
<td>Victoria</td>
<td>558 23.6</td>
<td>59,172 21.2</td>
</tr>
</tbody>
</table>

Source: 2006 Census. Note: not all families report education information

- The percentage of Aboriginal couple families in the Barwon South West region with children aged 0 to 8, where both parents had not completed Year 12 or its equivalent was 21.5%. This was less than the percentage of all couple families in this category in the Barwon South West region (27.7%) and less than the percentage of Aboriginal couple families in Victoria with at least one child aged 0 to 8 years where both parents had completed Year 12 or its equivalent (23.6%).

- The highest school qualification of the parent was less than Year 12 or its equivalent in 57.3% of Aboriginal one parent families with children aged 0 to 8 in the Barwon South West region. This was less than the percentage of all one parent families in the Barwon South West region with children aged 0 to 8 (14.5%) and less than the percentage of Aboriginal one parent families in Victoria with children in this age group (8.4%).

Families with Children Aged 0 to 8 in the Barwon South West region where the parent/parents have a non-school qualification

<table>
<thead>
<tr>
<th></th>
<th>Couple families where both parents have a non school qualification</th>
<th>One parent families where the parent has a non school qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aboriginal families</td>
<td>Total families</td>
</tr>
<tr>
<td>Barwon South West Region</td>
<td>11 5.4</td>
<td>2721 14.7</td>
</tr>
<tr>
<td>Victoria</td>
<td>132 5.6</td>
<td>62,362 22.3</td>
</tr>
</tbody>
</table>

Source: 2006 Census. Note: not all families report education information

- The percentage of Aboriginal couple families in the Barwon South West region with children aged 0 to 8, where both parents had a non school qualification was 5.4%. This was less than the percentage of all couple families in the Barwon South West region with children in this agegroup and where both parents had a non school qualification (14.7%) and less than the percentage of Aboriginal couple families in Victoria in this category (5.6%).

- In 7.7% of Aboriginal one parent families with children aged 0 to 8 in the Barwon South West region, the parent had completed a non school qualification. This was less than the percentage of all one parent families in the Barwon South West region with children aged 0 to 8 (14.5%) and less than the percentage of Aboriginal one parent families in Victoria with children in this age group (8.4%).
Demographics

Family tenure

Figure 6: Tenure type of families with children aged 0 to 8 years in the Barwon South West region.

<table>
<thead>
<tr>
<th></th>
<th>Fully own or purchasing</th>
<th>Renting</th>
<th>Renting from a state housing authority</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aboriginal families</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couple families</td>
<td>54.5%</td>
<td>25.8%</td>
<td>15.3%</td>
</tr>
<tr>
<td>One parent families</td>
<td>15.3%</td>
<td>39.1%</td>
<td>40.5%</td>
</tr>
<tr>
<td><strong>Total families</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couple families</td>
<td>33.2%</td>
<td>35.5%</td>
<td>28.7%</td>
</tr>
<tr>
<td>One parent families</td>
<td>15.3%</td>
<td>10.8%</td>
<td>10.4%</td>
</tr>
</tbody>
</table>

Source: ABS 2006 Census of Population and Housing

Notes:
1. Where there are less than five families within the relevant category, data is not reported for confidentiality reasons and will not be plotted in the figure above.
2. Percentages may not sum to 100% as the other category is not represented in the figure above.

• In Victoria, 50.1% of Aboriginal couple families with at least one child aged 0 to 8 were living in dwellings that were either fully owned or being purchased, 31.8% were renting and 12.7% were renting from a State housing authority.

• Based on the 2006 Census, fewer Aboriginal couple families than total couple families in the Barwon South West region, with children aged 0 to 8 years, were living in dwellings that were either fully owned or being purchased (54.5% compared to 77.3%).

• 15.3% of Aboriginal couple families with children aged 0 to 8 years in the Barwon South West region were renting their dwellings from a state housing authority. This is greater than the percentage for all couple families in the Barwon South West region with children in this age group (10.8%) and greater than the percentage of all Aboriginal families in Victoria with children aged 0 to 8 years who were renting their dwelling from a state housing authority (12.7%).

• In Victoria, 17.0% of Aboriginal one parent families with at least one child aged 0 to 8 years were living in dwellings that were either fully owned or being purchased, 38.1% were renting and 40.1% were renting from a State housing authority.

• Based on the 2006 Census, fewer Aboriginal one parent families than total one parent families in the Barwon South West region, with children aged 0 to 8 years, were living in dwellings that were either fully owned or being purchased (15.3% compared to 33.2%).

• 40.5% of Aboriginal one parent families with children aged 0 to 8 years in the Barwon South West region were renting their dwellings from a state housing authority. This is greater than the percentage for all one parent families in the Barwon South West region with children in this age group (28.7%) and greater than the percentage of all Aboriginal families in Victoria with children aged 0 to 8 years who were renting their dwelling from a state housing authority (40.1%).
Demographics

Need for assistance with core activities

The 2006 Census is the first to collect data on need for assistance with core activities. The need for assistance with core activities variable has been developed to measure the number of people with a profound or severe disability. Please refer to ‘need for assistance with core activities’ in the glossary for more information.

Aboriginal persons aged 0 to 8 years in the Barwon South West region with a need for assistance with core activities

<table>
<thead>
<tr>
<th>Region</th>
<th>Aboriginal population</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Children aged 0-8</td>
<td>Children aged 0-8</td>
</tr>
<tr>
<td></td>
<td>who have need for</td>
<td>who have need for</td>
</tr>
<tr>
<td></td>
<td>assistance</td>
<td>assistance</td>
</tr>
<tr>
<td>Barwon South West Region</td>
<td>637</td>
<td>38,509</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>613</td>
</tr>
<tr>
<td></td>
<td>2.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>2,902</td>
<td>153,444</td>
</tr>
<tr>
<td></td>
<td>71</td>
<td>2,387</td>
</tr>
<tr>
<td></td>
<td>2.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Victoria</td>
<td>6,650</td>
<td>554,968</td>
</tr>
<tr>
<td></td>
<td>159</td>
<td>7,770</td>
</tr>
<tr>
<td></td>
<td>2.4</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Source: ABS 2006 Census of Population and Housing

- According to the 2006 Census, there were 159 Aboriginal persons aged 0 to 8 years in Victoria with a need for assistance with core activities. This represents 2.4% of all Aboriginal persons in Victoria aged 0 to 8 years.

- The percentage of Aboriginal children aged 0 to 8 years in the Barwon South West Region with a need for assistance with core activities was 2.2%. This was greater than the percentage of all children aged 0 to 8 years in the Barwon South West Region with a need for assistance (1.6%) and less than the percentage of Aboriginal children aged 0 to 8 years in Victoria with a need for assistance (2.4%).

Figure 7: Percentage of children aged 0 to 8 years with a need for assistance with core activities, by Department of Education and Early Childhood Development Regions.

- The Southern Metropolitan region had the highest percentage of Aboriginal children aged 0 to 8 with a need for assistance with core activities (3.9%). This was followed by Gippsland (3.4%) and Northern Metropolitan region (2.7%). Loddon Mallee region had the lowest percentage of children aged 0 to 8 with a need for assistance with core activities (1.1%).

- The percentage of Aboriginal children aged 0 to 8 years with a need for assistance with core activities was more than double that of the total population in the Southern and Northern metropolitan regions and almost double that of the total population in the Western and Eastern metropolitan regions and in the rural region of Gippsland.
Victorian Child and Adolescent Outcomes Framework

Each of the indicators presented in the following pages of this community profile link to the Victorian Child and Adolescent Outcomes Framework.

The framework represents a whole of government approach and provides a common basis for setting objectives and planning for children, young people and their families in Victoria.

The 35 agreed outcomes incorporate health, safety, learning, development and wellbeing from birth to 18 years and reflect an ecological model that places the child at the centre of family, community and society.


Please note:
Each of the indicators presented in the following pages of this Aboriginal community profile contain information on why the indicators have been selected and what is measured. Data sources and notes for the indicators presented in this section can be found in Appendix B. For definitions of terms used throughout these profiles, please refer to Appendix C.
Outcome: Optimal Antenatal and Infant Development

Indicator: Low birth weight babies

What is measured?
This indicator measures the number of low birth weight babies per 1000 live births. Low birth weight is defined as weighing less than 2500 grams (2.5 kilograms or 5 pounds and 8 ounces). This includes both premature and full term babies.

Note: For 65 of the 79 Local Government Areas (LGAs) in Victoria, data on the number of Aboriginal live births and of Aboriginal low birth weight babies were suppressed due to small numbers. Data for the broader region in which that LGA is contained has been substituted for this indicator where applicable.

Why is it important?
Low birth weight is an indicator of the general health of a newborn. Low birth weight is also a key determinant of infant survival, health and development. Low birth weight babies are at greater risk of dying in the first years of life and also of:

- hospitalisation
- physical and neurological complications
- development of psychosocial problems

Low birth weight babies (<2500 grams) in the Barwon South West region, pooled for four calendar years, 2000 to 2003 and 2004 to 2007.

<table>
<thead>
<tr>
<th></th>
<th>2000-03</th>
<th>2004-07</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aboriginal</td>
<td>Non-Aboriginal</td>
</tr>
<tr>
<td></td>
<td>Low birth weight</td>
<td>Total live births</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>12</td>
<td>118</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>122</td>
<td>946</td>
</tr>
<tr>
<td>Victoria</td>
<td>205</td>
<td>1,569</td>
</tr>
</tbody>
</table>

Note: Victorian total includes women who live outside Victoria but gave birth at a Victorian hospital.

- The rate of Aboriginal low birth weight babies per 1000 live births in the Barwon South West region has increased from 101.7 in 2000-03 to 117.3 in 2004-07.
- In 2000-03, the rate of Aboriginal low birth weight babies in the Barwon South West region was less than the rate of Aboriginal low birth weight babies in Victoria (130.7 per 1000 live births) and greater than the rate of low birth weight babies for the non-Aboriginal population in the Barwon South West region (62.0 per 1000 live births).
- In 2004-07, the rate of Aboriginal low birth weight babies in the Barwon South West region was less than the rate of Aboriginal low birth weight babies in Victoria (134.5 per 1000 live births) and greater than the rate of low birth weight babies for the non-Aboriginal population in the Barwon South West region (57.0 per 1000 live births).

Figure 8: The rate of low birth weight babies per 1000 live births in the Barwon South West region and Victoria, pooled for four calendar years, 2000 to 2003 and 2004 to 2007.

Note: Where the number of low birth weight babies in the LGA was less than five, data is suppressed for confidentiality reasons. As such, the rate cannot be calculated and will not be represented in the chart above.
Outcome: Early identification of and attention to child health needs

Indicator: Proportion of children participating in Maternal and Child Health Services

What is measured?
This indicator measures the number of children aged 0 to 3 years and aged 3 to 6 years who have used the Maternal and Child Health Service at least once in the financial year (also known as 'active' children).

Why is it important?
The Maternal and Child Health (MCH) Service is a universal primary care service for all Victorian families with children from birth to school age. The service offers support, information and advice regarding parenting, child health and development, child behaviour, maternal health and well-being, child safety, immunisation, breastfeeding, nutrition and family planning.

The MCH Service aims to promote a comprehensive and focused approach for the promotion, prevention, early detection and intervention of physical, emotional or social factors affecting young children and their families.

All children can benefit from their family having access to helpful guidance as they grow and develop.

Number of Aboriginal children who are active in the MCH Service in the Barwon South West region.

<table>
<thead>
<tr>
<th></th>
<th>Aged 0 to 3</th>
<th></th>
<th>Aged 3 to 6</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active</td>
<td>Total</td>
<td>% active</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>children</td>
<td>cards</td>
<td></td>
<td>children</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>162</td>
<td>207</td>
<td>78.3</td>
<td>21</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>823</td>
<td>1091</td>
<td>75.4</td>
<td>243</td>
</tr>
<tr>
<td>Victoria</td>
<td>1524</td>
<td>1998</td>
<td>76.3</td>
<td>479</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Aged 0 to 3</th>
<th></th>
<th>Aged 3 to 6</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active</td>
<td>Total</td>
<td>% active</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>children</td>
<td>cards</td>
<td></td>
<td>children</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>176</td>
<td>221</td>
<td>79.6</td>
<td>85</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>949</td>
<td>1171</td>
<td>81.0</td>
<td>349</td>
</tr>
<tr>
<td>Victoria</td>
<td>1626</td>
<td>2080</td>
<td>78.2</td>
<td>530</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Aged 0 to 3</th>
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<th>Aged 3 to 6</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active</td>
<td>Total</td>
<td>% active</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>children</td>
<td>cards</td>
<td></td>
<td>children</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>190</td>
<td>233</td>
<td>81.5</td>
<td>59</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>1024</td>
<td>1295</td>
<td>79.1</td>
<td>326</td>
</tr>
<tr>
<td>Victoria</td>
<td>1748</td>
<td>2239</td>
<td>78.1</td>
<td>508</td>
</tr>
</tbody>
</table>
Outcome: Early identification of and attention to child health needs

Indicator: Proportion of children participating in Maternal and Child Health Services

Number of Aboriginal children who are active in the MCH Service in the Barwon South West region .... continued

### 2006-07

<table>
<thead>
<tr>
<th>Region</th>
<th>Aged 0 to 3</th>
<th></th>
<th>Aged 3 to 6</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active</td>
<td>Total cards</td>
<td>% active</td>
<td>Active</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>203</td>
<td>269</td>
<td>75.5</td>
<td>55</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>1097</td>
<td>1408</td>
<td>77.9</td>
<td>306</td>
</tr>
<tr>
<td>Victoria</td>
<td>1841</td>
<td>2351</td>
<td>78.3</td>
<td>523</td>
</tr>
</tbody>
</table>

### 2007-08

<table>
<thead>
<tr>
<th>Region</th>
<th>Aged 0 to 3</th>
<th></th>
<th>Aged 3 to 6</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active</td>
<td>Total cards</td>
<td>% active</td>
<td>Active</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>246</td>
<td>338</td>
<td>72.8</td>
<td>61</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>1156</td>
<td>1490</td>
<td>77.6</td>
<td>315</td>
</tr>
<tr>
<td>Victoria</td>
<td>1903</td>
<td>2464</td>
<td>77.2</td>
<td>480</td>
</tr>
</tbody>
</table>

• In 2007-08, the percentage of MCH active Aboriginal children aged 0 to 3 years in the Barwon South West region was 72.8%. This was less than the percentage of MCH active Aboriginal children in this age group in Rural Victoria (77.6%) and less than the percentage of MCH active Aboriginal children aged 0 to 3 years in Victoria (77.2%).

• The percentage of Aboriginal children aged 3 to 6 years who were active in MCH services during 2007-08 in the Barwon South West region was 18.3%. This was less than the percentage of MCH active Aboriginal children in this age group in Rural Victoria (26.5%) and less than the percentage of MCH active Aboriginal children aged 3 to 6 years in Victoria (23.8%).

**Figure 9: The percentage of MCH active Aboriginal children aged 0 to 6 years in the Barwon South West region.**

- The above figure shows the percentage of MCH active Aboriginal children in the Barwon South West region is higher in children aged 0 to 3 years than for children aged 3 to 6 years. This trend is consistent to that observed in the total population.
Outcome: Early Identification of and attention to child health needs

Indicator: Proportion of children receiving a Maternal and Child Health Service home consultation

What is measured?
This indicator measures participation in the Maternal and Child Health home consultation.

Participation in key ages and stages visits in the Maternal and Child Health (MCH) services for Aboriginal children are not fully represented in the figures below. This is because many Aboriginal children attend the Victorian Aboriginal Health Service (VAHS) rather than their local MCH service.

Participation rates for Aboriginal children at the LGA level is subject to volatility due to small numbers and cannot be accurately represented at an LGA level. This indicator presents the number and proportion of Aboriginal children receiving a home consultation within the DEECD region.

Why is it important?
The Maternal and Child Health (MCH) Service is a universal service for all Victorian families with children from birth to school age. The service offers support, information and advice regarding parenting, child health and development, child behaviour, maternal health and well-being, child safety, immunisation, breastfeeding, nutrition and family planning.

The MCH Service aims to promote a comprehensive and focused approach for the promotion, prevention, early detection and intervention of physical, emotional or social factors affecting young children and their families. All children can benefit from their family having access to helpful guidance as they grow and develop.

Aboriginal children receiving a Maternal and Child Health Service home consultation in the Barwon South West region, 2006-07 and 2007-08.

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Home consultations</td>
<td>Infant record cards - children aged 0 to 1</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>85</td>
<td>86</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>399</td>
<td>476</td>
</tr>
<tr>
<td>Victoria</td>
<td>685</td>
<td>777</td>
</tr>
</tbody>
</table>

- In 2007-08, the percentage of Aboriginal children seen at the home consultation visit in the Barwon South West region was 64.4%. This has decreased since 2006-07, where 98.8% of Aboriginal children were seen at the home consultation visit.

Figure 10: Percentage of children seen at the MCH home consultation visit in the Barwon South West region and Victoria, 2007-08.

Note: Percentage of children receiving a key ages and stages visit may exceed 100% in some areas. See 'key ages and stages visit' in glossary for more information.

- In 2007-08, the percentage of Aboriginal children seen at the home consultation visit in the Barwon South West region was less than the percentage of the total population in the Barwon South West region seen at home consultation visit (99.8%) and lower than the percentage of Aboriginal children seen at the home consultation visit in Victoria (91.3%).
Outcome: Early Identification of and attention to child health needs

Indicator: Proportion of children attending the Maternal and Child Health Service 3.5 year ages and stages visit

What is measured?
This indicator measures the number of children attending the Maternal and Child Health (MCH) 3.5 year ages and stages visit.

Participation in key ages and stages visits in the Maternal and Child Health (MCH) services for Aboriginal children are not fully represented in the figures below. This is because some Aboriginal children attend the Victorian Aboriginal Health Service (VAHS) rather than their local MCH service.

Participation rates for Aboriginal children at the LGA level is subject to volatility due to small numbers and cannot be accurately represented at an LGA level. This indicator presents the number and proportion of Aboriginal children receiving a 3.5 year ages and stages visit within the DEECD region.

Why is it important?
The Maternal and Child Health (MCH) Service is a universal service for all Victorian families with children from birth to school age. The service offers support, information and advice regarding parenting, child health and development, child behaviour, maternal health and well-being, child safety, immunisation, breastfeeding, nutrition and family planning.

The MCH Service aims to promote a comprehensive and focused approach for the promotion, prevention, early detection and intervention of physical, emotional or social factors affecting young children and their families. All children can benefit from their family having access to helpful guidance as they grow and develop.

Aboriginal children seen at Maternal and Child Health Service 3.5 year ages and stages visit in the Barwon South West region, 2006-07 and 2007-08.

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean infant record cards - children aged 3 to 4 and aged 4 to 5</td>
<td>Percentage of children attending 3.5 year ages and stages visit</td>
</tr>
<tr>
<td>Barwon South West Region</td>
<td>15</td>
<td>82.0</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>140</td>
<td>378.0</td>
</tr>
<tr>
<td>Victoria</td>
<td>255</td>
<td>681.0</td>
</tr>
</tbody>
</table>

In 2007-08, the percentage of Aboriginal children seen at the 3.5 year key ages and stages visit in the Barwon South West region was 20.6%. This has increased since 2006-07, where 18.3% of Aboriginal children were seen at the 3.5 year ages and stages visit.

In 2007-08, the percentage of Aboriginal children seen at the 3.5 year ages and stages visit in the Barwon South West region was lower than the percentage seen at the 3.5 year ages and stages visit in Rural Victoria (38.0%) and lower than the percentage seen in Victoria (40.3%).

Figure 11: Percentage of children seen at the 3.5 year ages and stages visit in the Barwon South West region and Victoria, 2007-08.

Note: Percentage of children receiving a key ages and stages visit may exceed 100% in some areas. See 'key ages and stages visit' in glossary for more information.

The percentage of Aboriginal children seen at the 3.5 year ages and stages visit in the Barwon South West region in 2007-08 was less than the percentage of the total population seen at the 3.5 year ages and stages visit (59.3%) and less than the percentage of Aboriginal children in Victoria seen at the 3.5 year ages and stages visit (40.3%).
Outcome: Early Identification of and attention to child health needs

Indicator: Proportion of children who are the subject of a child abuse notification within 12 months of a notification

What is measured?
This indicator measures the rate of child protection renotifications for children aged 0 to 8 years. A child is “renotified” if they are notified to Child Protection more than once in a 12 month period.

Why is it important?
Childhood trauma, abuse and neglect is one of the most significant factors impacting on child health, wellbeing and development. Abuse in childhood can result in a wide range of long and short term consequences. In addition to physical harm, abused children can develop ongoing mental health and behavioural issues.

Number and rate of child protection notifications, renotifications and re-reports within a year, for children aged 0 to 8 years in the Barwon South West region, 2001-02 to 2007-08.

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal child protection notifications</th>
<th>Total child protection notifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of notifications</td>
<td>Number of Renotifications</td>
</tr>
<tr>
<td>2001-02</td>
<td>74</td>
<td>35</td>
</tr>
<tr>
<td>2002-03</td>
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<td>34</td>
</tr>
<tr>
<td>2003-04</td>
<td>81</td>
<td>44</td>
</tr>
<tr>
<td>2004-05</td>
<td>89</td>
<td>43</td>
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<td>2005-06</td>
<td>69</td>
<td>27</td>
</tr>
<tr>
<td>2006-07 *</td>
<td>129</td>
<td>44</td>
</tr>
<tr>
<td>2007-08 *</td>
<td>125</td>
<td>35</td>
</tr>
</tbody>
</table>

* From 23 April 2007 the child protection reporting system changed resulting in notifications being replaced by child protection reports.

- In 2007-08, 40.9% of Aboriginal children aged 0 to 8 years in Victoria were re-reported to child protection services within 12 months of a notification. This rate has decreased from 43.8% in 2001-02. Over the seven year period between 2000-01 to 2007-08, the percentage of re-reports within 12 months of a notification in Aboriginal children aged 0 to 8 years in Victoria has been decreasing at an average rate of 1.0% per year.

- In 2007-08, 28.0% of Aboriginal children aged 0 to 8 years in the Barwon South West region were re-reported to child protection services within 12 months of a notification. This rate has decreased from 47.3% in 2001-02. The rate of Aboriginal children re-reported within 12 months has been decreasing at an average rate of 7.2% per year over past seven years.

Figure 12: The rate of children aged 0 to 8 years in the Barwon South West region re-reported to child protection within 12 months of a notification, 2001-02 to 2007-08.

Note: Due to new service and data reporting arrangements introduced in 2006-07, child protection data from 2006-07 onwards may not be fully comparable with data from previous years. From 23 April 2007 the child protection reporting system changed resulting in notifications being replaced by child protection reports.

- In 2007-08, the rate of Aboriginal children aged 0 to 8 years re-reported to child protection services within 12 months of a notification in the Barwon South West region (28.0%) was less than the percentage of re-reports of all children aged 0 to 8 years in the Barwon South West region (32.5%) and less than the percentage of re-reports of all Aboriginal children aged 0 to 8 years in Victoria (40.9%).
Outcome: Early Identification of and attention to child health needs

Indicator: Number of children who are the subject of a child abuse substantiation

What is measured?
This indicator measures the rate of child protection substantiations for children aged 0 to 8 years. The rate of substantiations is the number of substantiations per 1000 of the estimated population in the age-group. Substantiations are those finalised investigations of child maltreatment that result in a conclusion that a child has been or is likely to be abused, neglected or otherwise suffer harm6.

The rate of child protection substantiations for children aged 0 to 8 years is usually derived using the Estimated Resident Population (ERP) of all children aged 0-8 during the reference period. As Aboriginal population estimates are not produced annually at the local government area level by single year of age, a methodology was introduced by Statewide Outcomes to combine Aboriginal census counts with the Experimental Estimates of the Aboriginal population produced by the ABS. See Appendix A for more information on this methodology. This information should be used as a guide to depict trends over time and highlight any areas of concern.

Why is it important?
Childhood trauma, abuse and neglect is one of the most significant factors impacting on child health, wellbeing and development5.

Abuse in childhood can result in a wide range of long and short term consequences. In addition to physical harm, abused children can develop ongoing mental health and behavioural issues2.

Number and rate of child protection substantiations for Aboriginal children aged 0 to 8 years in the Barwon South West region, 2003-04 to 2007-08.

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal children</th>
<th>All children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of substantiations</td>
<td>Estimated population aged 0 to 8 years (a)</td>
</tr>
<tr>
<td>2003-04</td>
<td>40</td>
<td>668</td>
</tr>
<tr>
<td>2004-05</td>
<td>54</td>
<td>687</td>
</tr>
<tr>
<td>2005-06</td>
<td>46</td>
<td>706</td>
</tr>
<tr>
<td>2006-07</td>
<td>41</td>
<td>724</td>
</tr>
<tr>
<td>2007-08</td>
<td>49</td>
<td>743</td>
</tr>
</tbody>
</table>

(a) Statewide Outcomes methodology (see Appendix A)

- In 2007-08, the rate of child protection substantiations in Victoria was 68.2 per 1000 Aboriginal children aged 0 to 8 years. This rate has increased from 66.9 per 1000 children aged 0 to 8 years in 2006-07 and decreased from 74.5 per 1000 children aged 0 to 8 years in 2003-04. Over the 5 year period between 2003-04 to 2007-08, the rate of child protection substantiations in Aboriginal children aged 0 to 8 years in Victoria has been decreasing at an average rate of 1.8 per year.

- In 2007-08, the rate of child protection substantiations in the Barwon South West region was 66.0 per 1000 Aboriginal children aged 0 to 8 years. This rate has increased from 59.8 per 1000 children in this agegroup in 2003-04. Over the 5 year period between 2003-04 to 2007-08, the rate of child protection substantiations per 1000 Aboriginal children aged 0 to 8 years has been increasing at an average rate of 2.0 per year.

- In 2007-08, the rate of child protection substantiations per 1000 Aboriginal children aged 0 to 8 years in the Barwon South West region was greater than the total rate of child protection substantiations for all children aged 0 to 8 years in the Barwon South West region (8.9 per 1000 children aged 0 to 8 years) and less than the rate of child protection substantiations for all Aboriginal children aged 0 to 8 years in Victoria (68.2 per 1000 children aged 0 to 8 years).
Outcome: Free from preventable disease

Indicator: Proportion of children who are fully immunised

What is measured?
This indicator measures children fully immunised at age group 1 (12-<15 month age cohort), age group 2 (24-<27 month age cohort) and age group 3 (72-<75 month age cohort, 60-<63 month age cohort from January 2008). A child is considered fully immunised when they have completed the number and type of vaccinations listed on the National Health and Medical Research Council (NHMRC) standard vaccination schedule for their age group (see glossary entry for "fully immunised").

The program includes vaccination against diphtheria, tetanus, whooping cough (pertussis), poliomyelitis, measles, mumps, rubella, Haemophilus influenza type B (Hib), hepatitis B, meningococcal C and pneumococcal disease.

Why is it important?
Immunisation against infectious disease has been shown to reduce deaths and illness from a range of childhood diseases. Immunisation also offers protection for individual children and reduces the rate at which these diseases circulate within the broader community. Vaccine coverage needs to exceed 90 per cent to achieve and maintain the level of community immunity necessary to interrupt the ongoing transmission of vaccine preventable diseases.

Aboriginal children fully immunised at the 12-<15 month age cohort in the Barwon South West region, 2005-06 to 2007-08.

<table>
<thead>
<tr>
<th></th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of children</td>
<td>Fully Immunised Number</td>
<td>%</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>48</td>
<td>39</td>
<td>81.3</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>334</td>
<td>277</td>
<td>82.9</td>
</tr>
<tr>
<td>Victoria</td>
<td>711</td>
<td>612</td>
<td>86.1</td>
</tr>
</tbody>
</table>

- In 2007-08, 598 Aboriginal children aged 12 to 15 months in Victoria were fully immunised, representing 87.9% of all Aboriginal children aged 12 to 15 months. The percentage of Aboriginal children in Victoria fully immunised at this age group has decreased from 86.1% in 2005-06 to 84.4% in 2006-07, before rising to 87.9% in 2007-08.

- The percentage of Aboriginal children fully immunised at the 12-<15 month age cohort in the Barwon South West region has been increasing since 2005-06.

- The Barwon South West region was ranked 2 out of the 9 regions in Victoria on the percentage of Aboriginal children fully immunised at 12-<15 months during 2007-08. A rank of 1 was assigned to the region with the highest percentage of children fully immunised at the 12-<15 month age cohort.

Figure 13: Percentage of children fully immunised at the 12-<15 month age cohort in the Barwon South West region, Rural Victoria and Victoria, 2007-08.

- In 2007-08, 91.9% of Aboriginal children in the Barwon South West region were fully immunised at the 12-<15 month age cohort. This was less than the percentage of non-Aboriginal children in this area who were fully immunised at the 12-<15 month age cohort (92.3%) and greater than the percentage of Aboriginal children fully immunised at the 12-<15 month age cohort in Victoria (87.9%).
Outcome: Free from preventable disease

Indicator: Proportion of children who are fully immunised

Aboriginal children fully immunised at the 24 -< 27 month age cohort in the Barwon South West region, 2005-06 to 2007-08.

<table>
<thead>
<tr>
<th>Region</th>
<th>2005-06</th>
<th></th>
<th>2006-07</th>
<th></th>
<th>2007-08</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of children</td>
<td>Fully Immunised Number</td>
<td>%</td>
<td>No. of children</td>
<td>Fully Immunised Number</td>
<td>%</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>55</td>
<td>48</td>
<td>87.3</td>
<td>58</td>
<td>48</td>
<td>82.8</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>345</td>
<td>321</td>
<td>93.0</td>
<td>345</td>
<td>311</td>
<td>90.1</td>
</tr>
<tr>
<td>Victoria</td>
<td>748</td>
<td>699</td>
<td>93.4</td>
<td>713</td>
<td>656</td>
<td>92.0</td>
</tr>
</tbody>
</table>

• In 2007-08, 619 Aboriginal children aged 24 to 27 months in Victoria were fully immunised, representing 91.6% of all Aboriginal children aged 24 to 27 months in Victoria. The percentage of Aboriginal children in Victoria fully immunised at 24 to 27 months has decreased from 93.4% in 2005-06 to 91.6% in 2007-08.

• The percentage of Aboriginal children fully immunised at the 24-<27 month age cohort in the Barwon South West region has fluctuated over the past three years.

• The Barwon South West region was ranked 8 out of the 9 regions in Victoria on the percentage of Aboriginal children fully immunised at 24 -< 27 months during 2007-08. A rank of 1 was assigned to the region with the highest percentage of children fully immunised at the 24 -< 27 month age cohort.

Figure 14: Percentage of children fully immunised at the 24 -< 27 month age cohort in the Barwon South West region, Rural Victoria and Victoria, 2007-08.

• In 2007-08, 88.5% of Aboriginal children in the Barwon South West region were fully immunised at the 24 -< 27 month age cohort. This was less than the percentage of non-Aboriginal children in this area who were fully immunised at the 24 -< 27 month age cohort (95.1%) and less than the percentage of Aboriginal children fully immunised at the 24 -< 27 month age cohort in Victoria (91.6%).
Outcome: Free from preventable disease

Indicator: Proportion of children who are fully immunised

Aboriginal children fully immunised at the 72-<75 month age cohort, 60-<63 months age cohort from January 2008 (a), in the Barwon South West region, 2005-06 to 2007-08.

<table>
<thead>
<tr>
<th></th>
<th>2005-06</th>
<th></th>
<th>2006-07</th>
<th></th>
<th>2007-08 (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of children</td>
<td>Fully Immunised</td>
<td>Number</td>
<td>%</td>
<td>No. of children</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>84</td>
<td>74</td>
<td>88.1</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>474</td>
<td>402</td>
<td>84.8</td>
<td>278</td>
<td>232</td>
</tr>
<tr>
<td>Victoria</td>
<td>1,165</td>
<td>1,024</td>
<td>87.9</td>
<td>558</td>
<td>469</td>
</tr>
</tbody>
</table>

(a) In order to assess timely immunisation, from January 2008 the reporting period for children fully immunised at age group 3 changed from 72-<75 months (6-6.25 years) to 60-<63 months (5-5.25 years). While the immunisation schedule at age group 3 is the same, children need to have completed the entire schedule by their 5th birthday to be counted as fully immunised. This change has resulted in a decrease in the percentage of children shown as fully immunised at age group 3 when compared to previous years.

- In 2007-08, 484 Aboriginal children in Victoria were fully immunised at age group 3, representing 82.3% of all Aboriginal children in this cohort. The percentage of Aboriginal children in Victoria who were fully immunised at this age group has decreased over the past three years, from 87.9% in 2005-06, dropping to 84.1% in 2006-07 then to 82.3% in 2007-08.

- The percentage of Aboriginal children fully immunised at age group 3 in the broader Barwon South West region has fluctuated over the past three years.

- The Barwon South West region was ranked 1 out of the 9 regions in Victoria on the percentage of Aboriginal children fully immunised at age group 3 during 2007-08. A rank of 1 was assigned to the region with the highest percentage.

Figure 15: Percentage of children fully immunised at the 72-<75 month age cohort, 60-<63 months age cohort from January 2008 (a) in the Barwon South West region, Rural Victoria and Victoria, 2007-08.

(a) In order to assess timely immunisation, from January 2008 the reporting period for children fully immunised at age group 3 changed from 72-<75 months (6-6.25 years) to 60-<63 months (5-5.25 years). See "Fully immunised" in glossary at Appendix C.

- In 2007-08, 94.6% of Aboriginal children in the Barwon South West region were fully immunised at age group 3. This was greater than the percentage of non-Aboriginal children in this area who were fully immunised at age group 3 (89.1%) and greater than the percentage of Aboriginal children fully immunised at age group 3 in Victoria (82.3%).
Outcome: High quality early education and care experiences available

Indicator: Kindergarten participation rate

What is measured?
This indicator measures the number of Aboriginal children who were enrolled in a funded kindergarten the year before they start school. Enrolments include first year and second year enrolments in a funded kindergarten.

The kindergarten participation rate for Aboriginal children is measured as the number of enrolled children identified as being Aboriginal as a percentage of the subsequent year's grade prep enrolment who are identified as being Aboriginal. Aboriginal Prep enrolments may include students enrolled in their second year of Prep. Differences in calculation methods in kindergarten participation rates in the Aboriginal population mean that the Aboriginal kindergarten participation rate cannot be validly compared with general participation rates.

The participation rate for Aboriginal children is not currently measured at an LGA level. This indicator presents the number of Aboriginal children enrolled in a funded four year old kindergarten within the DEECD region, and the Statewide kindergarten participation rates.

See Appendix C for more information on kindergarten and kindergarten participation rates.

Why is it important?
Kindergarten is a Victorian State Government funded program for all children in the year before entering primary school. Attendance at a quality preschool program is considered to have a number of benefits, including better intellectual development and independence, sociability and concentration, cognitive development in the short-term and preparation for success in school.

The Best Start Indicators Project recognises that early childhood education is important in preparing children for school and introducing them to organised learning. International evidence suggests that participation in early childhood education and organised learning can produce a range of short-term and long-term benefits, including improved literacy and numeracy, improved self-esteem, positive social, emotional and linguistic effects, better employment prospects and improved health outcomes.

Number of Aboriginal children enrolled in four year old kindergarten in the Barwon South West region, 2004 to 2008.

<table>
<thead>
<tr>
<th>Region</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barwon South West region</td>
<td>55</td>
<td>65</td>
<td>58</td>
<td>54</td>
<td>60</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>352</td>
<td>301</td>
<td>351</td>
<td>323</td>
<td>360</td>
</tr>
<tr>
<td>Victoria</td>
<td>534</td>
<td>465</td>
<td>529</td>
<td>504</td>
<td>525</td>
</tr>
</tbody>
</table>

In 2008, there were 60 Aboriginal children enrolled in four year old kindergarten in the Barwon South West region. Since 2004, the Barwon South West region had an average of 58.4 Aboriginal children enrolled in four year kindergarten each year. Over the past five years, the number of Aboriginal children enrolled in four year old kindergarten in the Barwon South West region has been increasing at an average rate of 1.8 enrolments per year.

Figure 16: Kindergarten participation rate for Aboriginal children in Victoria, 2004 to 2007.

In 2007, the kindergarten participation rate for Aboriginal children in Victoria was 59.1%, decreasing from 66.0% in the previous year and from 78.5% in 2004.
Outcome: Successful in literacy and numeracy

Indicator: Student attainment at the designated text level at the end of the designated year level in reading

What is measured?
This indicator measures the percentage of Prep, Year 1 and Year 2 children enrolled in Government schools who meet or exceed the reading accuracy score of 90% or more on unseen texts at the recommended text levels. The text levels used for assessment for Aboriginal students in Victoria are:

- Prep - 90% or more on Level 1 text
- Year 1 - 90% or more on Level 5 text
- Year 2 - 90% or more on Level 15 text

Why is it important?
There are very strong links between literacy, school performance, self-esteem and life chances. Poor literacy skills can have a detrimental effect on a students’ academic pathway and are associated with generally lower education, earnings, health and social outcomes as well as being linked to higher rates of unemployment, welfare dependence and teenage parenting. The central task of reading and writing provides the foundation for more advanced skills and knowledge and is essential for the development of human potential.

Percentage of Aboriginal Prep children enrolled in government schools, achieving a reading accuracy score of 90% or more on Level 1 text in the Barwon South West region, calendar years 2000 to 2008.

<table>
<thead>
<tr>
<th>Year</th>
<th>Barwon South West region</th>
<th>Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>78.0</td>
<td>74.4</td>
</tr>
<tr>
<td>2001</td>
<td>85.1</td>
<td>77.7</td>
</tr>
<tr>
<td>2002</td>
<td>97.3</td>
<td>77.9</td>
</tr>
<tr>
<td>2003</td>
<td>85.0</td>
<td>81.9</td>
</tr>
<tr>
<td>2004</td>
<td>82.2</td>
<td>78.3</td>
</tr>
<tr>
<td>2005</td>
<td>80.0</td>
<td>79.8</td>
</tr>
<tr>
<td>2006</td>
<td>79.2</td>
<td>78.1</td>
</tr>
<tr>
<td>2007</td>
<td>83.3</td>
<td>77.8</td>
</tr>
<tr>
<td>2008</td>
<td>82.0</td>
<td>80.4</td>
</tr>
</tbody>
</table>

- In 2008, the percentage of Aboriginal children enrolled in government schools achieving a reading accuracy score of 90% or more on unseen Level 1 text in Prep in the Barwon South West region was 82.0%, representing a decrease of 1.3 percentage points since 2007 and an increase of 4.0 percentage points since 2000.

- In 2008, the percentage of Aboriginal Prep children enrolled in government schools in the Barwon South West region who achieved a score of 90% or more on Level 1 text was less than that of non-Aboriginal children in the Barwon South West region (94.7%) and greater than that of Aboriginal children in Victoria who were meeting the reading assessment benchmark in Prep (80.4%).

- Ranks were assigned to the 9 Departmental regions in Victoria in terms of percentage of Aboriginal children enrolled in government schools achieving a reading accuracy score of 90% or more on Level 1 text in Prep during 2008. The Barwon South West region was ranked 5 in terms of percentage of Aboriginal children enrolled in government schools achieving an accuracy score of 90% or more on Level 1 text in Prep during 2008. A rank of 1 was assigned to the region with the highest percentage.

Figure 17: Percentage of Prep children enrolled in government schools, achieving a reading accuracy score of 90% or more on Level 1 text in the Barwon South West region and Victoria, 2000 to 2008 calendar year.

- Over the past nine years, an average of 83.6% of Aboriginal Prep children, enrolled in government schools in the Barwon South West region, achieved a reading accuracy score of 90% or more on Level 1 text. This was greater than the average percentage of Aboriginal children in Victoria reading unseen Level 1 texts with 90%-100% accuracy in Prep (78.5%) and less than the average percentage of non-Aboriginal children in the Barwon South West region reading unseen Level 1 texts with 90%-100% accuracy in Prep (95.6%).
Outcome: Successful in literacy and numeracy

Indicator: Student attainment at the designated text level at the end of the designated year level in reading

Percentage of Aboriginal Year 1 children enrolled in government schools, achieving a reading accuracy score of 90% or more on Level 5 text in the Barwon South West region, calendar years 2000 to 2008.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Barwon South West region</td>
<td>85.7</td>
<td>94.4</td>
<td>95.5</td>
<td>97.6</td>
<td>100.0</td>
<td>95.5</td>
<td>97.9</td>
<td>95.1</td>
<td>91.1</td>
</tr>
<tr>
<td>Victoria</td>
<td>88.6</td>
<td>89.2</td>
<td>91.2</td>
<td>91.9</td>
<td>93.2</td>
<td>92.7</td>
<td>92.0</td>
<td>90.9</td>
<td>90.7</td>
</tr>
</tbody>
</table>

- In 2008, the percentage of Aboriginal children enrolled in government schools, reading unseen Level 5 texts with 90%-100% accuracy in Year 1 in the Barwon South West region was 91.1%, representing a decrease of 4.0 percentage points since 2007 and an increase of 5.4 percentage points since 2000.

- In 2008, the percentage of Aboriginal Year 1 children enrolled in government schools in the Barwon South West region who achieved a score of 90% or more on Level 5 text (91.1%) was less than that of non-Aboriginal children in the Barwon South West region (98.7%) and greater than the percentage of Aboriginal Year 1 children enrolled in government schools who achieve the reading assessment benchmark in Year 1 in Victoria (90.7%).

- Ranks were assigned to the 9 Departmental regions in Victoria in terms of percentage of Aboriginal children enrolled in government schools reading unseen Level 5 texts with 90%-100% accuracy in Year 1 in 2008. The Barwon South West region was ranked 4 in terms of percentage of Aboriginal children enrolled in government schools achieving a reading accuracy score of 90% or more on Level 5 text during 2006-08 in Year 1. A rank of 1 was assigned to the region with the highest percentage.

Figure 18: Percentage of Year 1 children enrolled in government schools, achieving a reading accuracy score of 90% or more on Level 5 text in the Barwon South West region and Victoria, 2000 to 2008 calendar year.

- Over the past nine years, an average of 94.8% of Aboriginal Year 1 children, enrolled in government schools in the Barwon South West region, were achieving a reading accuracy score of 90% or more on Level 5 text. This was greater than the average percentage of Aboriginal children reading unseen Level 5 texts with 90%-100% accuracy in Year 1 in Victoria (91.2%) and less than the average percentage of non-Aboriginal children in the Barwon South West region achieving a reading accuracy score of 90% or more on Level 5 text in Year 1 (98.8%).
Outcome: Successful in literacy and numeracy

Indicator: Student attainment at the designated text level at the end of the designated year level in reading

Percentage of Aboriginal Year 2 children enrolled in government schools achieving a reading accuracy score of 90% or more on Level 15 text in the Barwon South West region, calendar years 2000 to 2008.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Barwon South West region</td>
<td>86.5</td>
<td>86.8</td>
<td>93.2</td>
<td>90.7</td>
<td>94.4</td>
<td>80.0</td>
<td>92.9</td>
<td>89.4</td>
<td>90.2</td>
</tr>
<tr>
<td>Victoria</td>
<td>79.8</td>
<td>81.2</td>
<td>79.7</td>
<td>80.1</td>
<td>82.1</td>
<td>86.4</td>
<td>86.2</td>
<td>87.6</td>
<td>85.8</td>
</tr>
</tbody>
</table>

- In 2008, the percentage of Aboriginal children enrolled in government schools, reading unseen Level 15 text with 90%-100% accuracy in Year 2 in the Barwon South West region was 90.2%, representing an increase of 0.8 percentage points since 2007 and an increase of 3.7 percentage points since 2000.

- In 2008, the percentage of Aboriginal Year 2 children enrolled in government schools in the Barwon South West region who achieved a score of 90% or more on Level 15 text (90.2%) was less than that of non-Aboriginal children in the Barwon South West region (96.4%) and greater than the percentage of Aboriginal Year 2 children enrolled in government schools who achieve the reading assessment benchmark in Year 2 in Victoria (85.8%).

- Ranks were assigned to the 9 Departmental regions in Victoria in terms of percentage of Aboriginal children enrolled in government schools achieving a reading accuracy score of 90% or more on Level 15 text in Year 2 during 2008. The Barwon South West region was ranked 1 in terms of percentage of Aboriginal children enrolled in government schools achieving a reading accuracy score of 90% or more on Level 15 text during 2008 in Year 2. A rank of 1 was assigned to the region with the highest percentage.

Figure 19: Percentage of Year 2 children enrolled in government schools, achieving a reading accuracy score of 90% or more on Level 15 text in the Barwon South West region and Victoria, 2000 to 2008 calendar years.

- Over the past nine years, an average of 89.3% of Aboriginal children, enrolled in government schools in the Barwon South West region, were achieving a reading accuracy score of 90% or more on Level 15 text in Year 2. This was greater than the average percentage of Aboriginal children achieving a reading accuracy score of 90% or more on Level 15 text in Year 2 in Victoria (83.2%) and less than the average percentage of non-Aboriginal children in the Barwon South West region achieving a reading accuracy score of 90% or more on Level 15 text in Year 2 (96.8%).
Outcomes: Optimal physical health

Indicator: Hospitalisation rate for asthma

What is measured?
This indicator measures the rate of hospital separations for asthma in children aged 0 to 8. Admissions to hospital are called separations following discharge from the hospital (see glossary entry for "hospital separations" at Appendix C).

The rate of asthma separations is usually derived using the Estimated Resident Population (ERP) of all children aged 0-8 during the reference period. As Aboriginal population estimates are not produced annually at the local government area level by single year of age, a methodology was introduced by Statewide Outcomes to combine Aboriginal census counts with the Experimental Estimates of the Aboriginal population produced by the ABS. See Appendix A for more information on this methodology. This information should be used as a guide to depict trends over time and highlight any areas of concern.

Why is it important?
Asthma is a common condition caused by narrowing of the small air passages (breathing tubes/bronchi) of the lungs. The narrowing occurs because the air passages become swollen and inflamed, reducing the flow of air in and out of the lungs. This causes wheezing, coughing and difficulty in breathing.

Asthma is the most common long-term condition among Australian children aged under 14 years. It is also the most common cause of hospitalisation in this age group. Asthma hospitalisations are included as part of the ambulatory care sensitive conditions for which hospitalisation are considered avoidable with the application of preventative care and early disease management.

Asthma has been recognised as a priority area for gain for Victoria’s children. It is the leading cause of disease burden among children. Estimates suggest that one in four children will develop some form of wheezing sometime during childhood.

Asthma can have considerable impact on the physical, social and emotional life of those with asthma and their families. It can interfere with school and can create the need for urgent medical care and can even cause premature death.

Number and rate of hospital separations for asthma in children aged 0 to 8 years in the Barwon South West region, pooled over three financial years, 1999-02.

<table>
<thead>
<tr>
<th>Geographical Area</th>
<th>Aboriginal</th>
<th></th>
<th></th>
<th>Total population</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of hospital separations for asthma</td>
<td>Estimated Aboriginal population aged 0 to 8 years (a)</td>
<td>Rate per 1000 children aged 0 to 8 years</td>
<td>Number of hospital separations for asthma</td>
<td>Estimated Resident Population aged 0 to 8 years</td>
<td>Rate per 1000 children aged 0 to 8 years</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>16</td>
<td>1,820</td>
<td>8.8</td>
<td>1,060</td>
<td>124,077</td>
<td>8.5</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>94</td>
<td>9,808</td>
<td>9.6</td>
<td>3,992</td>
<td>501,668</td>
<td>8.0</td>
</tr>
<tr>
<td>Victoria</td>
<td>129</td>
<td>19,559</td>
<td>6.6</td>
<td>12,132</td>
<td>1,706,560</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Number and rate of hospital separations for asthma in children aged 0 to 8 years in the Barwon South West region, pooled over three financial years, 2002-05.

<table>
<thead>
<tr>
<th>Geographical Area</th>
<th>Aboriginal</th>
<th></th>
<th></th>
<th>Total population</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of hospital separations for asthma</td>
<td>Estimated Aboriginal population aged 0 to 8 years (a)</td>
<td>Rate per 1000 children aged 0 to 8 years</td>
<td>Number of hospital separations for asthma</td>
<td>Estimated Resident Population aged 0 to 8 years</td>
<td>Rate per 1000 children aged 0 to 8 years</td>
</tr>
<tr>
<td>Barwon South West region</td>
<td>20</td>
<td>2,005</td>
<td>10.0</td>
<td>750</td>
<td>123,358</td>
<td>6.1</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>118</td>
<td>11,827</td>
<td>10.0</td>
<td>3,115</td>
<td>495,713</td>
<td>6.3</td>
</tr>
<tr>
<td>Victoria</td>
<td>163</td>
<td>21,130</td>
<td>7.7</td>
<td>11,233</td>
<td>1,703,218</td>
<td>6.6</td>
</tr>
</tbody>
</table>

(a) Statewide Outcomes Methodology (see Appendix A for more information)
Outcome: Optimal physical health

Indicator: Hospitalisation rate for asthma

Number and rate of hospital separations for asthma in children aged 0 to 8 years in the Barwon South West region, pooled over three financial years, 2005-08

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of hospital separations for asthma</th>
<th>Estimated Aboriginal population aged 0 to 8 years (a)</th>
<th>Rate per 1000 children aged 0 to 8 years</th>
<th>Number of hospital separations for asthma</th>
<th>Estimated Resident Population aged 0 to 8 years</th>
<th>Rate per 1000 children aged 0 to 8 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barwon South West region</td>
<td>10</td>
<td>2,173</td>
<td>4.6</td>
<td>909</td>
<td>122,141</td>
<td>7.4</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>104</td>
<td>12,739</td>
<td>8.2</td>
<td>3,341</td>
<td>488,562</td>
<td>6.8</td>
</tr>
<tr>
<td>Victoria</td>
<td>175</td>
<td>22,633</td>
<td>7.7</td>
<td>13,618</td>
<td>1,698,670</td>
<td>8.0</td>
</tr>
</tbody>
</table>

(a) Statewide Outcomes Methodology (see Appendix A for more information)

- The rate of hospital separations for asthma for Aboriginal children aged 0 to 8 years in Victoria has risen from 6.6 per 1000 children aged 0 to 8 during the 1999-02 reference period to 7.7 per 1000 children aged 0 to 8 years during 2002-05, and has remained at this rate of 7.7 per 1000 children for the 2005-08 reference period.

- During 2005-08, the rate of asthma separations for Aboriginal children aged 0 to 8 years in the Barwon South West region was 4.6 per 1000 Aboriginal children aged 0 to 8 years. This was lower than the asthma separation rate of Aboriginal children aged 0 to 8 years in Rural Victoria (8.2 per 1000 children aged 0 to 8 years) and lower than the rate of asthma separations for all children aged 0 to 8 years in the Barwon South West region during this period (7.4 per 1000 children aged 0 to 8 years).

Figure 20: The rate of separations to hospital for asthma per 1000 children aged 0 to 8 years, by Department of Education and Early Childhood Development Regions, pooled for three financial years, 2005-08.

Note: The data presented in this section does not represent the prevalence of asthma across the regions in Victoria, but depicts where children are being hospitalised for this ambulatory care sensitive condition. It should be used to as a guide to determine which regions could benefit from improved asthma management strategies.

- In 2005-08, the Western Metropolitan region had the highest rate of hospital separations for asthma, with a rate of 14.5 per 1000 Aboriginal children aged 0 to 8 years. The region with the lowest rate of asthma separations in Aboriginal children in this age group was the Southern Metropolitan region, with a rate of 3.5 hospital admissions for asthma per 1000 Aboriginal children aged 0 to 8 years.
Outcome: Optimal physical health

Indicator: Leading causes of hospitalisations

What is measured?
This indicator measures the leading causes of hospital separations (admissions to hospital are called separations following discharge from the hospital) by principal diagnosis grouped by the International Statistical Classification of Diseases (ICD) chapter level descriptions (see ICD-10-AM in glossary for more information).

Due to the small numbers of Aboriginal children admitted to hospital at an LGA level, it is not currently possible to separate this data by principal cause / diagnosis. Therefore the broader ICD chapter level descriptions of causes for hospitalisation for children aged 0 to 8 years have been presented, expressed as a rate per 1000 of the estimated population of that age. The ICD is the international standard diagnostic classification for all general epidemiological, many health management purposes and clinical use. It is used to classify diseases and other health problems recorded on many types of health and vital records including death certificates and health records.

Please note: The rate of hospital separations is usually derived using the Estimated Resident Population (ERP) of all children aged 0-8 during the reference period. As Aboriginal population estimates are not produced annually at the local government area level by single year of age, a methodology was introduced by Statewide Outcomes to combine Aboriginal census counts with the Experimental Estimates of the Aboriginal population produced by the ABS. See Appendix A for more information on this methodology. This information should be used as a guide to depict trends over time and highlight any areas of concern.

Why is it important?
A range of factors can lead to hospitalisation. These include injury, disease, congenital conditions and birth defects. Consideration of the leading causes of hospitalisation at different ages is important in monitoring changes or emerging risks for children.

Hospitalisation rates are often used as a proxy indicators for the level of serious illness within a community. However, care should be taken in considering changes in hospitalisation rates. Rates can be influenced by access issues and changes in admission practices. Hospitalisation rates may reflect underlying levels of serious illness but may also reflect access to appropriate primary care (such as GPs).

Figure 21: The rate of hospital separations, by top 10 ICD chapter, per 1000 children aged 0 to 8 years in the Barwon South West region, pooled for three financial years, 2005-08.

- In 2005-08, the ICD chapter with the highest rate of hospital separations in Aboriginal children aged 0 to 8 years in Barwon South West region was Factors Influencing Health Status and Contact with Health Services, with 46.5 per 1000 Aboriginal children aged 0 to 8 years admitted to hospital for this cause. This ICD chapter also had the highest rate of hospital admissions for all children aged 0 to 8 years in this area.

- In 2005-08, the ICD chapter with the lowest rate of hospital separations in Aboriginal children aged 0 to 8 years in Barwon South West region was Diseases of the Ear and Mastoid Process, with 7.4 per 1000 Aboriginal children aged 0 to 8 years admitted to hospital for this cause. This differed from the total population, where the ICD chapter Diseases of the Nervous System had the lowest rate of hospital separations in children aged 0 to 8 years.
Outcome: Optimal physical health

Indicator: Leading causes of hospitalisations

Number and rate of hospital separations by top 10 ICD chapters for children aged 0 to 8 years in the Barwon South West region and Victoria, pooled for three financial years, 2002-05.

<table>
<thead>
<tr>
<th>ICD Chapter number and description</th>
<th>Aboriginal hospital separations</th>
<th>Total hospital separations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Barwon South West</td>
<td>Victoria</td>
</tr>
<tr>
<td></td>
<td>Rate of hospital separations per 1000 children aged 0 to 8 years</td>
<td>Rate of hospital separations per 1000 children aged 0 to 8 years</td>
</tr>
<tr>
<td>01 Certain Infectious and Parasitic Diseases</td>
<td>15 7.5</td>
<td>189 8.9</td>
</tr>
<tr>
<td>06 Diseases of the Nervous System</td>
<td>np np</td>
<td>70 3.3</td>
</tr>
<tr>
<td>08 Diseases of the Ear and Mastoid Process</td>
<td>14 7.0</td>
<td>163 7.7</td>
</tr>
<tr>
<td>10 Diseases of the Respiratory System</td>
<td>82 40.9</td>
<td>602 28.5</td>
</tr>
<tr>
<td>11 Diseases of the Digestive System</td>
<td>31 15.5</td>
<td>258 12.2</td>
</tr>
<tr>
<td>16 Certain Conditions Originating in the Perinatal Period</td>
<td>55 27.4</td>
<td>487 23.0</td>
</tr>
<tr>
<td>17 Congenital Malformations Deformations and Chromosomal Abnormalities</td>
<td>13 6.5</td>
<td>111 5.3</td>
</tr>
<tr>
<td>18 Symptoms Signs and Abnormal Clinical Laboratory Findings NEC</td>
<td>23 11.5</td>
<td>138 6.5</td>
</tr>
<tr>
<td>19 Injury Poisoning and Certain Other Consequences of External Causes</td>
<td>41 20.4</td>
<td>270 12.8</td>
</tr>
<tr>
<td>21 Factors Influencing Health Status and Contact with Health Services</td>
<td>89 44.4</td>
<td>691 32.7</td>
</tr>
<tr>
<td><strong>Total all hospital separations</strong></td>
<td><strong>398 198.5</strong></td>
<td><strong>3,261 154.3</strong></td>
</tr>
<tr>
<td>Estimated population aged 0 to 8 years</td>
<td>2,005</td>
<td>21,130</td>
</tr>
</tbody>
</table>

- The three ICD chapters with the highest rates of hospital separations for Aboriginal children aged 0 to 8 years in the Barwon South West region during 2002-05 were: ICD chapter 21 - Factors Influencing Health Status and Contact with Health Services (rate of 44.4 per 1000 children aged 0 to 8 years), ICD chapter 10 - Diseases of the Respiratory System (rate of 40.9 per 1000 children aged 0 to 8 years) and ICD chapter 16 - Certain Conditions Originating in the Perinatal Period (rate of 27.4 per 1000 children aged 0 to 8 years). The same ICD chapters also presented the highest rates of hospital separations for all children in this agegroup in the Barwon South West region.

- In 2002-05, the rate of all hospitalisations per 1000 Aboriginal children aged 0 to 8 years in the Barwon South West region was greater than the rate of total hospital separations for Victorian Aboriginal children aged 0 to 8 years during this period (154.3 per 1000 Aboriginal children aged 0 to 8 years in Victoria compared to 198.5 in the Barwon South West region) and less than the rate of all hospital separations for all children aged 0 to 8 years in the Barwon South West region (234.0 per 1000 children aged 0 to 8 years).
Outcome: Optimal physical health

Indicator: Leading causes of hospitalisations

Number and rate of hospital separations by top 10 ICD chapters for children aged 0 to 8 years in the Barwon South West region and Victoria, pooled for three financial years, 2005-08.

<table>
<thead>
<tr>
<th>ICD Chapter number and description</th>
<th>Aboriginal hospital separations</th>
<th>Total hospital separations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Barwon South West region</td>
<td>Victoria</td>
</tr>
<tr>
<td></td>
<td>Number of hospital separations per 1000 children aged 0 to 8 years</td>
<td>Rate of hospital separations per 1000 children aged 0 to 8 years</td>
</tr>
<tr>
<td>01 Certain Infectious and Parasitic Diseases</td>
<td>26</td>
<td>12.0</td>
</tr>
<tr>
<td>06 Diseases of the Nervous System</td>
<td>22</td>
<td>10.1</td>
</tr>
<tr>
<td>08 Diseases of the Ear and Mastoid Process</td>
<td>16</td>
<td>7.4</td>
</tr>
<tr>
<td>10 Diseases of the Respiratory System</td>
<td>64</td>
<td>29.5</td>
</tr>
<tr>
<td>11 Diseases of the Digestive System</td>
<td>32</td>
<td>14.7</td>
</tr>
<tr>
<td>16 Certain Conditions Originating in the Perinatal Period</td>
<td>72</td>
<td>33.1</td>
</tr>
<tr>
<td>17 Congenital Malformations, Deformations and Chromosomal Abnormalities</td>
<td>16</td>
<td>7.4</td>
</tr>
<tr>
<td>18 Symptoms, Signs and Abnormal Clinical Laboratory Findings NEC</td>
<td>25</td>
<td>11.5</td>
</tr>
<tr>
<td>19 Injury, Poisoning and Certain Other Consequences of External Causes</td>
<td>43</td>
<td>19.8</td>
</tr>
<tr>
<td>21 Factors Influencing Health Status and Contact with Health Services</td>
<td>101</td>
<td>46.5</td>
</tr>
<tr>
<td><strong>Total all hospital separations</strong></td>
<td><strong>445</strong></td>
<td><strong>204.8</strong></td>
</tr>
<tr>
<td><strong>Estimated population aged 0 to 8 years</strong></td>
<td><strong>2,173</strong></td>
<td><strong>22,633</strong></td>
</tr>
</tbody>
</table>

- The three ICD chapters with the highest rates of hospital separations for Aboriginal children aged 0 to 8 years in the Barwon South West region during 2005-08 were: ICD chapter 21 - Factors Influencing Health Status and Contact with Health Services (rate of 46.5 per 1000 children aged 0 to 8 years), ICD chapter 16 - Certain Conditions Originating in the Perinatal Period (rate of 33.1 per 1000 children aged 0 to 8 years) and ICD chapter 10 - Diseases of the Respiratory System (rate of 29.5 per 1000 children aged 0 to 8 years). The same ICD chapters also presented the highest rates of hospital separations for all children in this agegroup in the Barwon South West region.

- In 2005-08, the rate of all hospitalisations per 1000 Aboriginal children aged 0 to 8 years in the Barwon South West region was greater than the rate of total hospital separations for Victorian Aboriginal children aged 0 to 8 years (198.2 per 1000 Aboriginal children aged 0 to 8 years in Victoria compared to 204.8 in the Barwon South West region) and less than the rate of all hospital separations for all children aged 0 to 8 years in the Barwon South West region (237.1 per 1000 children aged 0 to 8 years).

- During 2005-08, the rate of hospital separations for Aboriginal children aged 0 to 8 years in the Barwon South West region was greater than the rate per 1000 children aged 0 to 8 years in the total population across most of the 10 ICD chapters presented in this section.
Outcome: Healthy Teenage Lifestyle

Indicator: Teenage births

What is measured?
This indicator measures the number of confinements (births), that result in a live birth, to women aged 15 to 19 years. The rate of teenage births is this number of confinements per 1000 women aged 15 to 19 in the population.

In calculating the rate of teenage births, two different population estimates have been used for the two time periods presented. Some differences in the resulting rates may be attributed to the net undercount in the Aboriginal population estimates sourced from the 2006 Census, rather than being a true reflection of a change in the rate of teenage births.

Note: For 61 of the 79 Local Government Areas (LGAs) in Victoria, data on the number of Aboriginal teenage births were suppressed due to small numbers. Where applicable, data for the broader region in which the LGA is contained, has been substituted for this indicator.

Why is it important?
Teenage childbearing is often related to increased adverse health, social and economical outcomes for teenagers and their children\(^1\). However, it is also important to recognise that not all teenage pregnancies are unplanned or unwanted and that many teenage parents and children of teenage parents report positive experiences\(^1\).

The number of births to Aboriginal women aged 15 to 19 years in the Barwon South West region, pooled over three financial years, 2000-03 and 2004-07.

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal Teenage births</th>
<th>Estimated population of females aged 15 to 19 years (a)</th>
<th>Rate teenage births per 1000 females aged 15 to 19 years</th>
<th>Aboriginal Teenage births</th>
<th>Estimated population of females aged 15 to 19 years (b)</th>
<th>Rate teenage births per 1000 females aged 15 to 19 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barwon South West region</td>
<td>25</td>
<td>139</td>
<td>179.9</td>
<td>38</td>
<td>147</td>
<td>258.5</td>
</tr>
<tr>
<td>Rural Victoria</td>
<td>238</td>
<td>765</td>
<td>311.1</td>
<td>259</td>
<td>852</td>
<td>304.0</td>
</tr>
<tr>
<td>Victoria</td>
<td>338</td>
<td>1376</td>
<td>245.6</td>
<td>410</td>
<td>1620</td>
<td>253.1</td>
</tr>
</tbody>
</table>

(a) Sourced from: Experimental Estimates of the Aboriginal and Torres Strait Islander population, 2001

(b) Sourced from: 2006 Census of Population and Housing. Victorian total includes persons with no usual address and persons in unincorporated Victoria.

* Victorian total of teenage births includes women who live outside Victoria but give birth at a Victorian hospital.

• In 2000-03, the rate of births to Aboriginal women aged 15 to 19 years in the Barwon South West region was 179.9 per 1000 Aboriginal women in this age group. This was lower than the rate in Rural Victoria (311.1 per 1000 Aboriginal teenage women) and less than the rate of teenage births in Victoria (245.6 per 1000 Aboriginal teenage women).

• In 2000-03, the Barwon South West region was ranked 5 out of the 9 regions in Victoria, in terms of the rate of teenage births per 1000 women aged 15 to 19 years in the region. A rank of 1 was assigned to the region with the highest rate of teenage births.

• In 2000-03, the Barwon South West region was ranked 5 out of the 9 regions in Victoria, in terms of the rate of teenage births per 1000 women aged 15 to 19 years in the region. A rank of 1 was assigned to the region with the highest rate of teenage births.

• In 2004-07, the rate of births to Aboriginal women aged 15 to 19 years in the Barwon South West region was 258.5 per 1000 Aboriginal women in this age group. This was lower than the rate in Rural Victoria (304.0 per 1000 Aboriginal teenage women) and greater than the rate in Victoria (253.1 per 1000 Aboriginal teenage women).

• In 2004-07, the Barwon South West region was ranked 4 out of the 9 regions in Victoria, in terms of the rate of teenage births per 1000 women aged 15 to 19 years in the region. A rank of 1 was assigned to the region with the highest rate of teenage births.
Outcome: Healthy Teenage Lifestyle

Indicator: Teenage births

Figure 22: The rate of teenage births to women aged 15 to 19 years in the Barwon South West region and Victoria, pooled over three financial years.

![Barwon South West region and Victoria teenage birth rates](chart.png)

- In 2000-03, the rate of teenage births to Aboriginal women aged 15 to 19 in Victoria was more than five times higher than that of non-Aboriginal women. This pattern continues in 2004-07.

- In 2000-03, the rate of births to Aboriginal women aged 15 to 19 years in the Barwon South West region was almost 3 times higher than the teenage birth rate of non-Aboriginal females (179.9 compared to 57.8). While in 2004-07, the teenage birth rate in Aboriginal women in the Barwon South West region was almost 5 times higher than that of non-Aboriginal women (258.5 compared to 52.8).

- The rate of Aboriginal teenage births in rural Victoria was more than triple that in metropolitan Victoria, with a rate of 311.1 in rural Victoria compared to 91.7 in metropolitan Victoria during 2000-03, and 304.0 in rural Victoria compared to 122.0 in metropolitan Victoria during 2004-07.
Appendix A: Methodology for producing a guide measure of the Aboriginal population

Australian Bureau of Statistics estimates of the Aboriginal population

Estimates of the Aboriginal populations are published by the Australian Bureau of Statistics after each Census in the publication Experimental Estimates of Aboriginal and Torres Strait Islander Australians (Cat. no. 3238.0.55.001). These estimates are disaggregated by age (5-year age groups) and sex at a state level, but are only available as a total for all ages for statistical local areas (SLAs).

The estimates of the Aboriginal population produced by the ABS are experimental, as the standard approach to population estimation is not possible because satisfactory data on the components of the population (i.e. births, deaths and internal migration) are not generally available.

Estimated resident population (ERP) by Indigenous status are compiled using Census, the Census Post Enumeration Survey (PES) and other demographic information. Starting with Census counts by place of usual residence, a number of steps are involved. These include:

- imputation of Indigenous status for Census records with unknown Indigenous status as a result of either non-response to the Aboriginal and Torres Strait Islander origin question in the Census, or unknown Indigenous status on Census records imputed by the ABS when a form could not be obtained from occupied dwellings identified in the field.
- an allowance for Census net undercount: in a complex exercise such as the Census, it is inevitable that some people will be missed and some will be included more than once. The PES, conducted shortly after Census Night, collects information about where people were on Census Night and their characteristics to estimate Census net undercount.
- an estimate of the number of Australian residents temporarily overseas on Census Night (RTOs).
- backdating from the Census date to the ERP reference date of 30 June using data on births, deaths, overseas and interstate migration for the intervening period.

Statewide Outcomes methodology to provide a guide measure for the Aboriginal population for years other than Census years

It is recognised that the most reliable source of Aboriginal population estimates are the Experimental Estimates of the Aboriginal and Torres Strait Islander population. However, as this data is not available by age at the LGA level, a methodology was introduced in order to supplement age and sex breakdowns at the local level (available from the 2006 Census counts), with published statewide estimates of the Indigenous population. This methodology merges both sources of Aboriginal estimates together to produce local level Aboriginal population counts by single year of age and sex.

Annual Aboriginal population estimates single year of age for LGAs in Victoria were then produced by calculating the difference in the Aboriginal population counts between 2006 and 2001 and applying a growth rate for the four intercensal years. While the benchmark estimates at 2001 and 2006 align with published Statewide estimates of the Aboriginal and Torres Strait Islander population produced by the ABS, the Statewide Outcomes methodology assumes that the growth in the Aboriginal population is constant in the intercensal years. This measure is therefore a guide, with a range of limitations, and should be used with caution.

Volatility in the Aboriginal population can in part be attributed to changes in the propensity of persons to identify as being of Indigenous origin. Below is a model that depicts the Statewide Outcomes methodology of constant growth in the intercensal years against a model of intercensal volatility. Both align at the end points.

Figure A1: Statewide Outcomes methodology plotted against a model of intercensal volatility, Aboriginal children aged 0 to 8 years in Victoria, 1996-2008.
Appendix A: Methodology for producing Aboriginal population estimates

Steps taken to derive the projected intercensal estimates of the Aboriginal population

Deriving the weighted 2006 Census counts

1: Compare difference in Aboriginal population estimates between the ABS Experimental estimates of the Aboriginal and Torres Strait Islander population to the estimates produced using the 2006 Census counts. The difference in the estimates can be attributed to the steps undertaken above by the ABS to deduce a more accurate representation of the Aboriginal population.

2: Using 2006 Census counts, calculate the proportional single year of age distribution to total for all ages. Use this proportional distribution to allocate weighting across single year of age.

3: Using 2006 Census counts, calculate the proportional distribution of each LGA in Victoria to Statewide total. Use this proportional distribution to allocate weighting across LGAs in Victoria.

4: Using proportional weighting for single year of age (columns) and proportional weighting for LGAs across Victoria (rows), multiply these to get single year of age weightings for each LGA in Victoria.

5: Allocate the difference in estimates calculated in step 1 to the proportional weights across single year of age and LGAs to produce weighted Census counts of the Aboriginal population. These weighted counts now align with the 2006 Experimental Estimates of the Aboriginal population, but are split by LGA and single year of age.

Using the 2001 Experimental Estimates of the Aboriginal population by LGA and single year of age and the weighted 2006 Census counts, these two estimates form the benchmarks from which intercensal counts can be projected.

6: Calculate the growth in the Aboriginal population by subtracting the 2006 weighted Census counts of the Aboriginal population from the 2001 Experimental Estimates of the Aboriginal population. This depicts the change in the Aboriginal population in the five year period between 2001 and 2006.

7: An annual rate of change in the Aboriginal population between 2001 and 2006 is then calculated by dividing the difference in the Aboriginal population by 5. This methodology:

- assumes that the rate of change in the Aboriginal population is constant between 2001 and 2006; and
- assumes that the rate of change across LGAs and across single year of age is constant between 2001 and 2006.

Figure A2: Projected intercensal estimates of the Aboriginal population aged 0 to 8 years, Statewide Outcomes methodology, 1996 to 2008, Victoria.

Note: outlined data points are published estimates of the Aboriginal population
Appendix B: Data sources and notes

Part A: Child and family demographics


Part B: Early Childhood Indicators

Low birth weight babies
Department of Human Services, 2009, Perinatal Data Collection Unit. Unpublished.

Notes
1. Information on Aboriginal births/confinements are based upon the cases of Aboriginal mothers that are reported on the Perinatal Form.
2. Data provided on local government area are approximate, based upon the ABS proportional allocation of postcodes to local government areas.
3. The statewide figures that have been provided include data on all births/confinements in the State, including women who live outside Victoria but give birth at a Victorian hospital. For the other demographic tables these women have been excluded.
4. Cases with unknown values for either maternal age or unknown Aboriginal status have been excluded.

Maternal and Child health - participation, home consultation and 3.5 year key ages and stages visits

Child protection rereports and substantiations

Notes
1. Aboriginal status data should be used with caution. Recorded Aboriginal status is not necessarily conclusive, and may change throughout the course of child protection involvement, as information becomes available.
2. Any figures expressed as percentages should be considered in conjunction with actual numbers, as large percentage changes may reflect small numbers.

Children fully immunised
Australian Childhood Immunisation Register (ACIR).
Note: This data is provided quarterly by the ACIR and was aggregated into financial years by the Data, Outcomes and Evaluation Division of the Office for Children and Portfolio Coordination.

Kindergarten participation

Kindergarten Enrolments

Aboriginal Prep Enrolments

Assessment of Reading
Appendix B: Data sources and notes

Part B: Early Childhood Indicators … continued

Hospitalisations for asthma

Aboriginal Population aged 0 to 8 years
Department of Education and Early Childhood Development, 2009, Statewide Outcomes methodology to provide a guide measure for the Aboriginal population for years other than Census years (see Appendix A). Unpublished.

Total population aged 0 to 8 years
Australian Bureau of Statistics, Population by age and sex, Australian States and Territories, June 2008 (Cat no. 3201.0).

Leading cause of hospitalisations

Aboriginal Population aged 0 to 8 years
Department of Education and Early Childhood Development, 2009, Statewide Outcomes methodology to provide a guide measure for the Aboriginal population for years other than Census years (see Appendix A). Unpublished.

Total population aged 0 to 8 years
Australian Bureau of Statistics, Population by age and sex, Australian States and Territories, June 2008 (Cat no. 3201.0).

Teen births
Department of Human Services, 2009, Perinatal Data Collection Unit. Unpublished.

Aboriginal females aged 15-19 years, 2000-03 reference period

Aboriginal females aged 15-19 years, 2004-07 reference period

Notes
1. Information on Aboriginal births/confinements are based upon the cases of Aboriginal mothers that are reported on the Perinatal Form.

2. Data provided on local government area are approximate, based upon the ABS proportional allocation of postcodes to local government areas.

3. The statewide figures that have been provided include data on all births/confinements in the State, including women who live outside Victoria but give birth at a Victorian hospital. For the other demographic tables these women have been excluded.

4. Cases with unknown values for either maternal age or unknown Aboriginal status have been excluded.
Appendix C: Glossary of terms

Aboriginal and Torres Strait Islander
Aboriginal and Torres Strait Islanders are those who identify themselves as either:
- Aboriginal
- Torres Strait Islander
- Both Aboriginal and Torres Strait Islander

Throughout this profile, Aboriginal and Torres Strait Islanders have been referred to as ‘Aboriginal’.

Aboriginal households
A family, lone person or group household which had at least one usual resident enumerated at home on Census night who was of Aboriginal and/or Torres Strait Islander origin.

See also: Household

Aboriginal families
A family which had at least one usual resident enumerated at home on Census night who was of Aboriginal and/or Torres Strait Islander origin.

Aboriginal families with at least one child aged 0 to 8 years
Child aged 0-8 years was not necessarily indigenous.

See also: Family.

Ambulatory care sensitive conditions (ACSCs)
Ambulatory care sensitive conditions (ACSCs) are defined as those conditions for which hospitalisation is considered to be avoidable with the application of preventative care and early disease management. Rates of hospitalisation for ACSCs can be considered an indirect measure of patient access to primary health care.

Asthma
Asthma is a chronic respiratory disease, often arising from allergies, that is characterised by sudden recurring attacks of laboured breathing, chest constriction and coughing. The hospital separations for asthma shown in these profiles are counted based on a principal diagnosis of one of the following ICD-10-AM coded conditions:

- J440 - COPD(a) with acute lower respiratory infection
- J441 - COPD(a) with acute exacerbation unspecified
- J448 - other specified COPD(a)
- J449 - COPD(a) unspecified
- J450 - predominantly allergic asthma
- J451 – non-allergic asthma
- J458 - mixed asthma
- J459 - asthma unspecified
- J46 - status asthmaticus.

(a) COPD = Chronic Obstructive Pulmonary Disease.

See also: Ambulatory care sensitive conditions.

Child abuse notification
Child protection notifications consist of reports made to an authorised department by persons or other bodies making allegations of child abuse or neglect, child maltreatment or harm to a child. Incidents or suspected cases of child abuse and neglect are usually reported to government departments in the first instance by health or welfare professionals, teachers or the police, who in some jurisdictions are mandated to report such matters, or by other people in the community.

Notifications should not include reports regarding wider concerns about children or families which are classified as child concern reports. A notification can involve only one child; where it is claimed that two children have been abused or neglected, this is counted as two notifications, even if the children are from one family. Where there is more than one notification about the same ‘event’, this is counted as only one notification. Where there is more than one notification between 1 July 2007 and 30 June 2008, but relating to different events (for instance, a different type of abuse or neglect or a different person believed responsible for the abuse or neglect), these notifications should be counted as separate notifications.
Appendix C: Glossary of terms … continued

**Child abuse renotification**
Where there is more than one child protection notification made to relevant authorities during the year ended 30 June, and these are related to the same child, these are counted as renotifications.

Note: From 23 April 2007 the child protection reporting system changed resulting in notifications being replaced by child protection reports.

**Child abuse substantiation**
Substantiations of notifications received during the year refer to child protection notifications made to relevant authorities during the year ended 30 June, which were investigated and the investigation was finalised by 31 August, and it was concluded that there was reasonable cause to believe that the child had been, was being or was likely to be abused or neglected or otherwise harmed.

**Employment status**

*Employed*
For Census purposes, employed includes people aged 15 years and over who:
• work for payment or profit, or as an unpaid helper in a family business, during the week prior to census night;
• have a job from which they are on leave or otherwise temporarily absent; or
• are on strike or stood down temporarily.

*Unemployed*
Includes people aged 15 years and over who do not have a job but are actively looking for work and are available to start work.

*Not in the labour force*
People aged 15 years and over who are neither employed nor unemployed are classified as ‘not in the labour force’. This includes people who are retired, pensioners and people engaged solely in home duties.

**Family**
A family is defined as two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who are usually resident in the same household. A household may contain more than one family. Non-related persons living in the same household are not counted as family members (unless under 15 years of age).

**Families with Aboriginal children**
A family which had at least one usual resident enumerated at home on Census night who was a child of Aboriginal and/or Torres Strait Islander origin.

**Family composition (couple/one parent families)**
Also referred to as *Family Type*.

Families are classified in terms of the relationships that exist between one individual who is nominated as the ‘family reference person’ and each other member of that family. The family type variable distinguishes between different types of families based on the presence or absence of couple relationships, parent-child relationships, child dependency relationships or other blood relationships, in that order of preference.

The family type variable is derived from people enumerated in the household who usually reside there, and who share a familial relationship. Partners and dependent children usually present but temporarily absent are also included in this derivation. Boarders and other non-family members are excluded.

**Couple family**
A census variable; a couple family is based on two persons who are in a registered or de facto marriage and who are usually resident in the same household. The family may or may not include any number of dependents, non-dependents and other related individuals, thus a couple family can consist of a couple without children present in the household.

**One parent family**
A one-parent family consists of a lone parent with at least one child (regardless of age) who is also usually resident in the family household. The family may also include any number of other related individuals.

See also: Lone parent.
Aboriginal Early Childhood Community Profile

Appendix C: Glossary of terms … continued

Family income
This variable is the sum of the usual gross individual weekly incomes of each family member present in the household on census night. Family income only applies to classifiable families in occupied private dwellings. If any person aged 15 and over is temporarily absent, or does not state their income, then the family income is not derived for that family. Family income is not applicable to non-family households such as group households or lone person households, or to people in non-private dwellings. Individual incomes are collected as ranges by the census. To enable these range values to be summed, information from the Survey of Income and Housing Costs, which collects income as individual values, is used to estimate the median income within each bracket collected by the census. The relevant median value for each family member is then summed to produce the family income figure.

Fully Immunised
A child's immunisation details are recorded on the Immunisation Register when information is submitted by a recognised immunisation provider. Hence, the accuracy of reports greatly depends on provider participation and the transitional flow of data between providers and the Immunisation Register.

A fully immunised child is one who has received the full schedule of immunisations for their age group. For the age groups presented in these profiles, the schedules are:

12-<15 month age cohort
Aboriginal children fully immunised at the 12-<15 month age cohort in Frankston (C), 2005-06 to 2007-08.
Polio = Polio 3
HIB = Haemophilus Influenzae 2 or 3
HepB = Hepatitis B 2 or 3
MMR = not assessed

Fully Vaccinated 12-<15 month = DTP + Polio + HIB + HepB (All previous doses are presumed as given)
Note: Only those immunisation services a child has received up to 12 months of age are included in the report.

24-<27 month age cohort
DTP = Diphtheria 3 + Pertussis 3 + Tetanus 3 or Diphtheria 4 + Pertussis 4 + Tetanus 4
Polio = Polio 3
HIB = Haemophilus Influenzae 3 or 4
HepB = Hepatitis B 2 or 3
MMR = Measles 1 + Mumps 1 + Rubella 1

Fully Vaccinated 24-<27 month = DTP + OPV + HIB + HepB + MMR (All previous doses are presumed as given)
Note: Only those immunisation services a child has received up to 24 months of age are included in the report.

60-<63 month age cohort
DTP = Diphtheria 4 + Pertussis 4 + Tetanus 4 or Diphtheria 5 + Pertussis 5 + Tetanus 5
Polio = Polio 4
HIB = not assessed
MMR = Measles 2 + Mumps 2 + Rubella 2

Fully Vaccinated 60-<63 month = DTP + OPV + MMR (All previous doses are presumed as given)
Note: Only those immunisation services a child has received up to 60 months of age are included in the report.

72-<75 month age cohort
DTP = Diphtheria 5 + Pertussis 5 + Tetanus 5
Polio = Polio 4
HIB = not assessed
MMR = Measles 2 + Mumps 2 + Rubella 2

Fully Vaccinated 72-<75 month = DTP + OPV + MMR (All previous doses are presumed as given)
Note: Only those immunisation services a child has received up to 72 months of age are included in the report.

In order to assess timely immunisation, from January 2008 the reporting period for children fully immunised at age group 3 changed from 72-<75 months (6.625 years) to 60-<63 months (5.5 years). While the immunisation schedule at age group 3 is the same, children need to have completed the entire schedule by their 5th birthday to be counted as fully immunised. This change has resulted in a decrease in the percentage of children shown as fully immunised at age group 3 when compared to previous years.

For the purpose of these reports only the antigens mentioned above are assessed to determine if a child is fully immunised. There are however other vaccines offered on the National Immunisation Program Schedule.

Please note that every effort is made to ensure that information contained in this document is correct at the time of printing. Occasionally changes to statistics may occur. Prior to using this information advice should be sought from the Immunisation Program at the Department of Health (immunisation@dhs.vic.gov.au).
Appendix C: Glossary of terms ... continued

**Hospital separations**
This refers to a completed episode of care in a hospital. Therefore, by counting separations, one is in fact counting episodes of care. A separation is counted when a phase of treatment or care ends within a patient's hospital stay due to the patient's need for a different type of care, or when a patient is discharged from hospital, leaves against medical advice, dies or goes on leave of absence for more than seven days.

**Episode of care**
The start and completion of a type of care in an acute hospital. One patient may have several episodes of care or only a single episode of care within their one hospital stay. The start and completion of an episode of care are defined, respectively, as the admission and separation of the patient.

**Household**
A household is defined as:

- a group of two or more related or unrelated people who usually reside in the same dwelling, who regard themselves as a household, and who make common provision for food or other essentials for living, or
- a person living in a dwelling who makes provision for their own food and other essentials for living, without combining with any other person.

Under this definition, in a group house where occupants share the dwelling, each occupant who usually supplies their own food should be counted as a separate household.

**ICD-10-AM, International Classification of Diseases**
The ICD-10-AM is the classification system of diseases used in Victorian hospitals. It stands for the International Classification of Diseases, Version Ten, Australian Modification.

**Introduced random error**
Under the Census and Statistics Act it is an offence to release any information collected under the Act that is likely to enable identification of any particular individual or organisation. Introduced random error is used to ensure that no data are released which could risk the identification of individuals in the statistics.

Random adjustment of the data is considered to be the most satisfactory technique for avoiding the release of identifiable Census data. When the technique is applied, all cells are slightly adjusted to prevent any identifiable data being exposed. These adjustments result in small introduced random errors. However the information value of the table as a whole is not impaired.

The totals and subtotals in summary tables are also subjected to small adjustments. These adjustments of totals and subtotals include modifications to preserve the summability within tables. Although each table of this kind is internally consistent, comparisons between tables which contain similar data may show some minor discrepancies. Small variances associated with derived totals can, for the most part, be ignored. However, no reliance should be placed on small cells as they are impacted by random adjustment, respondent and processing errors (ABS 2006, Census Dictionary).

**Key ages and stages visit**
The Maternal and Child Health service provides ten key ages and stages consultations from birth to 3.5 years.

Participation rates in key ages and stages visits are known to exceed 100% in some local government areas. This is due to a number of factors, including children who were born and enrolled late in the previous financial year receiving their Key Age and Stage visits in the following financial year. Another factor is due to mobility where a child may be registered as a caller only for a particular MCH centre. In this instance the check is counted but the child is not enrolled resulting in participation rates of more than 100%.

**Home consultation**
A home consultation is offered to every Victorian family once they are home from hospital with their new baby. The purpose of this visit is to introduce the Maternal and Child Health nurse to the new family, obtain a family health history and answer any queries that parents may have.

**3.5 year key ages and stages visit**
A visit with a maternal and child health nurse by a child aged three-years-six-months to four years. Assessments made after age four are not recorded as a 3.5 years consultation. The purpose of the key ages and stages visit is to reduce preventable premature mortality, impact of disability, incidence of vaccine preventable diseases and incidence of adult diseases which originate in childhood.
Appendix C: Glossary of terms ... continued

**Kindergarten**

**Kindergarten participation rate**
Victoria has a rigorous methodology for calculating the Kindergarten participation rate. The methodology calculates the number of confirmed first year enrolments in a state funded kindergarten (four year olds) as a proportion of the estimated population of four year olds as produced by the Australian Bureau of Statistics (ABS). As there is a lag in the availability of annual ABS population estimates (the population figures released in mid 2008 were for previous year), the number of 3 year olds in the previous year is be used a proxy for the number of four year olds in the current year.

The ABS revises their annual population estimates following the 5 yearly national Census of Population Housing. Following the 2006 Census the ABS revised the population estimates for the period 2002 to 2006 and published a final set of population estimates for this period. In response the Department revised the participation rates based on these final population estimates. When the kindergarten participation has been revised, due to changes in the population estimate, the actual number of children participating has NOT been revised.

The kindergarten participation rate for Aboriginal children is measured as the number of first and second year enrolments in a funded kindergarten for children identified as being Aboriginal as a percentage of the subsequent year's grade prep enrolment who are identified as being Aboriginal. Differences in calculation methods in kindergarten participation rates in the Aboriginal population mean that the Aboriginal kindergarten participation rate cannot be validly compared with general participation rates.

Some degree of caution should be applied when using the participation rates at the Local Government Area (LGA) level. The data relates to location where the service was provided and not where the child lives. Parents may and do use kindergarten services outside their local area and the participation rates may be distorted somewhat.

**Level of highest educational attainment**
Level of highest educational attainment is a new variable for the 2006 Census. It records the highest educational achievement a person has attained. It lists qualifications and other educational attainments regardless of the particular field of study or the type of institution in which the study was undertaken.

**Less than Year 12 or its equivalent**
Includes Years 11 or below, Certificate II, Certificate Level not further defined, Certificate I & II level not further defined and Certificate I, and persons with no educational attainment.

**Non-school qualification**
This variable describes the level of education of the highest completed non-school qualification (for example, bachelor degree, and diploma). For the purposes of these profiles, this variable includes Diploma level, Advanced Diploma level, Bachelor Degree and Postgraduate level.

**Lone Parent**
A lone parent is a person who has no spouse or partner usually present in the household, but who forms a parent-child relationship with at least one child usually resident in the household. The child may be either dependent or non-dependent.

**Low birth weight babies**
Low birth weight is defined as being born weighing less than 2500 grams\(^1\) (2.5 kilograms or 5 pounds and 8 ounces). This includes both premature and full term babies.
Maternal and Child Health Service

The Maternal and Child Health Service (MCH) is a universal primary care service for Victorian families with children from birth to school age. The service is provided in partnership with the Municipal Association of Victoria, local government and the DEECD and aims to promote healthy outcomes for children and their families. The service provides a comprehensive and focused approach for the promotion, prevention, early detection, and intervention of the physical, emotional or social factors affecting young children and their families in contemporary communities. The service also provides intensive support for vulnerable families experiencing significant parenting difficulties.

The Maternal and Child Health Program offers a number of services through its maternal and child health nurses to families with children in the birth to school age range. The chief mechanism for delivery of these services is the program of 'key ages and stages visits'. These are assessments carried out on the child at key developmental ages.

Aboriginal and Torres Strait Islander families can use local services or may choose to use the MCH Service at the Victorian Aboriginal Health Service (VAHS) in Melbourne.

Some degree of caution should be applied when using the MCH participation rates at the Local Government Area (LGA) level. Participation rates in key ages and stages visits may exceed 100% in some local government areas. This may be due to financial year overlap, where the infant record card was recorded in one financial year and the key ages and stages visit occurred in the next financial year; or due to parents accessing MCH services at an LGA outside the local area in which they reside.

Three indicators in these profiles are sourced from the Maternal and Child Health Program:

1. Participation in Maternal and Child Health Service
2. Attendance at Home consultation visits
3. Attendance at 3.5 year key ages and stages visit

See also: Key ages and stages visit.

Median family income

Median family income is the mid-point of the distribution of family income.

See Also: Family Income.

Need for assistance with core activities

The 2006 Census is the first Census to have the variable Core Activity Need for Assistance. The Core Activity Need for Assistance variable has been developed to measure the number of people with a profound or severe disability. The Census of Population and Housing defines the profound or severe disability population as: 'those people needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a long-term health condition (lasting six months or more), a disability (lasting six months or more), or old age'.

Reading Assessment

All students enrolled in government schools have the right to, and should be assessed. This includes:

- all students funded on the Program for Students with Disability.
- all students enrolled in specialised curriculum programs such as Montessori, Reggio Emilia and Steiner.
- all students subsequently ‘deemed as not capable’ at this time.

The reasons for students being deemed not capable were:

- insufficient English
- receiving PSD funding for a disability that affected reading
- insufficient attendance at that school
- referred from Reading Recovery (applicable to Year 1 students only)

The only exception to the ‘all students should be assessed’ rule is where the child is physically not available for assessment (e.g. overseas, away ill for an extended period).
Appendix C: Glossary of terms … continued

Reading Assessment … continued
Students in Prep, Year 1 and Year 2 are assessed against unseen texts. Each student is assessed against different text levels as follows:

• All Prep students were assessed against text Levels 1 and 5
• All Year 1 students were assessed against text Levels 1, 5 and 15
• All Year 2 students were assessed against text Levels 5, 15 and 20.

The assessments were designed to measure the students’ accuracy rate on oral reading of standard level texts. Those meeting the reading assessment benchmark standards were reading unseen texts at the recommended text level with 90%-100% accuracy by the end of the school year.

For the purpose of this report, the text levels used for assessment were:
• Prep students - Level 1 text
• Year 1 students - Level 5 text
• Year 2 students - Levels 15 text

Teenage births
Number of pregnancies in women aged 15 to 19 years, that result in a live birth. This can include births to mothers aged less than 15 years as these births are not reported separately.

Tenure type
Tenure type describes whether a household is purchasing, rents or owns the dwelling in which it was enumerated on census night, or whether the household occupies it under another arrangement. Tenure type is applicable to occupied private dwellings. For the purposes of these profiles, the census output categories have been aggregated into:

• Fully owned or purchasing - fully owned, being purchased or being purchased under a rent/buy scheme;
• Renting – rented or being occupied rent-free;
• Renting from a state housing authority; or
• Other – includes other tenure type, not stated or not applicable (unoccupied private dwellings; non-private dwellings; migratory and off-shore CDs).
Appendix D: Bibliography


11. GINA (Global Initiative for Asthma), 2005 Global strategy for asthma management and prevention.


