

# Early Childhood Community Profile



## City of Warrnambool 2010





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### 2010

This *Early Childhood community profile* was prepared by the Office for Children and Portfolio Coordination, in the Victorian 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 development of young children. They are published to:

- Equip communities with the information required to identify the needs of children and families within their local government area.
- Aid Best Start partnerships with local service development, innovation and program planning to improve outcomes for young children.
- Support local government and regional planning of early childhood services; and
- Assist community service agencies working with vulnerable families and young people.

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



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Principal Analyst and Author: Hiba Molaeb

Authorised by the Department of Education and Early Childhood Development,  
2 Treasury Place, East Melbourne, Victoria, 3002.



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## Introduction

These *Early childhood community profiles* are compiled by the Data, Outcomes and Evaluation Division of the Department of Education and Early Childhood Development (DEECD). These profiles are intended to provide local level information on the health, wellbeing, learning, safety and developmental outcomes of young children.

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, whole of government monitoring system that reports on the safety, health, development, learning and wellbeing of children and young people, aged 0 to 17, 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 on improving outcomes for children.

### What is included?

The 2010 Early childhood community profiles are structured based on the Victorian Child and Adolescent Outcomes Framework (depicted on page 13). The indicators are grouped according to the four dimensions: Child, Families, Community and Society and are ordered by Outcome Areas within each dimension. Each outcome has one or many associated indicators presented.

These profiles have been updated and expanded since the last release in 2007.

Note: For definitions on the terms used throughout these profiles, please refer to the glossary at Appendix F.

### Part A: Child and family demographics

This section contains child and family demographics for the 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.

### Parts B to E: Early Childhood Indicators

This section contains the most recent administrative data and survey 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 these sections span across 24 outcome areas within VCAMS. A total of 41 indicators of child health, development, learning, safety and wellbeing have been presented in these profiles. Five new indicators have been included in this edition:

- Children developmentally vulnerable on the Australian Early Development Index (AEDI)
- Children entering schools with basic skills for life and learning
- Child behaviour on entering school
- Child abuse substantiations
- Leading causes of hospitalisations

Further to these indicators, additional material from the School Entrant Health Questionnaire (SEHQ) has been included that provides further insight and information related to the VCAMS indicator presented. These include:

- Parental Evaluation of Development Status
- Concerns about child's hearing and eyesight
- Children with reported difficulties with speech and language

For more information on the SEHQ, please refer to Appendix D.

### Notes:

- Some data presented have been suppressed due to the small numbers of the population being measured at an LGA level. These data will either be presented as np (not published) or replaced with broader region data in which that LGA is contained.
- Over half of the indicators presented in these profiles are sourced from the Victorian Child Health and Wellbeing Survey (VCHWS). Due to sample size, disaggregated data at the LGA level was not considered reliable. The broader region level data are presented for these indicators. See Appendix B for general information about the VCHWS and Appendix C for VCHWS respondent characteristics.
- The population base used to derive rate based measures have been revised since the last edition of these profiles. ERP to 2006 are based on final Estimated Resident Population (ERP), 2007 ERP are based on revised estimates and 2008 ERP are based on preliminary estimates.
- The data sources for each of the indicators presented are listed in Appendix A.



## Demographics

### A population profile

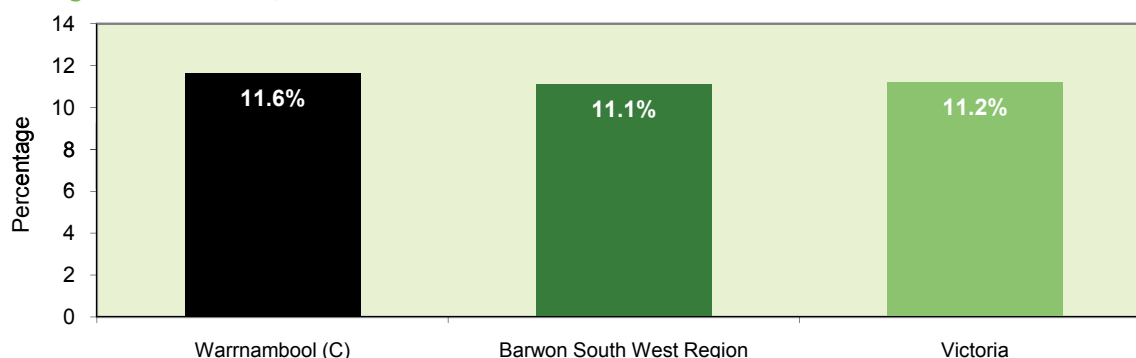
#### Estimated Resident Population of Warrnambool (C) at 30 June 2008.

	Total Population	Children aged 0-8 years	Percentage of children aged 0 to 8 years
Warrnambool (C)	32,712	3,809	11.6
Barwon South West Region	365,696	40,643	11.1
Victoria	5,313,823	595,545	11.2

Source: ABS 2008 preliminary Estimated Resident Population.

- At 30 June 2008, there was an estimated 5,313,823 people residing in Victoria. Of these, 595,545 were aged between 0 to 8 years, representing 11.2 per cent of Victoria's total population.
- Warrnambool (C) was ranked 23 out of 79 LGAs in terms of the percentage of children aged 0 to 8 years in the population. A rank of 1 was assigned to the LGA with the highest percentage of children aged 0 to 8 years.

**Figure 1: Percentage of children aged 0 to 8 years in Warrnambool (C) compared to the Barwon South West region and Victoria, 2008.**



Source: Estimated Resident Population, ABS, 2008 preliminary estimates

- The percentage of children aged 0 to 8 years in Warrnambool (C) (11.6%) is greater than the percentage of children in this age-group in the Barwon South West region (11.1%) and is greater than the percentage of children in this age-group in Victoria (11.2%).

#### Population Projections for Warrnambool (C), 2006 to 2026.

	2006 Population	2011 Population	2016 Population	2021 Population	2026 Population
0 to 8 Years	3,731	3,835	4,152	4,346	4,489
Total Population	31,501	33,321	35,223	37,267	39,229

Source: Victoria in Future Population Projections, DSE

- Based on the Department of Planning and Community Development (DPCD) projections, the total population in Victoria is expected to increase by 30.9 per cent from 5,128,310 in 2006 to reach 6,711,190 by 2026. The population of children aged 0 to 8 years is expected to increase by 23.5 per cent from 572,384 in 2006 to 707,123 by 2026.
- Based on DPCD projections, the population aged 0 to 8 years in Warrnambool (C) will increase by 20.3 per cent from 3,731 in 2006 to 4,489 by 2026.
- Based on DPCD projections, the total population of Warrnambool (C) will increase by 24.5 per cent from 31,501 in 2006 to 39,229 by 2026.





## 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

The ABS standardises the IRSED scores for Census Collection Districts (CDs) so that the average IRSED score across Australia is 1000 and the middle two-thirds of IRSED scores will fall between 900 and 1100.

While a low IRSED score indicates that the LGA is more disadvantaged than another with a higher score, there is no particular score below which an area is classified as disadvantaged and above which it is classified as not disadvantaged.

### The IRSED score for Warrnambool (C) is 993.

- Warrnambool (C) was in the 7th decile out of all LGAs across Australia. The 1st decile contains the 10% of LGAs that are the most disadvantaged across Australia and the 10th decile contains the 10% that are the least disadvantaged.
- Warrnambool (C) was ranked 41 out of 79 LGAs in Victoria. A rank of 1 was assigned to the most disadvantaged LGA in Victoria.

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).

There are 204 SLAs in Victoria which make up the 79 LGAs.

### Statistical Local Areas within Warrnambool (C).

- There are 1 SLAs within the LGA of Warrnambool (C). The distribution of the population of Warrnambool (C) and the IRSED scores across these statistical local areas are presented in the table below.

Statistical Local Area	2008 ERP of population within SLA	Proportion of population within LGA (%)	IRSED score	Rank out of 204 SLAs in Victoria
Warrnambool (C)	32,712	100.0	993	93

Source: Estimated Resident Population, ABS, 2008 preliminary; Census of Population and Housing, ABS, 2006

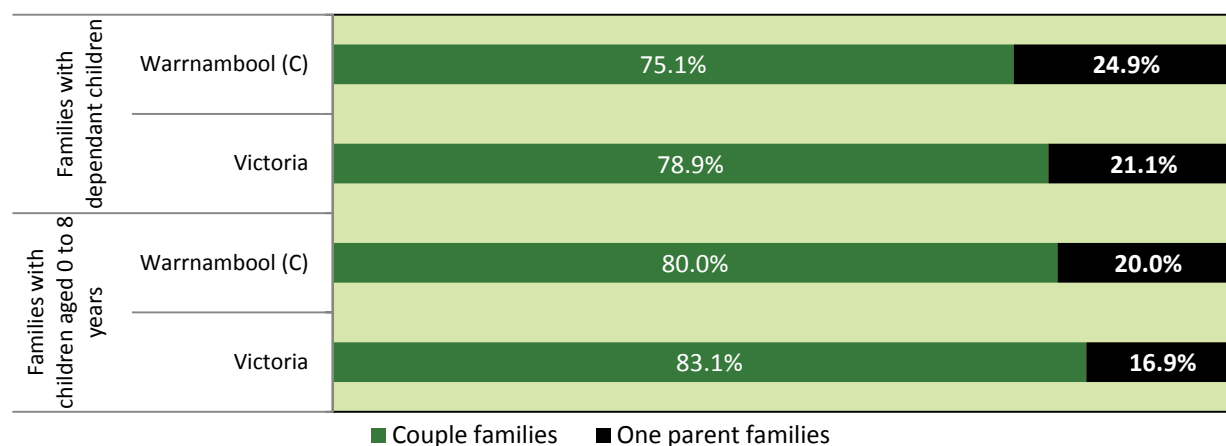
- A rank of 1 was assigned to the most disadvantaged SLA in Victoria.  
*Note: Where "Bal" appears in the above table, it refers to the balance or rest of the LGA not covered by the other SLAs.*

## Demographics

### Family type

- At the 2006 Census, 1,294,388 families were recorded in Victoria. Families with dependent children accounted for just under half (48.2 per cent or 623,647 families) of all families in Victoria.
- There were 336,092 families in Victoria with children aged 0 to 8 years, representing 26.0 per cent of all families counted in Victoria. Of these, 83.1 per cent were couple families and 16.9 per cent were one parent families.
- Based on the 2006 Census, there are 3,797 families with dependent children in Warrnambool (C). Of these families, 2,110, or 55.6 per cent, have children in the 0 to 8 age group.

**Figure 2: Composition of families with children in Warrnambool (C) and Victoria, 2006.**



Source: Census of Population and Housing, ABS, 2006.

- Of the 623,647 families with children across Victoria, 78.9 per cent were couple families and 21.1 per cent were one parent families. For families with young children, 83.1 per cent were couple families and 16.9 per cent were one parent families.
- Of the 3,797 families with dependent children in Warrnambool (C), 75.1 per cent were couple families and 24.9 per cent were one parent families.
- Of the 2,110 families Warrnambool (C) with children aged between 0 and 8 years, 80.0 per cent were couple families and 20.0 per cent were one parent families.

### Families with children aged 0 to 8 years in Warrnambool (C), the Barwon South West region and Victoria, 2006.

	Couple families		One parent families		All families with children aged 0 to 8 years
	Number	Percentage	Number	Percentage	
Warrnambool (C)	1,687	80.0	423	20.0	2,110
Barwon South West Region	18,462	80.8	4,379	19.2	22,841
Victoria	279,376	83.1	56,716	16.9	336,092

Source: Census of Population and Housing, ABS, 2006.

## Demographics

### Family Income

- Couple families across Victoria with children aged 0 to 8 years reported a gross median weekly income of \$1339, while one parent families in Victoria reported a gross median income of \$551 per week.

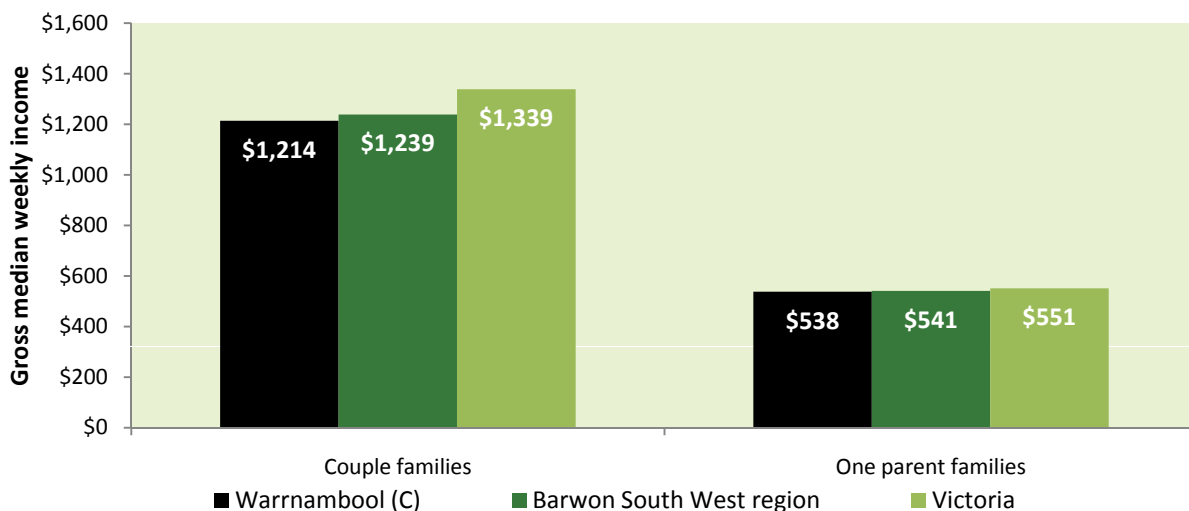
**Median weekly income for families with children aged 0 to 8 years in Warrnambool (C), the Barwon South West region and Victoria, by family type, 2006.**

	Couple families		One parent families	
	No. of families	Median weekly income	No. of families	Median weekly income
Warrnambool (C)	1,687	\$1,214	423	\$538
Barwon South West region	18,462	\$1,239	4,379	\$541
Victoria	279,376	\$1,339	56,716	\$551

Source: Population of Census and Housing, ABS, 2006. Note: only those families that reported income are represented in this table

- Based on the 2006 Census, the gross median weekly income for couple families with children aged 0 to 8 years in Warrnambool (C) is \$1,214. This is less than the gross median weekly income for couple families in Victoria with children in this age group (\$1,339).
- Warrnambool (C) was ranked 36 out of all LGAs on the gross median income for couple families with children aged 0 to 8 years. A rank of 1 was assigned to the LGA with the highest median income.
- Based on the 2006 Census, the gross median weekly income for one parent families with children aged 0 to 8 years in Warrnambool (C) is \$538. This is less than the gross median weekly income for one parent families in Victoria with children in this age group (\$551).
- Warrnambool (C) was ranked 49 out of all LGAs on the gross median income for one parent families with children aged 0 to 8 years. A rank of 1 was assigned to the LGA with the highest gross median income.

**Figure 3: Gross Median weekly income of couple and one parent families with children aged 0 to 8 years in Warrnambool (C), the Barwon South West region and Victoria, 2006.**

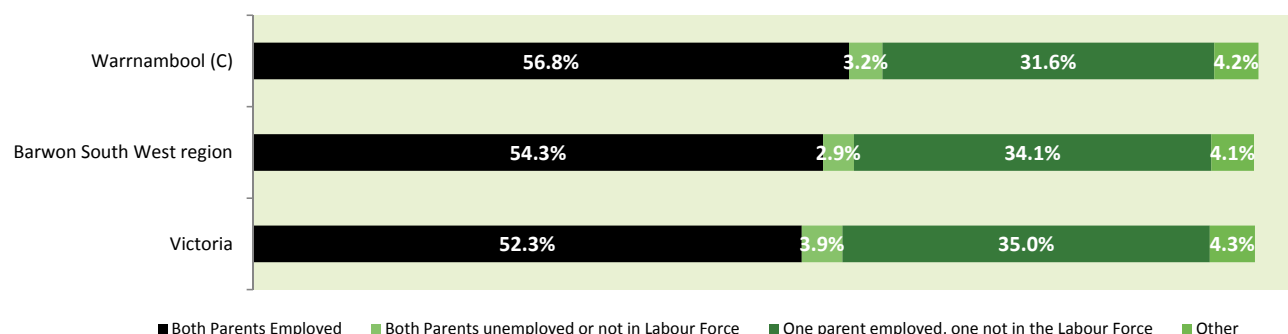


Source: Census of Population and Housing, ABS, 2006. Note: only those families that reported income are represented in this table.

## Demographics

### Family employment

**Figure 4: Employment status of couple families with children aged 0 to 8 years in Warrnambool (C), the Barwon South West region and Victoria, 2006.**



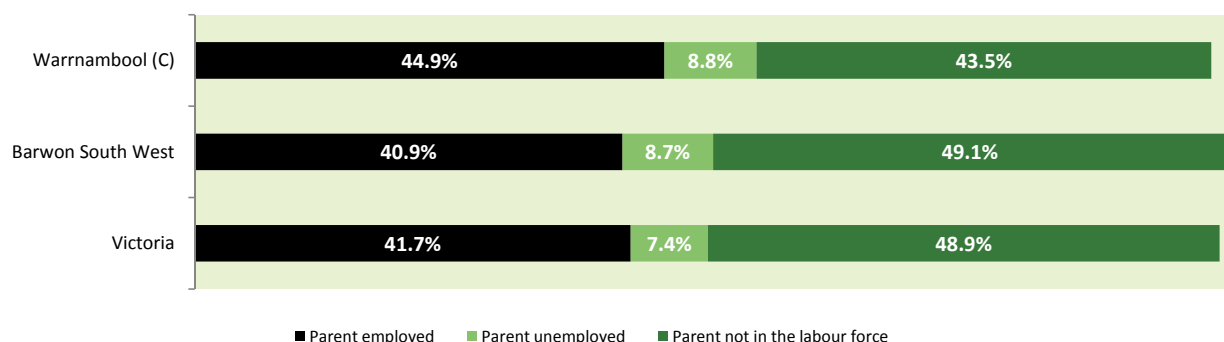
Source: Census of Population and Housing, ABS, 2006.

**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 not all families reported employment status.
3. Other includes: One parent employed, other parent unemployed and One parent unemployed and other not in the labour force.

- Based on the 2006 Census, 56.8 per cent of couple families with children aged 0 to 8 in Warrnambool (C) had both parents employed. This is greater than the percentage of couple families, with children in this age group, with both parents employed in Victoria (52.3 per cent).
- Based on the 2006 Census, 3.2 per cent of couple families with children aged 0 to 8 years in Warrnambool (C) had both parents unemployed or not in the labour force. This is less than the percentage of couple families, with children in this age group, with neither parent in the labour force in Victoria (3.9 per cent).
- Warrnambool (C) was ranked 42 out of 79 LGAs in terms of the percentage of couple families with neither parent in the labour force. A rank of 1 was assigned to the LGA with the highest percentage of couple families with neither parent in the labour force.

**Figure 5: Employment status of one parent families with children aged 0 to 8 years in Warrnambool (C), the Barwon South West region and Victoria, 2006.**



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.

- Based on the 2006 Census, 44.9 per cent of one parent families with children aged 0 to 8 years in Warrnambool (C) had the parent employed. This is greater than the percentage of one parent families, with children in this age group, with the parent employed in Victoria (41.7 per cent).
- Based on the 2006 Census, 8.8 per cent of one parent families with children aged 0 to 8 years in Warrnambool (C) had the parent unemployed. This is greater than the percentage of one parent families, with children in this age group, with the parent unemployed in Victoria (7.4 per cent).
- Warrnambool (C) was ranked 16 out of 70 LGAs in terms of the percentage of one parent families with the parent unemployed. A rank of 1 was assigned to the LGA with the highest percentage of one parent families with the parent unemployed. Ranks were not assigned to LGAs where the number of one parent families in the area with the parent unemployed was less than five.
- Based on the 2006 Census, there were 43.5 per cent of one parent families with children aged 0 to 8 years with the parent not in the labour force in Warrnambool (C). This is similar to the percentage of one parent families, with children in this age group, with the parent not in the labour force in Victoria (48.9 per cent).



## Demographics

### Educational level of families

**Families with children aged 0 to 8 years in Warrnambool (C) and Victoria where the parents highest school qualification was less than Year 12 or equivalent, 2006.**

	Couple families where both parents have not completed Year 12 or its equivalent		One parent families where the parent has not completed Year 12 or its equivalent	
	<i>Number</i>	<i>Per cent</i>	<i>Number</i>	<i>Per cent</i>
Warrnambool (C)	482	28.6	256	60.5
Victoria	59,172	21.2	31,041	54.7

Source: Census of Population and Housing, ABS, 2006. Note: not all families report education information

- The highest school qualification of both parents is less than Year 12 or equivalent in 28.6 per cent of couple families with children aged 0 to 8 years in Warrnambool (C). This is greater than the percentage of couple families with children in this age group in Victoria (21.2 per cent).
- Warrnambool (C) was ranked 40 out of 79 LGAs on the percentage of couple families where both parents have not completed Year 12 or equivalent. A rank of 1 was assigned to the LGA with the highest percentage of families.
- The highest school qualification of the parent is less than Year 12 or equivalent in 60.5 per cent of one parent families with children aged 0 to 8 years in Warrnambool (C). This is greater than the percentage of one parent families with children in this age group in Victoria (54.7 per cent).
- Warrnambool (C) was ranked 37 out of 79 LGAs on the percentage of one parent families where the parent has not completed Year 12 or equivalent. A rank of 1 was assigned to the LGA with the highest percentage of families.

**Families with Children aged 0 to 8 years in Warrnambool (C) and Victoria where the parent(s) has a non-school qualification, 2006.**

	Couple families where both parents have a non-school qualification		One parent families where the parent has a non-school	
	<i>Number</i>	<i>Per cent</i>	<i>Number</i>	<i>Per cent</i>
Warrnambool (C)	238	14.1	72	17.0
Victoria	62,362	22.3	10,104	17.8

Source: Census of Population and Housing, ABS, 2006. Note: not all families report education information

- Both parents have a non-school qualification in 14.1 per cent of couple families with children aged 0 to 8 years in Warrnambool (C). This is less than the percentage of couple families with children in this age group in Victoria (22.3 per cent).
- Warrnambool (C) was ranked 31 out of 79 LGAs on the percentage of couple families where both parents have a non-school qualification. A rank of 1 was assigned to the LGA with the highest percentage of families.
- Parents have a non-school qualification in 17.0 per cent of one parent families with children aged 0 to 8 years in Warrnambool (C). This is less than the percentage of one parent families with children in this age group in Victoria.
- Warrnambool (C) was ranked 32 out of 77 LGAs on the percentage of one parent families where the parent has a non-school qualification. A rank of 1 was assigned to the LGA with the highest percentage of families.



## Demographics

### Aboriginal children and families

#### Aboriginal population of Warrnambool (C), the Barwon South West region and Victoria, 2006.

	Aboriginal population			Total Population		
	Children aged 0 to 8 years	Total (all ages)	Percentage children aged 0 to 8 years	Children aged 0 to 8 years	Total (all ages)	Percentage children aged 0 to 8 years
Warrnambool (C)	84	392	21.4	3,612	30,393	11.9
Barwon South West Region	637	2,773	23.0	38,713	341,410	11.3
Victoria	6,650	30,143	22.1	556,791	4,932,422	11.3

Source: Census of Population and Housing, ABS, 2006

- At the 2006 Census, 4,932,422 persons were enumerated in Victoria. Of these, 30,143 were Aboriginal, representing 0.6 per cent of Victoria's population.
- According to the 2006 Census, there were 392 Aboriginal persons in Warrnambool (C). This represents 1.3 per cent of the total population of Warrnambool (C). This was greater than the percentage of Aboriginal persons in Victoria (0.6 per cent).
- In 2006, 556,791 children aged 0 to 8 years were counted in Victoria at the 2006 Census, representing 11.3 per cent of Victoria's total population. Of these, 6,650 (1.2 per cent) were Aboriginal children.
- In 2006, 21.4 per cent of the Aboriginal population in Warrnambool (C) were aged 0 to 8 years, compared to 11.9 per cent in the total population.
- 76 of the 79 LGAs in Victoria were ranked in terms of the proportion of Aboriginal population aged 0 to 8 years. Warrnambool (C) was ranked 38. A rank of 1 was assigned to the LGA with the highest proportion of its Aboriginal population aged 0 to 8.

#### Aboriginal families with children in Warrnambool (C), the Barwon South West region and Victoria, 2006.

	Families with dependent children			Families with at least one child aged 0 to 8 years		
	Aboriginal families	All families	Percentage Aboriginal	Aboriginal families	All families	Percentage Aboriginal
Warrnambool (C)	113	3,797	3.0	66	2,110	3.1
Barwon South West Region	684	42,514	1.6	425	22,841	1.9
Victoria	7,222	623,647	1.2	4,654	336,092	1.4

Source: Census of Population and Housing, ABS, 2006.

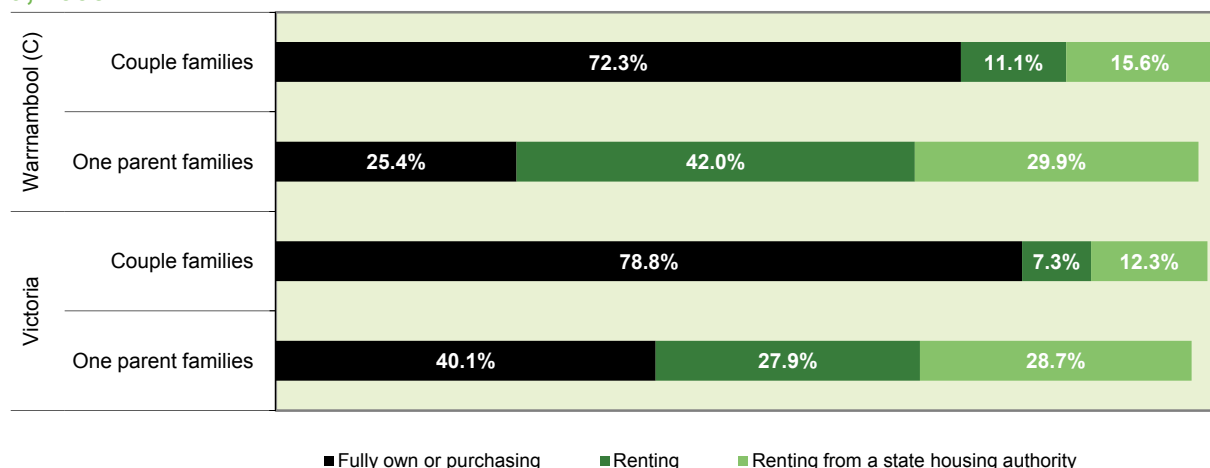
- Of the 3,797 families counted in Warrnambool (C) with dependent children, 113 were Aboriginal families, representing 3.0 per cent of all families with dependent children in Warrnambool (C).
- The percentage of Aboriginal families with dependent children in Warrnambool (C) (3.0 per cent) was greater than that in the Barwon South West Region (1.6 per cent) and greater than that in Victoria (1.2 per cent).
- Of the 3,797 families counted in Warrnambool (C) with dependent children, 55.6 per cent had at least one child aged 0 to 8 years. 3.1 per cent 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 per cent).



## Demographics

### Family tenure

**Figure 6: Tenure type of families with children aged 0 to 8 years in Warrnambool (C) and Victoria, 2006.**



Source: Census of Population and Housing, ABS, 2006

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 not all families reported their tenure status in the Census.

- In Victoria, 78.8 per cent of couple families with at least one child aged 0 to 8 were living in dwellings that were either fully owned or being purchased, 7.3 per cent were renting and 12.3 per cent were renting from a state housing authority.
- Based on the 2006 Census, fewer couple families in Warrnambool (C) with children aged 0 to 8 years were living in dwellings that were either fully owned or being purchased (72.3 per cent), than couple families with children in this age group in Victoria (78.8 per cent).
- 15.6 per cent of couple families with children aged 0 to 8 years in Warrnambool (C) were renting their dwellings from a state housing authority. This is greater than the percentage for couple families in Victoria with children in this age group (12.3 per cent).
- Warrnambool (C) was ranked 12 out of 76 LGAs in terms of the percentage of couple families who are in state housing. A rank of 1 was assigned to the LGA with the highest percentage of couple families who are in state housing. Ranks were not assigned to LGAs with less than 5 families.
- In Victoria, 40.1 per cent of 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, 27.9 per cent were renting and 28.7 per cent were renting from a state housing authority.
- Based on the 2006 Census, fewer one parent families in Warrnambool (C) with children aged 0 to 8, were living in dwellings that were either fully owned or being purchased (25.4 per cent) than one parent families with children in this age group in Victoria (40.1 per cent).
- 29.9 per cent of one parent families with children aged 0 to 8 years in Warrnambool (C) were renting their dwellings from a state housing authority. This is greater than the percentage for all one parent families in Victoria with children in this age group who were renting their dwelling from a state housing authority (28.7 per cent).
- 76 of the 79 LGAs in Victoria were ranked in terms of the percentage of one parent families who are in state housing. Warrnambool (C) was ranked 22 out of 76 LGAs. A rank of 1 was assigned to the LGA with the highest percentage of one parent families with children aged 0 to 8 years who are in state housing. LGAs with less than 5 one parent families were not assigned a rank.





## Demographics

### Cultural and linguistic diversity - language other than English spoken at home

Language spoken at home in couple and one parent families with children aged 0 to 8 in Warrnambool (C), Rural Victoria and Victoria, 2006.

	Couple families				One parent families	
	Both parents speak language other than English at home		Mother speaks language other than English at home		Parent speaks language other than English at home	
	Number	Percentage	Number	Percentage	Number	Percentage
Warrnambool (C)	30	1.8	54	3.2	10	2.4
Rural Victoria	2,547	3.6	3,744	5.2	588	3.2
Victoria	59,475	21.3	69,207	24.8	11,302	19.9

Source: Census of Population and Housing, ABS, 2006. Note: not all families report on language spoken

- According to the 2006 Census, 59,475 couple families with children aged 0 to 8 years in Victoria reported that both parents speak a language other than English at home, representing 21.3 per cent of all couple families with children in this age group. Almost a quarter (24.8 per cent) of couple families with young children in Victoria reported that the mother speaks a language other than English at home.
- Both parents speak a language other than English at home in 1.8 per cent of couple families with children aged 0 to 8 years in Warrnambool (C). This is less than the percentage of couple families, with children in this age group, where both parents speak a language other than English in Rural Victoria (3.6 per cent) and less than the percentage in Victoria (21.3 per cent).
- 69 of the 79 LGAs in Victoria were ranked on the percentage of couple families where both parents spoke a language other than English at home. Warrnambool (C) was ranked 52 out of 69 LGAs. A rank of 1 was assigned to the LGA with the highest percentage of couple families where both parents spoke a language other than English.
- The mother speaks a language other than English at home in 3.2 per cent of couple families with children aged 0 to 8 years in Warrnambool (C). This is less than the percentage of couple families, with children in this age group, where the mother speaks a language other than English in Rural Victoria (5.2 per cent) and less than the percentage in Victoria (24.8 per cent).
- Based on the 2006 Census, 11,302 one parent families with children aged 0 to 8 years in Victoria reported that the parent speaks a language other than English at home, representing 19.9 per cent of all one parent families in Victoria with children in this age group.
- In 2.4 per cent of one parent families with children aged 0 to 8 years in Warrnambool (C), the parent speaks a language other than English at home. This is less than the percentage of one parent families, with children in this age group, with a parent who spoke a language other than English in Rural Victoria (3.2 per cent) and less than the percentage in Victoria (19.9 per cent).
- 56 of the 79 LGAs in Victoria were ranked on the percentage of one parent families where the parent spoke a language other than English. Warrnambool (C) was ranked 45 out of 56 LGAs. A rank of 1 was assigned to the LGA with the highest percentage of one parent families where the parent spoke a language other than English.

Note that ranks are not out of all 79 LGAs, as LGAs with less than five couple families or one parent families speaking a language other than English at home were not assigned ranks.





## Demographics

### Cultural and linguistic diversity - English speaking proficiency

English proficiency of couple and one parent families with children aged 0 to 8 years in Warrnambool (C), Rural Victoria and Victoria, 2006.

	Couple families				One parent families	
	Both parents speak other language and speak English not well or not at all		Mother speaks other language and speak English not well or not at all		Parent speaks other language and speaks English not well or not at all	
	Number	Percentage	Number	Percentage	Number	Percentage
Warrnambool (C)	np	np	7	0.4	np	np
Rural Victoria	179	0.3	426	0.6	63	0.3
Victoria	4,491	1.6	9,939	3.6	2,622	4.6

Source: Census of Population and Housing, ABS, 2006. Note: not all families report on English proficiency

- In Victoria, 4,491 (1.6 per cent) couple families with children aged 0 to 8 years reported that both parents speak a language other than English and speak English not well or not at all. A further 3.6 per cent of couple families in this category reported that the mother speaks another language and English not well or not at all.
- There were less than 5 couple families with children aged 0 to 8 years in Warrnambool (C) where both parents speak another language and speak English not well or not at all and a percentage was not calculated.
- The mother speaks another language and speaks English not well or not at all in 0.4 per cent of couple families with children aged 0 to 8 years in Warrnambool (C). This is similar to the percentage of couple families with children in this age group where the mother speaks another language and speaks English not well or not at all in Rural Victoria (0.6 per cent) and less than the percentage in Victoria (3.6 per cent).
- The percentage of couple families in Warrnambool (C) where both parents speak another language and speaks English not well or not at all could not be accurately calculated due to the small number of families and a rank was not assigned.
- In Victoria, 2,622 one parent families with children aged 0 to 8 years reported that the parent speak a language other than English and speak English not well or not at all, representing 4.6 per cent of all one parent families with children in this age group.
- There are less than 5 one parent families with children aged 0 to 8 years reported that the parent speaks English not well or not at all in Warrnambool (C) and a percentage was not calculated.
- The percentage of one parent families in Warrnambool (C) where the parent speaks English not well or not at all could not be accurately calculated due to the small number of families and a rank was not assigned.



## 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.

### Children aged 0 to 8 years in Warrnambool (C), the Barwon South West region and Victoria, with a need for assistance with core activities, 2006.

	All children aged 0 to 8 years	Children aged 0 to 8 years who have need for assistance	Percentage of children aged 0 to 8 years who have need for assistance
Warrnambool (C)	3,574	49	1.4
Barwon South West Region	38,509	613	1.6
Victoria	554,968	7,770	1.4

Source: Census of Population and Housing, ABS, 2006

- According to the 2006 Census, there were 7,770 children aged 0 to 8 years in Victoria with a need for assistance with core activities. This represents 1.4 per cent of all children in Victoria aged 0 to 8 years.
- There were 49 children aged 0 to 8 years in Warrnambool (C) with a need for assistance with core activities, representing 1.4 per cent of all children in this age group in Warrnambool (C). This was less than the percentage of children aged 0 to 8 years in the Barwon South West region with a need for assistance (1.6 per cent) and less than the percentage of children aged 0 to 8 years in Victoria with a need for assistance (1.4 per cent).
- Warrnambool (C) was ranked 35 out of 77 LGAs on the percentage of children aged 0 to 8 who had a need for assistance. A rank of 1 was assigned to the LGA with the highest percentage of children aged 0 to 8 years who had a need for assistance. Ranks were not assigned to LGAs with less than 5 children with a need for assistance.

**Figure 7: Percentage of children aged 0 to 8 years with a need for assistance with core activities in the Metropolitan and Rural regions of Victoria.**



- The Gippsland region had the highest percentage of children aged 0 to 8 with a need for assistance with core activities (1.80 per cent). The Northern Metropolitan region had the lowest percentage of children aged 0 to 8 with a need for assistance with core activities (1.27 per cent).



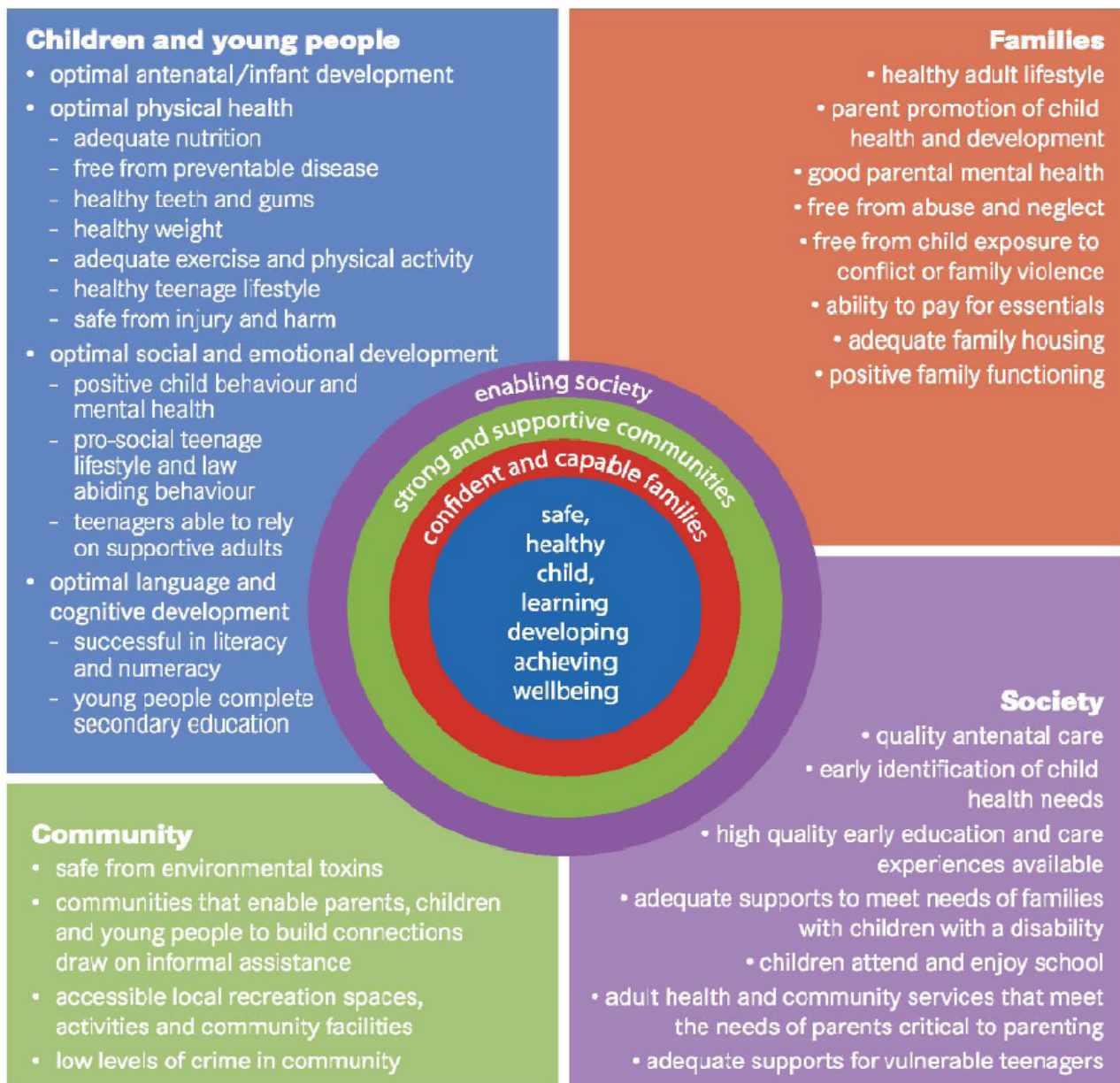
## Victorian Child and Adolescent Outcomes Framework

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 17 years and reflect an ecological model that places the child at the centre of family, community and society.

For further information on the Outcomes Framework, visit <http://www.education.vic.gov.au/about/directions/children/vcams/default.htm>



**Please note:**

Each of the indicators presented in the following pages of this profile contain information on why the indicators have been selected and what is measured. Data sources for the indicators presented in this section can be found in Appendix A. For definitions of terms used throughout these profiles, please refer to Appendix F.



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal antenatal and infant development

#### Indicator: Proportion of infants exposed to tobacco while in utero

##### What is measured?

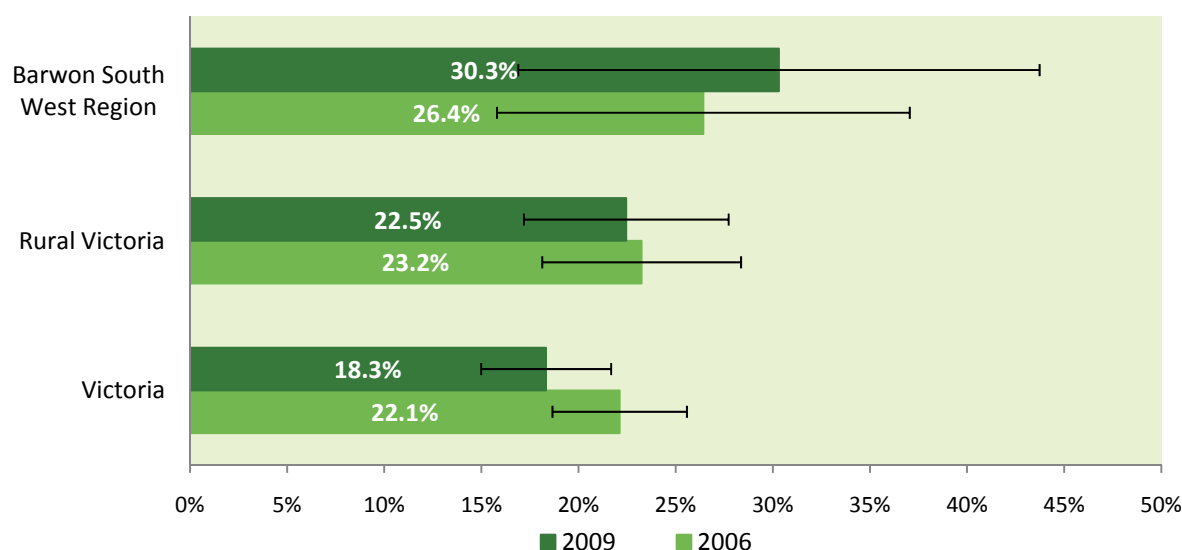
The proportion of mothers (with infants aged under 2 years) who reported smoking cigarettes at any time during pregnancy.

##### Why is it important?

Smoking during pregnancy can increase the risk of a range of poor birth outcomes and infant health problems including low birth weight, intrauterine growth restriction, prematurity, birth defects, perinatal mortality and sudden infant death syndrome.<sup>1,2,3</sup>

It is estimated that just over one in five Victorian infants have mothers who smoked cigarettes at some point during pregnancy. Mothers are most likely to smoke in the early stages of pregnancy, before they are aware of the pregnancy.<sup>4</sup>

**Figure 8: Proportion of children exposed to tobacco while in utero in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In 2009, 18.3% of mothers in Victoria reported that they had smoked cigarettes at some point during pregnancy. This proportion is lower than, but not significantly different to that reported in 2006 (22.1%).
- According to the 2009 Victorian Child Health and Wellbeing Survey (VCHWS) results, 30.3% of mothers in the Barwon South West region reported that their child was exposed to tobacco at some point in utero. Although this proportion has increased from that reported in 2006 (26.4%), this difference is not statistically significant.
- The proportion of mothers in the Barwon South West region who reported in 2009 that they had smoked cigarettes at some point during pregnancy was greater than the proportion reported in Rural Victoria (22.5%) and greater than the proportion reported in Victoria (18.3%). However, these differences were not statistically significant.



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal antenatal and infant development

#### Indicator: Proportion of infants exposed to alcohol while in utero

##### What is measured?

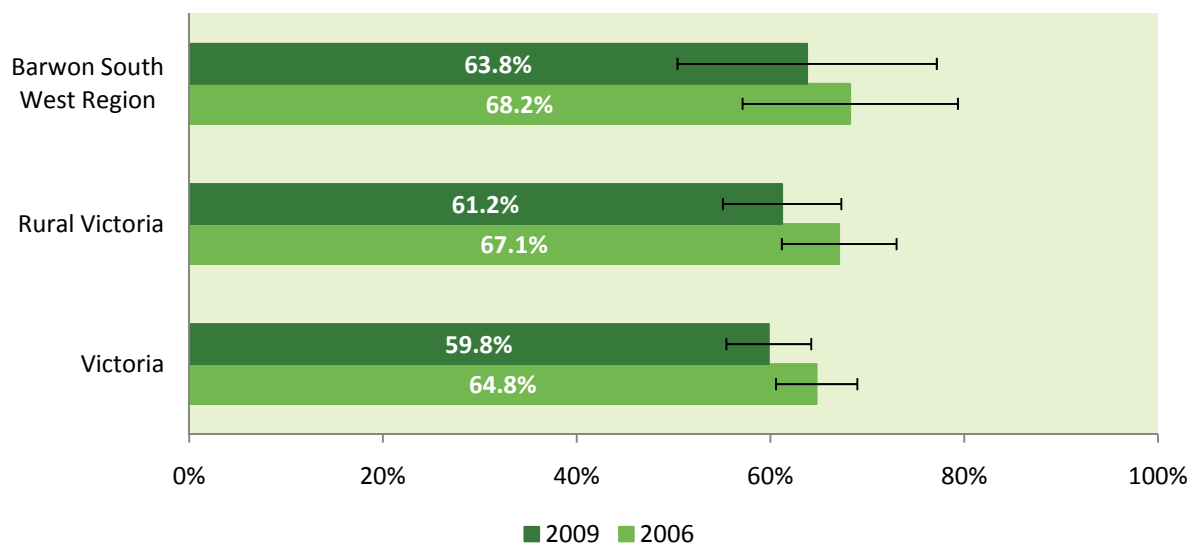
The proportion of mothers (with infants aged under 2 years) who reported drinking any amount of alcohol at any time during pregnancy.

##### Why is it important?

It is widely accepted that heavy drinking during pregnancy can be harmful to the development of the fetus. Exposure to alcohol in pregnancy is associated with poorer birth outcomes such as low birth weight, premature births, increased risk of cognitive defects and congenital abnormality<sup>5,6</sup>. During 2007, the National Health and Medical Research Council alcohol guidelines were revised to advise that avoiding alcohol is the safest option for women who are planning to conceive, who are pregnant or who are breastfeeding.<sup>4</sup>

Recent data suggests that most Victorian women will drink alcohol at sometime during their pregnancy - although most will drink in moderation. As with smoking, Victorian women are most likely to drink early on in their pregnancy, before they realise they are pregnant.<sup>4</sup>

**Figure 9: Proportion of children exposed to alcohol while in utero in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In 2009, 59.8% of mothers with an infant under 2 years in Victoria reported that they drank alcohol at some point during pregnancy. This proportion was lower, but not significantly different to that reported in 2006 (64.8%).
- According to the 2009 Victorian Child Health and Wellbeing Survey (VCHWS) results, 63.8% of mothers with infants aged under 2 years in the Barwon South West region reported that their child was exposed to alcohol in utero. Although this proportion has decreased from that reported in 2006 (68.2%), this difference is not statistically significant.
- The proportion of mothers with an infant aged under 2 years in the Barwon South West region who reported in 2009 that they drank alcohol at some point during pregnancy was greater than, but not significantly different to the proportion reported in Rural Victoria (61.2%) and greater than, but not significantly different to the proportion reported in Victoria (59.8%).





## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Adequate Nutrition

#### Indicator: Proportion of infants that are fully breastfed

##### What is measured?

This indicator measures the percentage of children fully breastfed at 3 months and 6 months. A fully breastfed child is one who does not regularly (at least once a day) receive milk other than breast milk, but may receive some solids.

##### Why is it important?

Breastfeeding has been shown to be protective against a range of childhood conditions including asthma, gastrointestinal disorders, sudden infant death syndrome, and overall infant mortality. Some research has also indicated that breastfeeding can improve infant mother attachment where this is at risk because of maternal mental health problems or other issues impacting on parenting capacity.<sup>7</sup>

#### Children fully breastfed at 3 months and 6 months in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009.

2004 - 2005					
	Infant Record Cards	At 3 Months		At 6 Months	
		Number	Per cent	Number	Per cent
Warrnambool (C)	375	273	72.8	194	51.7
Barwon South West region	4,189	2,259	53.9	1,764	42.1
Victoria	64,621	31,329	48.5	23,899	37.0
2005 - 2006					
	Infant Record Cards	At 3 Months		At 6 Months	
		Number	Per cent	Number	Per cent
Warrnambool (C)	353	258	73.1	158	44.8
Barwon South West region	4,272	2,303	53.9	1,704	39.9
Victoria	64,816	33,590	51.8	25,064	38.7
2006 - 2007					
	Infant Record Cards	At 3 Months		At 6 Months	
		Number	Per cent	Number	Per cent
Warrnambool (C)	370	236	63.8	143	38.6
Barwon South West region	4,226	2,293	54.3	1,694	40.1
Victoria	67,682	35,037	51.8	25,692	38.0
2007 - 2008					
	Infant Record Cards	At 3 Months		At 6 Months	
		Number	Per cent	Number	Per cent
Warrnambool (C)	463	239	51.6	172	37.1
Barwon South West region	4,678	2,453	52.4	1,859	39.7
Victoria	70,835	37,108	52.4	27,557	38.9



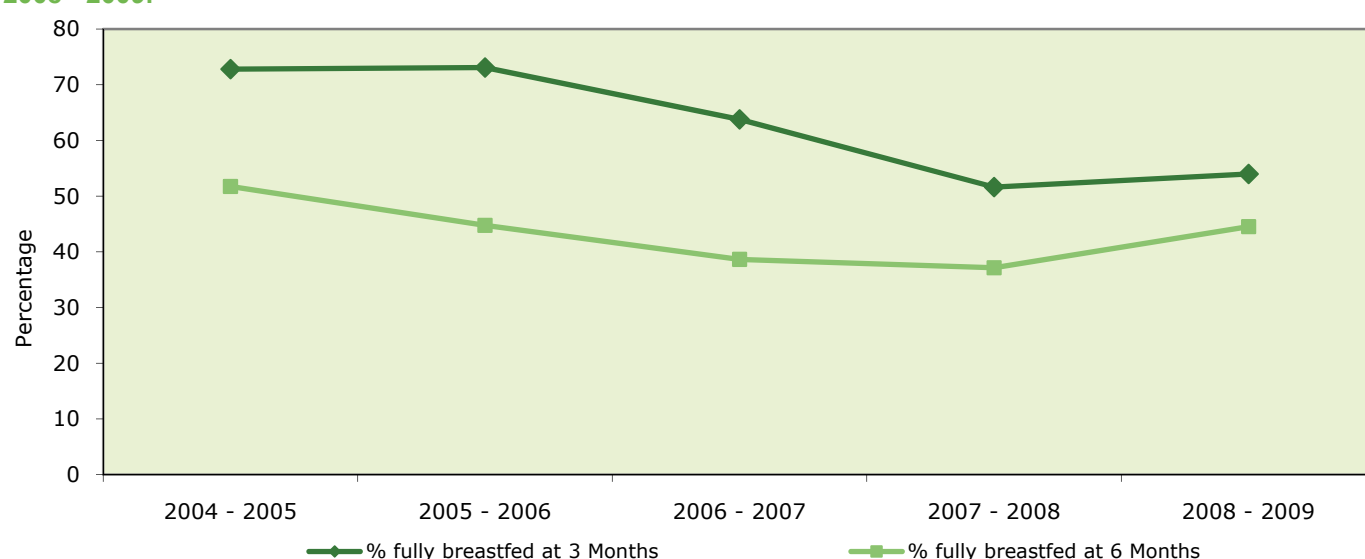
### Children fully breastfed at 3 months and 6 months in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009 ... continued

	Infant Record Cards	2008 - 2009			
		At 3 Months		At 6 Months	
		Number	Per cent	Number	Per cent
Warrnambool (C)	465	251	54.0	207	44.5
Barwon South West region	4,718	2,502	53.0	1,888	40.0
Victoria	72,182	37,102	51.4	27,325	37.9

#### Based on 2008 - 2009 data:

- Of the 72,182 record cards for infants aged under one in Victoria, 51.4 per cent were recorded as being fully breastfed at 3 months. This percentage dropped to 37.9 per cent at 6 months.
- In 2008 - 2009, 54.0 per cent of children were fully breastfed at 3 months in Warrnambool (C). This was greater than the percentage fully breastfed at 3 months in the Barwon South West region (53.0 per cent) and greater than the percentage fully breastfed at 3 months in Victoria (51.4 per cent).
- Warrnambool (C) was ranked 41 out of 79 LGAs on the percentage of infants fully breastfed at 3 months. A rank of 1 was assigned to the LGA with the highest percentage of infants fully breastfed at 3 months.
- In 2008 - 2009, 44.5 per cent of children were fully breastfed at 6 months in Warrnambool (C). This was greater than the percentage fully breastfed at 6 months in the Barwon South West region (40.0 per cent) and greater than the percentage fully breastfed at 6 months in Victoria (37.9 per cent).
- Warrnambool (C) was ranked 25 out of 79 LGAs on the percentage of infants fully breastfed at 6 months. A rank of 1 was assigned to the LGA with the highest percentage of infants fully breastfed at 6 months.

**Figure 10: Percentage of children fully breastfed at 3 months and 6 months in Warrnambool (C), 2004 - 2005 to 2008 - 2009.**



- The percentage of infants breastfed decreases as the child ages, with more infants being fully breastfed at 3 months of age compared to 6 months of age.



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Adequate Nutrition

#### Related information: Introduction of infant formula, juice and solid foods

VCHWS respondents with infants aged under two years were asked to recall at what stage their infant was first introduced to infant formula, juice and solids. Results are presented in the table below.

#### Age at which infant formula, juice and solid foods were introduced into diet of a child in the Barwon South West region, 2006 and 2009.

Barwon South West region	Infant formula		Juice		Solid Foods	
	2006	2009	2006	2009	2006	2009
Up to one week	21.7%	34.9%	-	-	-	-
More than one week to less than three months	19.6% *	16.7% *	-	-	-	-
Three months to less than six months	14.8% *	20.1% *	4.4% **	2.1% **	47.4%	38.9%
Six months or more	19.4%	12.8% *	27.6%	31.0%	32.9%	37.6%
Not yet introduced	23.7%	15.5% *	68.0%	64.7%	19.6% *	23.4% *

Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

\* Estimate has a relative standard error of between 25-50% and should be used with caution.

\*\* Estimate has a relative standard error of greater than 50% and is not considered reliable for general use.

- Based on the 2009 VCHWS results, 34.9% of parents of infants aged under 2 years in the Barwon South West region reported that they introduced infant formula when their child was aged 'Up to one week', 16.7% introduced infant formula when their child was 'More than one week to less than three months' old and 12.8% introduced infant formula when their child was aged 'Six months or more'.
- In 2009, 64.7% of respondents with infants aged under two years in the Barwon South West region reported that they had not yet introduced juice into their child's diet, while 31.0% reported that they had introduced juice when their child was at least six months old.
- Based on the 2009 VCHWS results, the majority of respondents with infants aged under two years in Victoria reported that they had introduced solid foods when their child was aged three months or older. In the Barwon South West region, 38.9% of parents with infants aged under 2 years introduced solid foods when their child was aged between three and six months and 37.6% introduced solid foods when their child was at least six months old.





## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Adequate Nutrition

#### Indicator: Proportion of children who eat the minimum recommended serves of fruit and vegetables every day

##### What is measured?

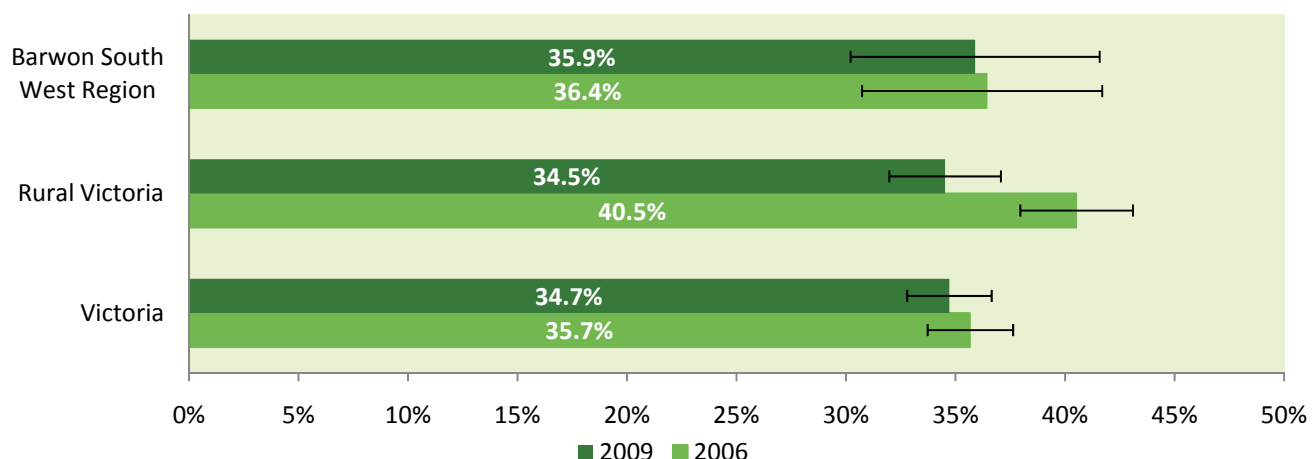
The proportion of children aged four to 12 years who are reported to eat at least the minimum recommended serves of fruit and vegetables each day.<sup>8</sup>

##### Why is it important?

In Australia, as in many Western countries, people often struggle to meet the recommended daily intake of fruits and vegetables. In Victoria, most young children eat their daily serve of fruit, but only a minority of children eat the minimum recommended daily serves of vegetables.<sup>9</sup>

Fruit and vegetable consumption is strongly linked to the prevention of chronic diseases including coronary heart disease, hypertension, stroke and Type 2 diabetes.<sup>8</sup>

**Figure 11: Proportion of children aged four to 12 years who are reported to eat at least the minimum recommended serves of fruit and vegetables each day in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In Victoria, 34.7% of children aged four to 12 were reported to eat the minimum recommended serves of both fruit and vegetables each day in 2009. This proportion was not significantly different to that reported in 2006 (35.7%).
- Based on the 2009 VCHWS survey results, the proportion of children aged four to 12 years in Victoria who reported to eat the minimum daily recommended serves of fruit, but not of vegetables (54.6%) was significantly higher than the proportion of children in this age-group who were reported to eat the recommended daily serves of vegetables, but not fruit (3.0%). This is also evident in the 2006 results and across the state.
- In the Barwon South West region, 35.9% of children aged four to 12 were reported to eat the minimum recommended serves of both fruit and vegetables each day in 2009. This was similar to the proportion reported in 2006 (36.4%).
- Based on the 2009 VCHWS survey results, the proportion of children aged four to 12 reported to eat the minimum recommended serves of both fruit and vegetables each day in the Barwon South West region (35.9%) was higher than the proportion reported in Rural Victoria (34.5%), but this difference was not significant.



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Adequate Nutrition

#### Related Information

The dietary guidelines for children recommend children eat a wide variety of nutritious foods, whilst moderating sugar and fat intake and limiting the intake of saturated fat or foods that are high in salt.<sup>8</sup>

The frequencies with which children in the Barwon South West region were reported to eat takeaway food and fries are summarised in the tables below. This information is sourced from the 2006 and 2009 Victorian Child Health and Wellbeing Survey (VCHWS).

#### The frequency of takeaway consumption among children aged one to 12 years in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.

	Barwon South West region		Rural Victoria		Victoria	
	2006	2009	2006	2009	2006	2009
Once or twice a month	38.6%	41.9%	41.1%	42.3%	38.4%	40.0%
Three to less than five times a month	38.1%	34.9%	34.8%	32.7%	35.2%	31.7%
Five times a month or more	7.2%	5.1%	5.7%	6.2%	7.6%	6.9%
Rarely	9.8%	11.7%	12.7%	13.2%	11.6%	13.2%
Never	6.3%	6.4%	5.7%	5.5%	7.1%	8.1%
Don't know	-	-	0.0% **	0.0% **	0.0% **	0.0% **

Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

\* Estimate has a relative standard error of between 25-50% and should be used with caution.

\*\* Estimate has a relative standard error of greater than 50% and is not considered reliable for general use.

- Based on the 2009 VCHWS survey results, 41.9% of children aged one to 12 years in the Barwon South West region were reported to have consumed takeaway food once or twice a month, while 18.1% of children aged one to twelve years were reported to 'rarely' or 'never' consume takeaway.
- The proportion of children aged one to twelve in the Barwon South West region who were reported by their parents to consume takeaway three or more times a month in 2009 was 40.0%. This was similar to the proportion reported in Rural Victoria in 2009 (38.9%) and similar to the proportion reported in Victoria in 2009 (38.6%).

#### The frequency of fries consumption among children aged one to 12 years in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.

	Barwon South West region		Rural Victoria		Victoria	
	2006	2009	2006	2009	2006	2009
Less than once a week	17.6%	16.8%	18.7%	21.1%	18.9%	24.4%
One to less than four times a week	66.0%	66.9%	63.7%	62.6%	62.5%	58.4%
Four to less than six times a week	3.0%	3.4% *	4.0%	2.5%	4.1%	3.0%
Six times a week or more	7.0%	6.5%	7.4%	6.2%	6.8%	5.4%
Rarely or never	6.4%	6.4%	6.3%	7.5%	7.7%	8.8%

Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

\* Estimate has a relative standard error of between 25-50% and should be used with caution

\*\* Estimate has a relative standard error of greater than 50% and is not considered reliable.

- In 2009, the majority of children aged one to 12 years in the Barwon South West region (66.9%) were reported to consume fries 'one to less than four times a week'. While 6.4% of children were reported to 'rarely' or 'never' consume fries, 9.9% were reported to consume fries four times or more a week.
- The proportion of children reporting to consume fries less than once a week in the Barwon South West region in the 2009 VCHWS survey (16.8%) was less than, but not significantly different to that reported across Rural Victoria (21.1%) and less than, but not significantly different to that reported across Victoria (24.4%).



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### 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 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, rotavirus, haemophilus influenza type B (Hib), hepatitis B, varicella, meningococcal C and pneumococcal disease.<sup>10</sup>

##### Why is it important?

Immunisation against infectious disease has been shown to reduce deaths and illness from a range of childhood diseases.<sup>11</sup> Immunisation also offers protection for individual children and reduces the rate at which these diseases circulate within the broader community.<sup>4</sup> 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.<sup>12</sup>

#### Children fully immunised at the 12-<15 month age cohort, 24-<27 month age cohort and the 72-<75 month age cohort (60-<63 month age cohort from January 2008 (a)) in Warrnambool (C), from 2004 - 2005 to 2008 - 2009.

##### 2004 - 2005

	12-15 months			24-27 months			72-75 months		
	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%
Warrnambool (C)	410	385	93.9	390	374	95.9	439	401	91.3
Barwon South West region	4,117	3,800	92.3	4,232	4,040	95.5	4,607	4,067	88.3
Victoria	62,619	57,230	91.4	61,908	57,381	92.7	64,196	55,105	85.8

##### 2005 - 2006

	12-15 months			24-27 months			72-75 months		
	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%
Warrnambool (C)	377	344	91.2	412	398	96.6	418	386	92.3
Barwon South West region	4,157	3,851	92.6	4,225	3,981	94.2	4,505	3,967	88.1
Victoria	61,858	56,621	91.5	63,438	59,023	93.0	64,108	55,517	86.6

##### 2006 - 2007

	12-15 months			24-27 months			72-75 months		
	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%
Warrnambool (C)	384	365	95.1	393	369	93.9	447	419	93.7
Barwon South West region	4,258	3,950	92.8	4,266	4,059	95.1	4,389	4,007	91.3
Victoria	65,515	59,959	91.5	62,625	58,615	93.6	63,983	57,679	90.1



Children fully immunised at the 12-<15 month age cohort, 24-<27 month age cohort and the 72-<75 month age cohort (60-<63 month age cohort from January 2008 (a)) in Warrnambool (C) ... continued.

#### 2007 - 2008

	12-15 months			24-27 months			72-75 months, 60-<63 months from Jan 08 (a)		
	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%
Warrnambool (C)	442	414	93.7	388	371	95.6	394	357	90.6
Barwon South West region	4,448	4,107	92.3	4,304	4,089	95.0	4,365	3,892	89.2
Victoria	69,226	63,592	91.9	66,324	62,146	93.7	63,450	55,506	87.5

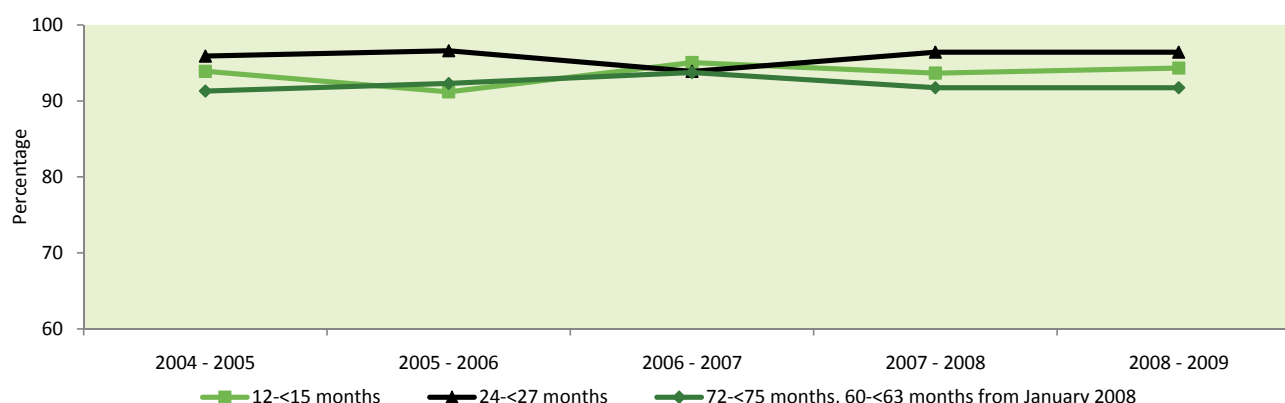
#### 2008 - 2009

	12-15 months			24-27 months			60-<63 months		
	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%	No. of children	Fully Immunised Number	%
Warrnambool (C)	423	399	94.3	447	431	96.4	436	400	91.7
Barwon South West region	4,577	4,202	91.8	4,539	4,306	94.9	4,406	3,717	84.4
Victoria	70,569	64,850	91.9	69,989	65,560	93.7	65,477	55,078	84.1

Notes: (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 2008 - 2009, the percentage of children fully immunised at 12-<15 months in Warrnambool (C) (94.3 per cent) was greater than the percentage fully immunised in the Barwon South West region and greater than the percentage fully immunised across Victoria (91.9 per cent).
- Warrnambool (C) was ranked 15 out of 79 LGAs on the percentage of children fully immunised at 12-<15 months in 2008 - 2009. A rank of 1 was assigned to the LGA with the highest percentage of children in this age group who were fully immunised.
- In 2008 - 2009, the percentage of children fully immunised at 24-<27 months in Warrnambool (C) (96.4 per cent) was greater than the percentage fully immunised in the Barwon South West region and greater than the percentage fully immunised across Victoria (93.7 per cent).
- Warrnambool (C) was ranked 15 out of 79 LGAs on the percentage of children fully immunised at 24-<27 months in 2008 - 2009. A rank of 1 was assigned to the LGA with the highest percentage of children in this age group who were fully immunised.
- In 2008 - 2009, the percentage of children fully immunised at 60-<63 months in Warrnambool (C) (91.7 per cent) was greater than the percentage fully immunised in the Barwon South West region and greater than the percentage fully immunised across Victoria (84.1 per cent).
- Warrnambool (C) was ranked 2 out of 79 LGAs on the percentage of children fully immunised at 60-<63 months in 2008 - 2009. A rank of 1 was assigned to the LGA with the highest percentage of children in this agegroup who were fully immunised.

**Figure 12: Percentage of children fully immunised at 12-<15 months, 24-<27 months and 72-<75 months (60-<63 months from January 2008) in Warrnambool (C), financial years 2004 - 2005 to 2008 - 2009.**



Note: The Y-Axis on this chart does not start at zero.



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal Social and Emotional development

#### Indicator: Proportion of children who are developmentally vulnerable

##### What is measured?

Number of children who are developmentally vulnerable as they enter school. The data are compiled from the Australian Early Development Index (AEDI), a population measure of children's development as they enter school.

The AEDI contains over 100 questions about the development of the child across five developmental domains: Communication skills and general knowledge; Language and cognitive skills; Physical health and wellbeing; Emotional maturity and Social competence. For more information about the AEDI and the five domains, see Appendix E.

##### Why is it important?

Science tells us that the quality of a child's earliest environments and the availability of appropriate experiences at the right stages of development are crucial in determining the brain's architecture. Creating quality environments means that strong communities are good for children. Supporting children and families in the early years greatly increases children's chances of finding successful pathways that lead to good health and educational outcomes.<sup>13</sup>

#### Australian Early Development Index Summary sheet for Victoria

Victoria	
Number of children involved in the data collection	61,187
Per cent of estimated equivalent population	94.2
Number of teachers involved in completing checklists	3,783
Number of schools where checklists were completed	1,765
Percentage of children developmentally vulnerable on the following domains	
Physical health and wellbeing	7.7
Social competence	8.4
Emotional maturity	8.3
Language and cognitive skills (school-based)	6.1
Communication skills and general knowledge	8.3
Percentage of children developmentally vulnerable on one or more domains	
All children	20.2
Aboriginal children	42.5
Children in the most socio-economic disadvantaged communities	31.6
Children proficient in English and speak another language at home	19.6
Children not proficient in English and speak a language other than English	93.5
Percentage of children developmentally vulnerable on two or more domains	
All children	10.0
Aboriginal children	26.5
Children in the most socio-economic disadvantaged communities	17.1
Children proficient in English and speak another language at home	8.7
Children not proficient in English and speak a language other than English	54.3

#### Key Findings

- Both nationally,<sup>14</sup> and within Victoria, the majority of children are developmentally on track according to the AEDI results. Preliminary analysis of the Victorian data suggests that Victorian children are faring better than their national counterparts; that is, they are less likely to be vulnerable across the AEDI domains.<sup>14</sup>
- Approximately one-in-five Victorian children (20.2 per cent of those surveyed) are considered developmentally vulnerable on one or more of the five AEDI domains. Furthermore, one-in-ten Victorian children (10 per cent of those surveyed) are considered developmentally vulnerable on two or more of the five AEDI domains.
- Analysis of AEDI data and IRSED data shows a relationship between socioeconomic disadvantage and developmental vulnerability on the AEDI, with developmental vulnerability more highly concentrated within disadvantaged areas.<sup>14</sup>

While the AEDI was collected at the school, local community data relates to where the child lives. The following table presents the AEDI results for the local communities within Warrnambool (C).

## AEDI local community data within the City of Warrnambool

*\*Data for communities with fewer than 15 children are not shown above, but are included in the total for the LGA.*

*^Data excludes children with special needs and those deemed invalid due to their age or the low number of responses across the checklist.*

*# The IRSED - Index of Relative Socio-economic Disadvantage - is from the Australian Bureau of Statistics Socio-economic Indexes for Areas (SEIFA). A lower IRSED score means an area is more disadvantaged.*

**Data correct as at September 2010.**





## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal Social and Emotional development

#### Related Information: Parental report of child development

The Parental Evaluation of Developmental Status (PEDS)<sup>15</sup> provides a parental report of child development. The PEDS is conducted as a part of the School Entrant Health Questionnaire (SEHQ) at the first year of formal schooling and is a means to detect developmental and behavioural problems in children from birth to eight years of age. It can be used as a development screening test, or as an informal means to elicit and respond to parental concerns, thus engaging them more collaboratively in seeking available services and increasing the likelihood that families will follow up with professionals' recommendations.

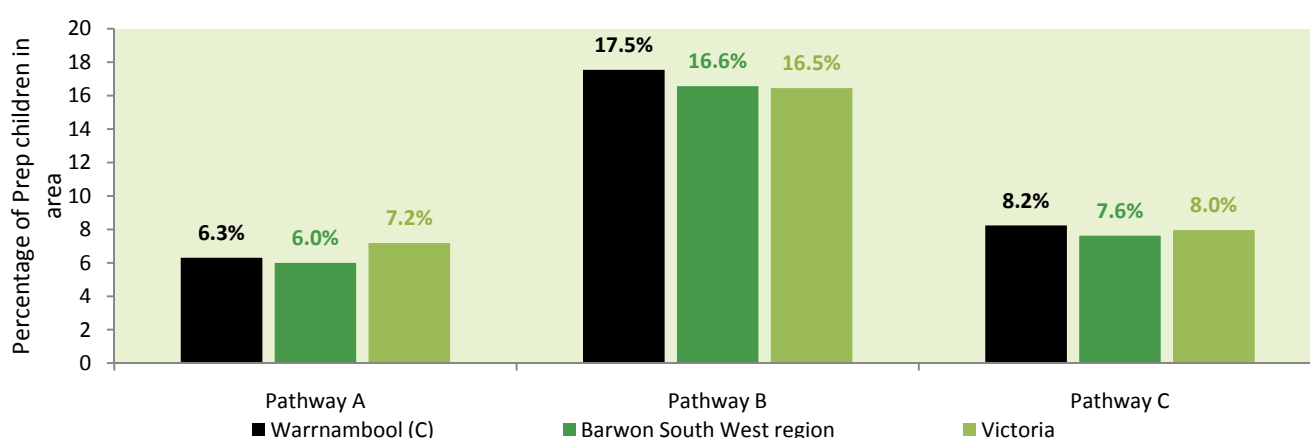
The PEDS pathways are used to decide whether to refer, screen further, watch carefully, counsel parents, or simply reassure them. These PEDS pathways are based on the number of predictive and non-predictive concerns raised by the parent.

#### PEDS Pathways:

A	Two or more predictive concerns	High risk
B	One predictive concern	Moderate risk: further screening/ vigilant monitoring needed
C	Non predictive concerns	Low risk but parent education needed
D	Parental difficulties communicating	Moderate risk: hands-on measures (or translations) are needed
E	No concerns	Low risk: typical development

See 'PEDS' in glossary at Appendix F for more information.

**Figure 13: PEDS pathways frequencies of Prep children in Warrnambool (C), the Barwon South West region and Victoria, 2008.**



Source: PEDS in School Entrant Health Questionnaire, 2008.

- Of the 53,872 Prep children in Victoria represented in the 2008 SEHQ, 7.2 per cent were classified as PEDS Pathway A, 16.5 per cent were classified as PEDS Pathway B and 8.0 per cent were classified as PEDS Pathway C.
- The majority of Prep children in Warrnambool (C) (67.7 per cent) were classified to either Pathway D or E. This proportion is similar to the proportion of Prep children classified to PEDS Pathways D or E across Victoria. Note: These D&E Pathways have been combined in this edition but will be separated out in future analysis.
- In Warrnambool (C), 6.3 per cent of the 376 Prep children represented in the 2008 SEHQ were classified as PEDS Pathway A. This was similar to the proportion of Prep children across the Barwon South West region who were classified as PEDS Pathway A (6.0 per cent) and lower than the proportion of Prep children classified as PEDS Pathway A across Victoria (7.2 per cent).
- Of the 376 Prep children represented in the 2008 SEHQ in Warrnambool (C), 17.5 per cent were classified as PEDS Pathway B. This was higher than the proportion of Prep children across the Barwon South West region who were classified as PEDS Pathway B (16.6 per cent) and higher than the proportion of Prep children classified as PEDS Pathway B across Victoria (16.5 per cent).



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Healthy teeth and gums

#### Indicator: Proportion of children who brush their teeth twice a day

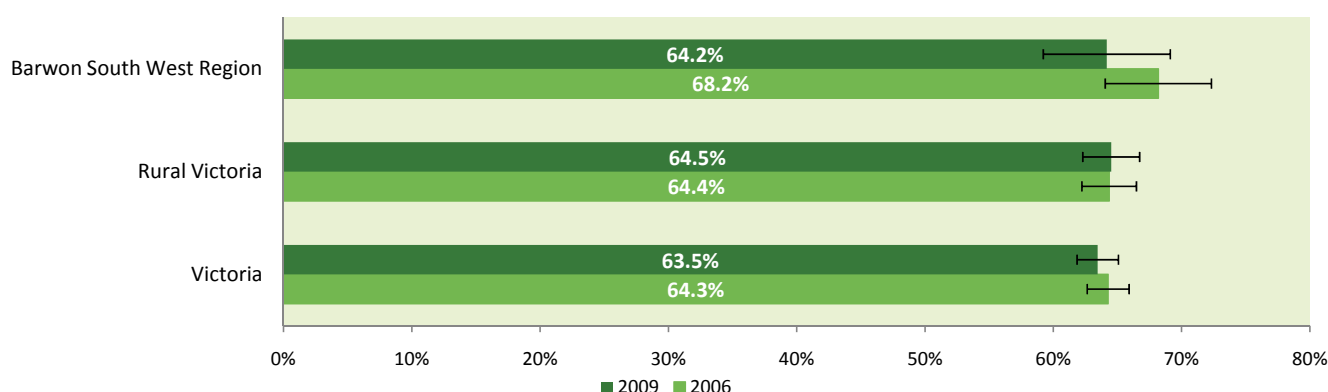
##### What is measured?

The proportion of children aged six months to 12 years who were reported to brush their teeth twice a day or more.

##### Why is it important?

Toothbrushing assists in ensuring good oral health. Effective toothbrushing removes dental plaque that can cause inflammation of the gums and dental decay.<sup>16</sup> If good oral health strategies can be established in childhood, there is greater likelihood that an individual will have good oral health behaviours and healthier teeth and gums in adulthood.

**Figure 14: Proportion of children aged 6 months to 12 years who brush their teeth twice a day or more in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**

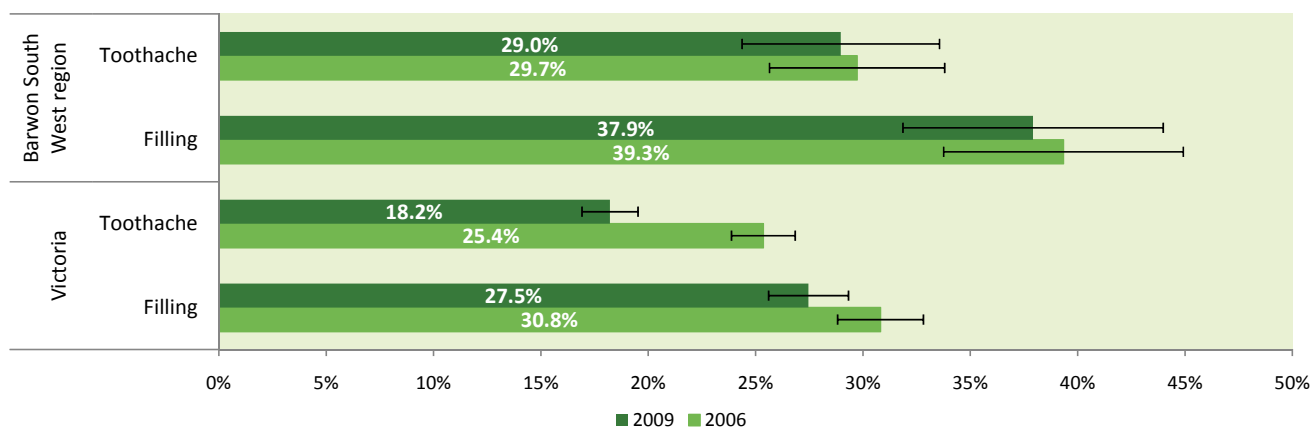


Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In Victoria, 63.5% of children aged 6 months to 12 years were reported to brush their teeth twice a day or more in 2009. This was lower than the proportion reported in 2006 (64.3%), but this difference was not significant.
- In the Barwon South West region, 64.2% of children aged 6 months to 12 years were reported to brush their teeth twice a day or more in 2009. This was lower than the proportion reported in 2006 (68.2%), but this difference was not significant.
- Based on the 2009 VCHWS survey results, the proportion of children aged 6 months to 12 years who reported to brush their teeth twice a day or more in the Barwon South West region (64.2%) was lower than the proportion reported in Rural Victoria (64.5%), but this difference was not significant.

#### Related Information: Oral health status

**Figure 15: Proportion of children aged 6 months to 12 years who had ever had a filling or experienced toothache in the Barwon South West region, Rural Victoria and Victoria.**



Source: Victorian Child Health and Wellbeing Survey, 2006 and 2009

- The proportion of children aged 6 months to 12 years who had ever had a toothache in the Barwon South West region (29.0%) was lower than the proportion reported in 2006 (29.7%), but this difference was not significant.
- The proportion of children aged 6 months to 12 years who had ever had a filling in the Barwon South West region (37.9%) in 2009 was lower than the proportion reported in 2006 (39.3%), but this difference was not significant.





## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Healthy teeth and gums

#### Related Information: Service Use

The following section presents information on use of dental services, including when children last visited a dentist, where this dentist was located and the reason for the visit. This information is sourced from the 2006 and 2009 Victorian Child Health and Wellbeing Survey.

#### The proportion of children aged 6 months to 12 years who have visited a dentist in the last 12 months in the Barwon South West region, Rural Victoria and Victoria.

- According to the 2009 VCHWS survey, 57.5% of children aged 6 months to 12 years in Victoria reported that they had visited a dentist in the last 12 months. This was lower than, but not significantly different to the proportion reported in 2006 (59.5%). Further, 31.6% reported that their child had never been to a dentist, representing an increase, but not significant from that reported in 2006 (30.2%).
- 62.3% of children aged 6 months to 12 years in the Barwon South West region reported that they had visited a dentist in the last 12 months in the 2009 VCHWS survey. This was higher than, but not significantly different to the proportion reported in 2006 (58.8%) and higher than, but not significantly different to the proportion reported across Rural Victoria in 2009 (58.3%).
- The proportion of children aged 6 months to 12 years who had not visited a dentist in the Barwon South West region in 2009 was 27.1%. This was lower than, but not significantly different to the proportion reported in 2006 (30.7%) and lower than, but not significantly different to the proportion reported across Rural Victoria in 2009 (29.8%) .

#### The location of last dentist visit for children aged 6 months to 12 years who had ever visited a dentist in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.

	Barwon South West		Rural Victoria		Victoria	
	2006	2009	2006	2009	2006	2009
Private dentist	64.4%	71.1%	57.9%	62.9%	64.1%	70.7%
School dental service	27.8%	17.2%	32.9%	22.6%	27.1%	18.2%
Other government or public dentist	6.8%	9.6%	6.8%	10.7%	7.5%	8.7%
Dental hospital	1.0% **	2.0% *	1.7%	3.4%	0.9%	2.0%
Other / Don't know / Refused	0.0% **	0.1% **	0.8% **	0.3% **	0.4% **	0.4% **

\* Estimate has a relative standard error of between 25-50% and should be used with caution.

\*\* Estimate has a relative standard error of greater than 50% and is not considered reliable.

- According to the 2009 VCHWS survey, the majority of children who visited a dentist in the last 12 months in the Barwon South West region went to a private dentist (71.1%). This proportion was higher than, but not significantly different to that reported in 2006 (64.4%).

#### Main reason for the last dentist visit, for children aged 6 months to 12 years who had ever visited a dentist in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.

	Barwon South West		Rural Victoria		Victoria	
	2006	2009	2006	2009	2006	2009
Check up	71.0%	71.9%	71.0%	75.3%	73.4%	76.4%
Fillings	10.4%	9.2%	9.5%	7.7%	7.0%	6.8%
Tooth removed	3.2% *	3.6% *	4.2%	3.6%	2.9%	3.0%
Braces/orthodontics	2.7% *	3.2% *	3.3%	3.1%	3.6%	3.2%
Injury to mouth/teeth	2.1% *	2.1% *	2.1%	2.0%	2.4%	2.3%
Toothache or a sore mouth	4.1% *	6.3%	3.5%	4.3%	2.9%	3.3%

\* Estimate has a relative standard error of between 25-50% and should be used with caution.

\*\* Estimate has a relative standard error of greater than 50% and is not considered reliable for general use.

- The most common reason for the last dental visit for children aged 6 months to 12 years in the Barwon South West region was for a check-up, with 71.9% of children reporting to visit the dentist for this reason in 2009. In 2009, 9.2% of children who had visited a dentist went there for fillings, and 3.2% went to a dentist for braces or orthodontics.



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal Physical Health

#### Indicator: Proportion of children and young people with special health care needs

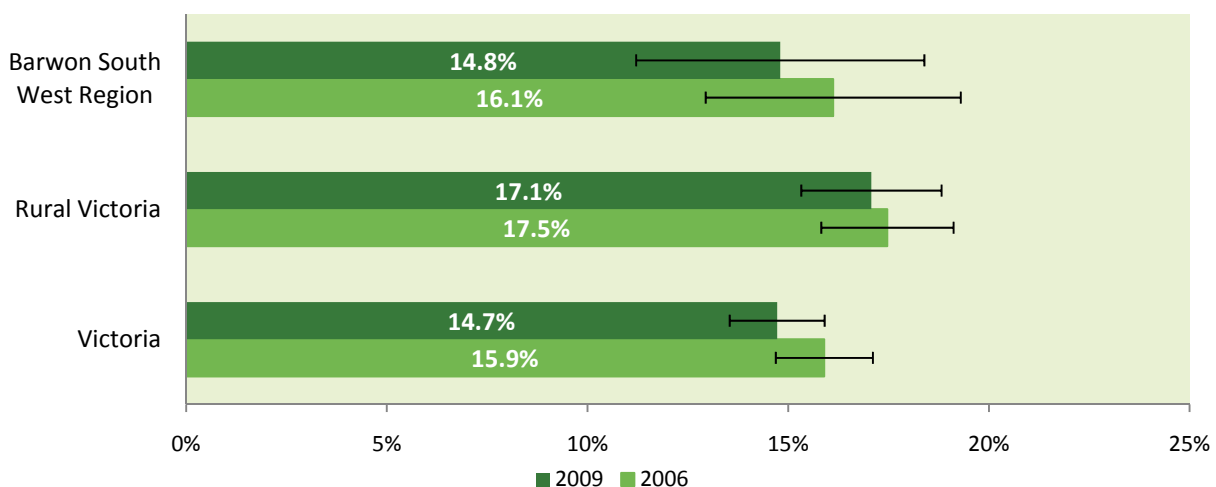
##### What is measured?

The Special Health Care Needs Screener,<sup>17</sup> was used to identify children reported to have either: a) functional limitations b) long term use of medication, and /or c) special service needs, such as the ongoing need for physiotherapy or counselling. A child was only classified as having a special health care need if their condition, use of medication or special service needs had lasted, or was expected to last for 12 months or longer.

##### Why is it important?

Capturing parental reports of their child's special health care needs may identify some children whose health care needs are not recorded elsewhere. For example, a child's health care needs might not be recorded in administrative systems if the family has been unable to access services, or if the child has a health or an emotional problem that is not routinely recorded in existing clinical or administrative systems<sup>17</sup>. While there are many childhood illnesses, most are relatively rare, making condition specific monitoring at a population level problematic. A non-condition specific approach allows statistically robust comparisons to be made between children living in different geographical areas.

**Figure 16: Proportion of children aged 6 months to 12 years with one or more special health care needs in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In Victoria, 14.7% of children aged 6 months to 12 years were reported to have one or more special health care needs in 2009. This was lower than the proportion reported in 2006 (15.9%), but this difference was not significant.
- The proportion of children aged 6 months to 12 years with one or more special health care needs in the Barwon South West region (14.8%) was lower than the proportion reported in 2006 (16.1%), but this difference was not significant.
- The proportion of children aged 6 months to 12 years in the Barwon South West region who reported to have a special health care need in 2009 was lower than, but not significantly different to that reported in Rural Victoria (17.1%) and similar to that reported in Victoria (14.7%).



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal Physical Health

#### Indicator: Proportion of children with current asthma

##### What is measured?

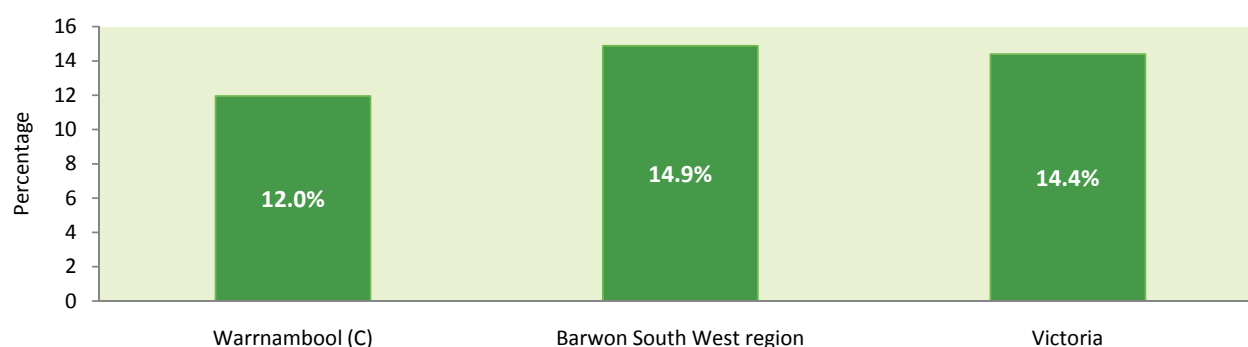
Children were classified as having asthma in the School Entrant Health Questionnaire (SEQH) if they had ever been told by a doctor that they had asthma. This differs from the definition used in the Victorian Child Health and Wellbeing Survey (VCHWS), which defines children as having 'current asthma' if they had ever been diagnosed with asthma by a doctor, and if they had experienced asthma symptoms or taken asthma medications in the past year.

As VCHWS data is not available at a local government area level, SEQH data was used as the source for the asthma indicators. It should be noted that the definition of asthma used in SEQH does not capture whether any symptoms of asthma were present in the past 12 months or the degree of severity of asthma. For more information about SEQH, refer to Appendix D.

##### Why is it important?

Asthma is the most common long term condition among Australian children and the leading cause of disease burden in Victorian children.<sup>18,19</sup> Asthma can have considerable impact on the physical, social and emotional life of children with asthma and their families. It can interfere with school and can create the need for urgent medical care.

**Figure 17: The proportion of Prep children aged 5 to 6 years with reported asthma in Warrnambool (C), the Barwon South West region and Victoria, 2008.**



Source: School Entrant Health Questionnaire, 2008.

- Of the 53,872 Prep children counted in the 2008 SEQH across Victoria, 14.4 per cent were reported to have asthma.
- In Warrnambool (C), 12.0 per cent of Prep children were reported to have asthma. This was lower than the proportion of Prep children reported to have asthma across the Barwon South West region (14.9 per cent) and lower than the proportion of Prep children reported to have asthma across Victoria (14.4 per cent).

#### Indicator: Proportion of children with current asthma who have a written asthma plan

##### What is measured?

Asthma action plans are written instructions of what to do if a child's asthma is worse or out of control. Parents with children with current asthma, were asked if their child had an asthma action plan at school.

##### Why is it important?

Written asthma action plans are an important component of asthma management.<sup>1,2</sup> Monitoring the proportion of children with asthma action plans informs the development of interventions and supports to assist children and their families manage asthma symptoms.<sup>3</sup>

- Of the 7,758 Prep children in Victoria who had ever been told by a doctor that they had asthma, 39.9% were reported to have an asthma action plan at school.
- In Warrnambool (C), 44.4% of Prep children who were ever told by a doctor that they had asthma, had an asthma action plan at school. This was higher than the proportion across the Barwon South West region (39.2%) and higher than the proportion across Victoria (39.9%).

## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: 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 years. Admissions to hospital are called separations following discharge from the hospital (see glossary entry for 'hospital separations' at Appendix C).

##### Why is it important?

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.<sup>20</sup> 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.<sup>11</sup> 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.<sup>21</sup>

#### Hospital separations for asthma in children aged 0 to 8 years in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009.

2004 - 2005			
	Number of hospital separations for asthma	Estimated Resident Population aged 0 to 8 years	Rate per 1000 children aged 0 to 8 years
Warrnambool (C)	38	3,800	10.0
Barwon South West region	274	39,938	6.9
Victoria	4,006	564,120	7.1
2005 - 2006			
	Number of hospital separations for asthma	Estimated Resident Population aged 0 to 8 years	Rate per 1000 children aged 0 to 8 years
Warrnambool (C)	44	3,748	11.7
Barwon South West region	268	39,795	6.7
Victoria	4,203	566,750	7.4
2006 - 2007			
	Number of hospital separations for asthma	Estimated Resident Population aged 0 to 8 years	Rate per 1000 children aged 0 to 8 years
Warrnambool (C)	45	3,732	12.1
Barwon South West region	300	40,005	7.5
Victoria	4,650	572,710	8.1



### Hospital separations for asthma in children aged 0 to 8 years in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009 ..... continued

#### 2007 - 2008

	Number of hospital separations for asthma	Estimated Resident Population aged 0 to 8 years	Rate per 1000 children aged 0 to 8 years
Warrnambool (C)	44	3,760	11.7
Barwon South West region	341	40,136	8.5
Victoria	4,765	582,221	8.2

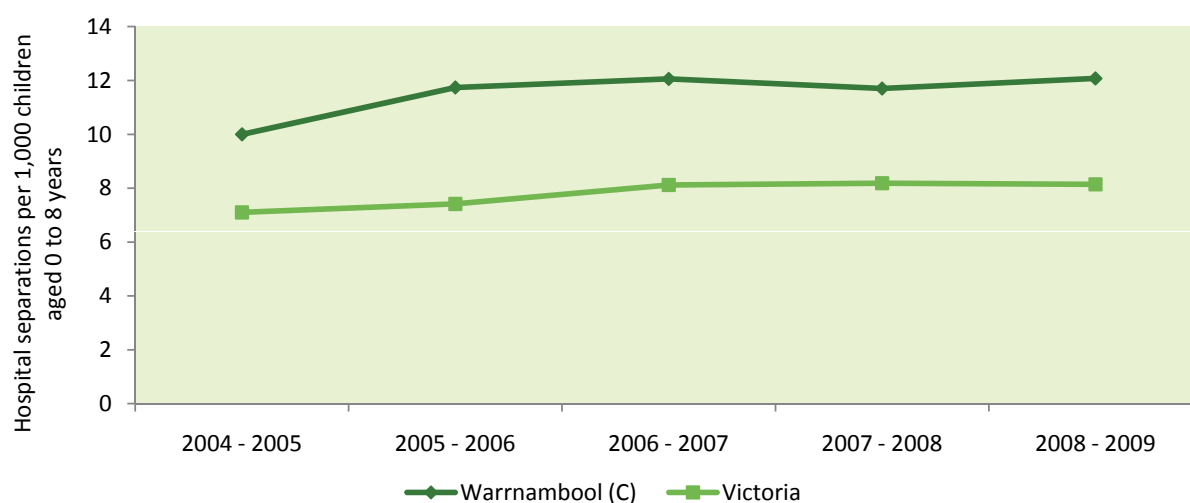
#### 2008 - 2009

	Number of hospital separations for asthma	Estimated Resident Population aged 0 to 8 years	Rate per 1000 children aged 0 to 8 years
Warrnambool (C)	46	3,809	12.1
Barwon South West region	339	40,643	8.3
Victoria	4,849	595,545	8.1

- During 2008 - 2009, there were 12.1 hospital separations per 1,000 children aged 0 to 8 years in Warrnambool (C). This is greater than the rate of hospital separations for asthma in the Barwon South West region (8.3 per 1,000 children aged 0 to 8 years) and greater than the rate of hospital separations for asthma in Victoria (8.1 per 1,000 children aged 0 to 8 years).
- Warrnambool (C) was ranked 5 out of 70 LGAs in terms of the rate of hospital separations for asthma during 2008 - 2009. A rank of 1 was assigned to the LGA with the highest rate of hospital separations. LGA with less than 5 hospital separations were not assigned a rank.

*Note: In LGAs where there are less than 5 hospital separations, the data is not reported for confidentiality reasons. Where applicable, this is represented by "np" in the above tables and data points are not plotted on the chart below.*

**Figure 18: Rate of hospital separations for asthma per 1,000 children aged 0 to 8 years in Warrnambool (C) and Victoria, 2004 - 2005 to 2008 - 2009.**



*Note: Rates in above chart should not be interpreted without consulting the raw data in the above tables.*

- The rate of hospital separations for asthma in children aged 0 to 8 years in Warrnambool (C) have increased from 10.0 per 1,000 children in 2004 - 2005 to 12.1 per 1,000 children in 2008 - 2009.
- Over the five year period between 2004 - 2005 and 2008 - 2009, the rate of hospital separations for asthma per 1,000 children aged 0 to 8 years was higher in Warrnambool (C) than in Victoria



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### 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. Number of hospital separations are expressed as rates per 1,000 of the estimated resident population of children aged 0 to 8 years at the beginning of the reporting period.

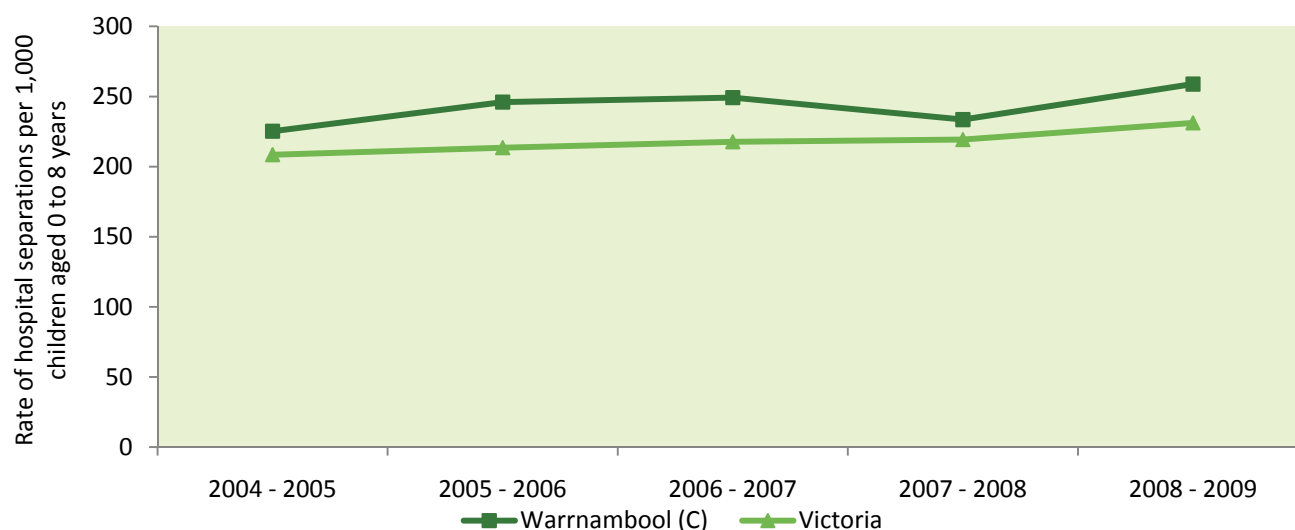
The International Statistical Classification of Diseases (ICD) is the international standard diagnostic classification for all general epidemiological, many health management purposes and clinical use. It is used to classify diseases and other health problems recorded on many types of health and vital records including death certificates and health records<sup>22</sup> (see ICD in glossary for more information).

##### Why is it important?

A range of factors can lead to hospitalisation. These include injury, disease, congenital conditions and birth defects.<sup>11</sup> Consideration of the leading causes of hospitalisation at different ages is important in monitoring changes or emerging risks for children.<sup>11</sup>

Hospitalisation rates are often used as a proxy indicators for the level of serious illness within a community.<sup>11</sup> 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).<sup>11</sup>

**Figure 19: Rate of hospital separations, for all principal diagnosis, per 1,000 children aged 0 to 8 years in Warrnambool (C) and Victoria, 2004 - 2005 to 2008 - 2009.**



- The rate of hospital separations per 1,000 children aged 0 to 8 years in Victoria has increased by a rate of 2.1 per year, from 208.4 in 2004 - 2005 to 231.2 in 2008 - 2009.
- Over the past five years, the rate of hospital separations per 1,000 children aged 0 to 8 years in Warrnambool (C) has increased by an average rate of 2.8 per cent per year, from 225.3 in 2004 - 2005 to 258.9 in 2008 - 2009.



**Number and rate of hospital separations, by top 20 principal diagnoses recorded for children aged 0 to 8 years in Warrnambool (C) and Victoria, 2008 - 2009.**

ICD principal diagnosis	Warrnambool (C)		Victoria	
	Number of hospital separations	Rate of hospital separations per 1,000 children aged 0 to 8 years (a)	Number of hospital separations	Rate of hospital separations per 1,000 children aged 0 to 8 years (a)
Asthma unspecified	46	12.1	4,717	7.9
Neonatal difficulty in feeding at breast	np	np	1,495	2.5
Oth pret infnt >=32 but <37 compl wk	24	6.3	4,567	7.7
Dental caries unspecified	29	7.6	3,736	6.3
Acute bronchiolitis unspecified	7	1.8	2,130	3.6
Feeding difficulties and mismanagement	np	np	601	1.0
Neonatal jaundice unspecified	9	2.4	2,007	3.4
Routine and ritual circumcision	10	2.6	1,213	2.0
Viral infection unspecified	8	2.1	1,352	2.3
Acute obstructive laryngitis [croup]	6	1.6	1,151	1.9
Chronic tonsillitis	51	13.4	2,518	4.2
Disorders of the sleep-wake schedule	np	np	602	1.0
Acute URTI unspecified	11	2.9	1,299	2.2
Pneumonia unspecified	np	np	1,021	1.7
Chronic mucoid otitis media	8	2.1	1,849	3.1
Neonatal conjunctivitis & dacryocystitis	14	3.7	864	1.5
Disorders initiating & maintaining sleep	np	np	1,403	2.4
Nonsuppurative otitis media unspecified	9	2.4	1,743	2.9
Nonspecific symptoms peculiar to infancy	np	np	1,104	1.9
<b>All hospital separations</b>	<b>986</b>	<b>258.9</b>	<b>137,680</b>	<b>231.2</b>

*Note: The leading cause of hospital admissions was for 'Singleton born in hospital'. This was excluded from the above analysis.*

*(a) The population estimate used to calculate the rate of separations during 2008 - 2009 was the preliminary 2008 ERP at 30 June.*

- The top three causes for hospital separation in Victoria during 2008 - 2009 were 'Asthma unspecified' (rate of 7.9 per 1,000 children aged 0 to 8 years), 'Oth pret infnt >=32 but <37 compl wk' (rate of 7.7 per 1,000 children aged 0 to 8 years) and 'Dental caries unspecified' (rate of 6.3 per 1,000 children aged 0 to 8 years).
- In 2008 - 2009, the top three causes for hospital separation in Warrnambool (C) were 'Chronic tonsillitis' (rate of 13.4 per 1,000 children aged 0 to 8 years), 'Asthma unspecified' (rate of 12.1 per 1,000 children aged 0 to 8 years) and 'Dental caries unspecified' (rate of 7.6 per 1,000 children aged 0 to 8 years).
- In 2008 - 2009, the rate of hospitalisations for any cause for children aged 0 to 8 years in Warrnambool (C) was 258.9. This was greater than the rate of all hospital separations for children in this age-group across Victoria (rate of 231.2 per 1,000 children aged 0 to 8 years).





## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal physical health

#### Indicator: Proportion of children and young people in good health

##### What is measured?

Parents with Prep children were asked to report whether their child's health was 'excellent', 'very good', 'good', 'fair', or 'poor'. As VCHWS data is not available at a local government area level, SEQH data was used as the source for this indicator. For more information about SEHQ, refer to Appendix D.

##### Why is it important?

Early childhood is a time when most children will enjoy good health. In comparison to previous generations, children in Australia today are perhaps healthier than ever.<sup>23</sup> As living standards, and access to health care (including immunisation) and education have improved, there have been marked reductions in communicable diseases and also in infant and child mortality rates.

**Figure 20: Reported health status of Prep children in Warrnambool (C), the Barwon South West region and Victoria, 2008.**



Source: School Entrant Health Questionnaire, 2008.

Note: Percentages may not sum to 100% as not all respondents completed this question

LGA's with less than 5 children in a reported health category were suppressed and are not depicted in the chart above

- Of the 53,872 Prep children in Victoria counted in the 2008 SEQH, 91.4 per cent were reported to be in either excellent or very good health, 7.1 per cent were reported to be in good health and 0.6 per cent were reported to be in either fair or poor health.
- In Warrnambool (C), the vast majority (94.8 per cent) of Prep children were reported to be in either 'excellent' or 'very good' health. This proportion was higher than that reported across the Barwon South West region (93.0 per cent) and higher than the proportion reported across Victoria (91.4 per cent).
- The proportion of children in Warrnambool (C) reported to be in either 'fair' or 'poor' health were suppressed due to small numbers. In the broader Barwon South West region, 0.5 per cent of Prep children were reported to be in either 'fair' or 'poor' health. This was lower than the proportion reported across Rural Victoria (0.6 per cent) and lower than the proportion reported across Victoria (0.6 per cent).





## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal language and cognitive development

#### Indicator: Children entering school with basic skills for life and learning

##### What is measured?

Percentage of parents concerned about their child's behaviour entering school, sourced from the School Entrant Health Questionnaire (SEHQ). For more information on SEHQ, refer to glossary at Appendix D).

##### Why is it important?

The transition to school represents a major shift for young children involving a move from small-scale to large-scale interactions, from highly personalised to less personalised relationships and from environments with a limited range of ages to an institution with children of many ages.<sup>24</sup>

Research shows that children are more successful at school when they have developed the emotional capacity to manage their feelings and behaviour and when they have a base of academic and social skills.<sup>25</sup> It is important, therefore, that children are 'ready' for the transition to school. Readiness is not just a feature of the child and his or her maturation, but is a feature of the child's wider environment and family, service and community factors.

#### Proportion of parents who reported concern about the way their child behaves.

- In Victoria, 4.6 per cent of parents reported that they were concerned about how their child behaves. A further 8.8 per cent of parents reported in Victoria reported that they were a little concerned about how their child behaves.
- In Warrnambool (C), 3.9 per cent of parents were reported to be concerned about how their child behaves. This proportion was lower than that reported across the Barwon South West region (4.2 per cent) and lower than the proportion reported across Victoria (4.6 per cent).
- According to the 2008 SEHQ, 9.6 per cent of parents in Warrnambool (C) were reported to be a little concerned about how their child behaves. This proportion was higher than that reported across the Barwon South West region (8.5 per cent) and higher than the proportion reported across Victoria (8.8 per cent).

#### Related Information: Parental report on child's behaviour and emotional wellbeing

The SEHQ asks parents to describe their child's behaviour and emotional wellbeing across a number of areas. Parents response to this question are summarised in the table below.

#### Parents description of child's behaviour and emotional wellbeing, for Warrnambool (C), the Barwon South West region and Victoria, sourced from the 2008 SEHQ.

	Warrnambool (C)		Barwon South West region		Victoria	
	Usually / Often (%)	Sometimes (%)	Usually / Often (%)	Sometimes (%)	Usually / Often (%)	Sometimes (%)
Trouble paying attention and completing an activity	2.7	34.4	3.5	31.1	3.2	31.9
Has temper tantrums	3.7	34.5	3.7	36.7	3.3	36.4
Displays aggressive behaviour	1.9	12.9	1.6	15.4	1.6	15.3
Play well with other children	90.5	7.6	90.8	6.3	89.6	6.9
Resist or sometimes refuse to go to school	1.9	8.4	1.7	8.4	1.9	9.4
Generally happy	97.9	1.3	96.4	1.8	95.8	2.1
Sleeps well through the night	91.0	6.3	89.4	7.8	89.0	8.0

- In Warrnambool (C), the vast majority (97.9 per cent) of parents reported that their child was generally happy, played well with other children (90.5 per cent) and sleeps well through the night (91.0 per cent).
- Some parents in Warrnambool (C) were experiencing difficulty with their child's behaviour and emotional wellbeing, with 2.7 per cent of Prep children reported to usually or often have trouble paying attention and completing an activity, 3.7 per cent usually or often having temper tantrums and 1.9 per cent of children reported to usually or often display aggressive behaviour.
- 10.3 per cent of Prep children were reported to resist or sometimes refuse to go to school in Warrnambool (C). This proportion was similar to the proportion reported across the Barwon South West region (10.1 per cent) and lower than the proportion reported across Victoria (11.3 per cent).



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Optimal language and cognitive development

#### Related Information: Children with reported difficulties with speech and language

Proportion of parents who reported that their child had difficulty with speech and language and proportion of these children who were seeing a speech pathologist, in Warrnambool (C), the Barwon South West region and Victoria, 2008.

	Children reported to have difficulties with speech or language		Number and proportion of children with reported difficulties with speech and language who were seeing a speech pathologist	
	Number	Percentage	Number	Percentage
Warrnambool (C)	52	13.8	13	25.0
Barwon South West region	587	14.4	122	20.9
Victoria	7,867	14.6	1,738	22.1

Source: School Entrant Health Questionnaire, 2008.

- In Victoria, 7,867 Prep children were reported to have difficulties with speech and language, representing 14.6 per cent of all Prep children surveyed in the 2008 SEHQ. 22.1 per cent of these children were reported to be seeing a speech pathologist.
- In Warrnambool (C), 52 Prep children were reported to have difficulties with speech and language, representing 13.8 per cent of all Prep students in this area. Of these, 25.0 per cent were reported to be seeing a speech pathologist.

## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Adequate exercise and physical activity

#### Indicator: Proportion of children and young people who do the recommended amount of physical activity every day

##### What is measured?

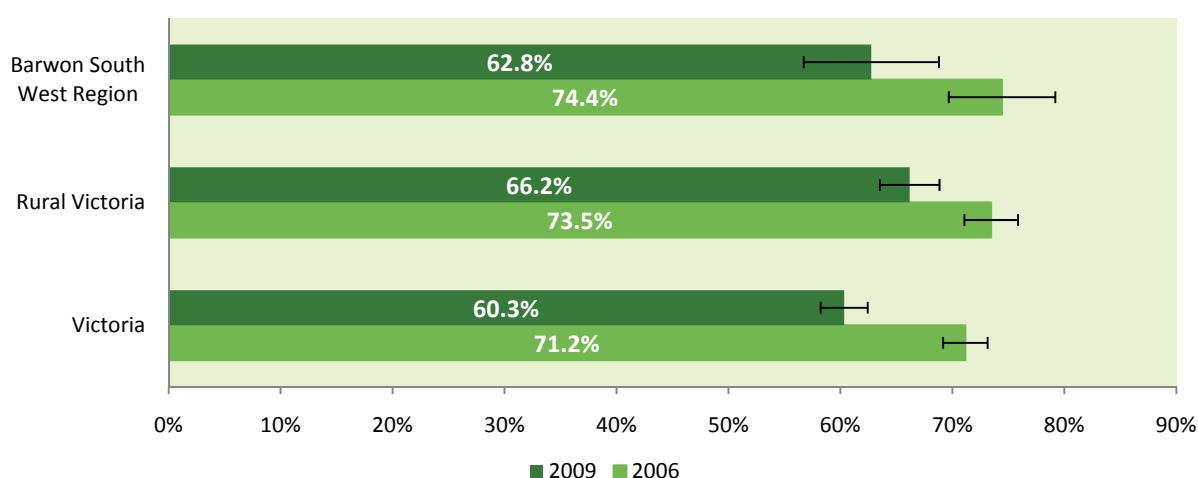
Children in Australia are advised to exercise for at least an hour everyday whilst limiting their use of electronic media (such as television, use of the internet and computer games) to no more than two hours each day.<sup>26</sup>

##### Why is it important?

Participation in physical activity is thought to influence many aspects of a child's development. Physical activity plays an important role in promoting healthy growth, weight control and cardiovascular fitness. It also provides children with opportunities to interact with others and to improve self esteem.<sup>26</sup>

Children are probably at their most active in their early school years. However, in the Victorian Child Health and Wellbeing Survey, there was evidence of a reduction in physical activity and an increase in the use of electronic media as children aged.<sup>9</sup>

**Figure 23: Proportion of children aged 5 to 12 years who are reported to do the recommended amount of physical activity every day in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In Victoria, 60.3% of children aged five to 12 years were reported to do the recommended amount of physical activity every day in 2009. This was significantly lower than the proportion reported in 2006 (71.2%).
- In the Barwon South West region, 62.8% of children aged five to 12 years reported to do the recommended amount of physical activity every day in 2009. This was significantly lower than the proportion reported in 2006 (74.4%).
- Based on the 2009 VCHWS survey results, the proportion of children aged five to 12 years who were reported to do the recommended amount of physical activity every day in the Barwon South West region (62.8%) was lower, but not significantly different to the proportion reported in Rural Victoria (66.2%) and higher, but not significantly different to the proportion reported across Victoria (60.3%).



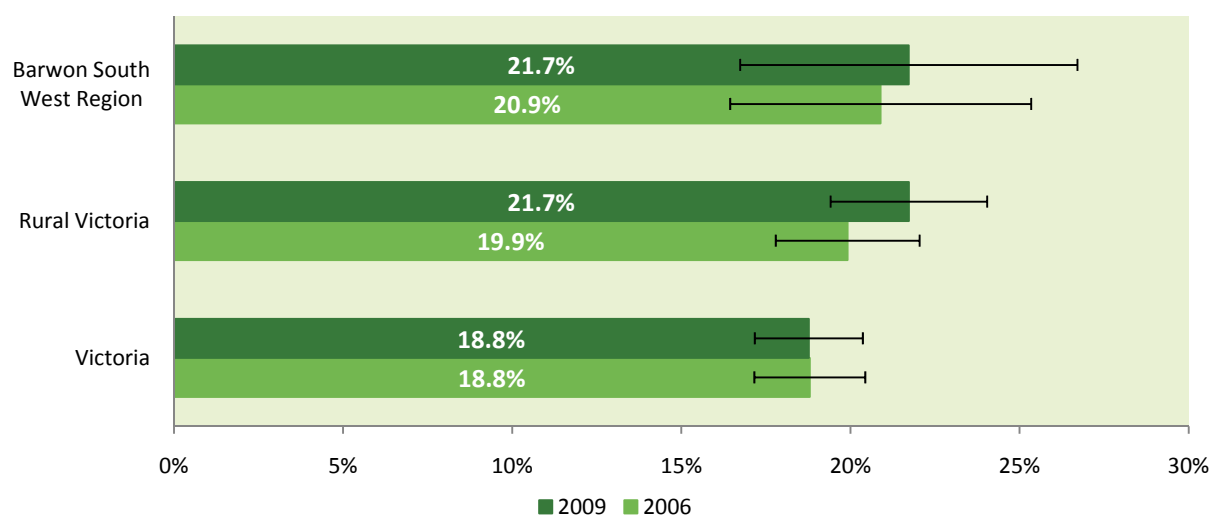
## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Adequate exercise and physical activity

#### Related information: Proportion of children and young people who use electronic media for more than two hours per day

Electronic media includes TV, computer, computer games or gaming consoles.

**Figure 24: Proportion of children aged 5 to 12 years who are reported to use electronic media for more than 2 hours every day in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In Victoria, 18.8% of children aged five to 12 years were reported to use electronic media for more than 2 hours every day in 2009. This was not significantly different from the proportion reported in 2006 (18.8%).
- In the Barwon South West region, 21.7% of children aged five to 12 years were reported to use electronic media for more than 2 hours every day in 2009. This was higher than the proportion reported in 2006 (20.9%), but this difference was not significant.
- Based on the 2009 VCHWS survey results, the proportion of children aged five to 12 years who were reported to use electronic media for more than 2 hours every day in the Barwon South West region (21.7%) was similar to the proportion reported across Rural Victoria (21.7%) and higher than, but not significantly different to the proportion reported across Victoria (18.8%).

## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Positive child behaviour and mental health

#### Indicator: Proportion of children with emotional or behaviour difficulties

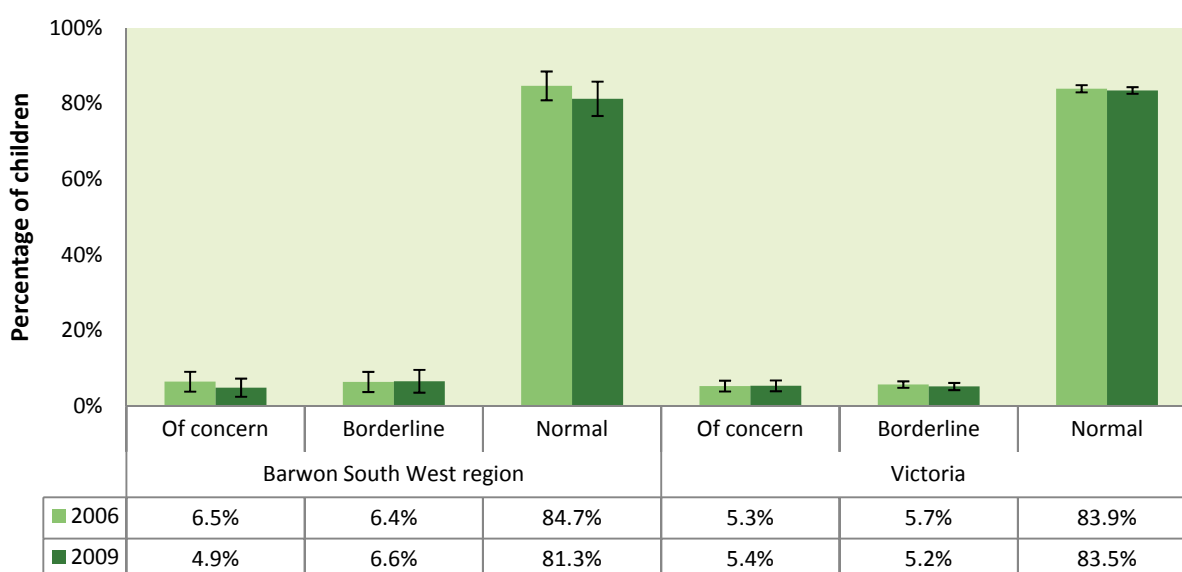
##### What is measured?

Within the Victorian Child Health and Wellbeing Survey (VCHWS), respondents with children aged between four and 12 years of age completed the Strengths and Difficulties Questionnaire (SDQ).<sup>27</sup> Based on the responses, children's behaviour was scored as either being 'of concern', 'borderline' or of 'no concern'.

##### Why is it important?

During an era when increased prosperity has brought significant gains to children's health, there are concerns that social change may be contributing to a rise in newer morbidities, such as increases in children's behavioural, social and emotional problems.<sup>28</sup>

**Figure 25: Child behaviour scores on the Strengths and Difficulties Questionnaire in the VCHWS for Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

Note: Percentages will not sum to 100% as those with unknown child behaviour scores were not depicted above.

- In Victoria, the majority (83.5%) of children aged 4 to twelve years had behaviour rated as 'normal' on the 2009 VCHWS SDQ. However, 5.4% of children had behaviour rated as 'of concern' and a further 5.2% had behaviour rated as 'borderline'.
- Similarly, in the Barwon South West region, the majority (81.3%) of children aged 4 to twelve years had behaviour rated as 'normal' on the 2009 VCHWS SDQ, 4.9% of children had behaviour rated as 'of concern' and a further 6.6% had behaviour rated as 'borderline'.
- The proportion of children in the Barwon South West region with behaviour rated as 'of concern' on the SDQ in 2009 (4.9%) was lower than the proportion of children with behaviour rated as 'of concern' in 2006 (6.5%), but this difference was not significant.

## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### Outcome: Positive child behaviour and mental health

#### Indicator: Proportion of children who are bullied

##### What is measured?

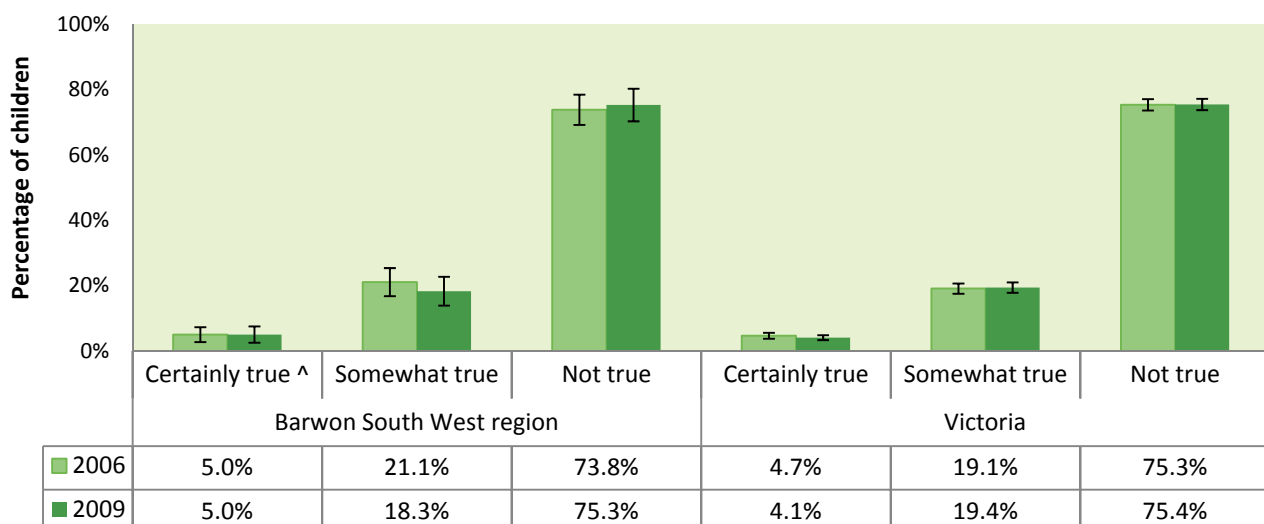
The proportion of children aged four to 12 years with a parent who reported that it was 'certainly true' that their child was bullied.

##### Why is it important?

Bullying is characterised by an imbalance of physical or psychological strength between the bully and his or her victim. Bullies repeatedly expose their victims to aggressive physical or verbal acts over time.<sup>29</sup> See glossary at Appendix F for more information.

Bullying is known to negatively impact on children's mental health status, including increasing risk of depression, anxiety, poor self-esteem and withdrawal.

**Figure 26: Proportion of children aged four to 12 years who were bullied in the Barwon South West region and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

^ Estimates have a relative standard error of 25-50% and should be used with caution.

- Based on the 2009 VCHWS survey, the majority of parents in Victoria reported that their child (aged four to 12 years) was not being bullied (75.4%). However, 19.4% of parents reported it was 'somewhat true' that their child was being bullied while a further 4.1% of parents reported it was 'certainly true' that their child was being bullied.
- The proportion of parents in Victoria who reported that it was 'certainly true' that their child was being bullied in the 2009 VCHWS survey (4.1%) was lower than, but not significantly different to that reported in the 2006 survey (4.7%).
- Based on the 2009 VCHWS survey, the majority of parents in the Barwon South West region reported that their child (aged four to 12 years) was not being bullied (75.3%). 18.3% of parents reported it was 'somewhat true' that their child was being bullied while a further 5.0% of parents reported it was 'certainly true' that their child was being bullied.
- The proportion of parents in the Barwon South West region who reported that it was 'not true' that their child was being bullied in the 2009 VCHWS survey (75.3%) was greater than, but not significantly different to that reported in the 2006 survey (73.8%).
- Parents of children aged four to 12 residing in the Barwon South West region were neither more likely or less likely to report that it was 'certainly true' that their child was being bullied than children living across Victoria.



## VCAMS Domain: Safe, healthy child, learning, developing, achieving wellbeing

### 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 students enrolled in government schools who meet or exceed the reading accuracy score of 90% or more on unseen texts at the recommended text levels. For the purpose of this report, the text levels used for assessment were:

- Prep - reading unseen Level 5 text with 90% accuracy or higher
- Year 1 - reading unseen Level 15 text with 90% accuracy or higher
- Year 2 - reading unseen Level 20 text with 90% accuracy or higher

Note: Accuracy of reading was replaced with the English Online Interview from 2009 onwards. 2008 will be the last year for which Reading Accuracy is assessed using percentage accuracy scores at recommended text levels. Refer to 'Reading Assessment' in glossary at Appendix F for more information.

##### 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 of students' academic pathway and are associated with generally lower education attainment, earnings, health and social outcomes as well as being linked to higher rates of unemployment, welfare dependencies and teenage parenting.<sup>30</sup> The central task of reading and writing provide the foundation for more advanced skills and knowledge and is essential for the development of human potential.<sup>12</sup>

#### Percentage of Prep students enrolled in government schools, achieving a reading accuracy score of 90% or more on Level 5 texts in Warrnambool (C), Barwon South West region and Victoria, 2004 to 2008.

	2004	2005	2006	2007	2008
Warrnambool (C)	88.0	79.0	85.5	85.3	83.3
Barwon South West region	84.0	84.1	84.0	83.5	84.3
Victoria	79.0	79.7	80.3	80.4	81.3

- In 2008, 83.3 per cent of Prep children enrolled in government schools in Warrnambool (C) achieved a reading accuracy score of 90% or more on Level 5 text. This was less than the percentage in the Barwon South West region (84.3 per cent) and greater than the percentage of Prep students enrolled in government schools reading Level 5 texts with 90% accuracy or higher in Victoria (81.3 per cent).
- In 2008, Warrnambool (C) was ranked 28 out of 79 LGAs on the percentage of Prep students reading Level 5 texts with a reading accuracy score of 90% or higher. A rank of 1 was assigned to the LGA with the highest percentage of Prep students achieving 90% accuracy score or higher.

#### Percentage of Year 1 students enrolled in government schools, achieving a reading accuracy score of 90% or more on Level 15 texts in Warrnambool (C), Barwon South West region and Victoria, 2004 to 2008.

	2004	2005	2006	2007	2008
Warrnambool (C)	90.9	87.6	84.4	86.5	84.8
Barwon South West region	90.5	88.6	87.9	87.4	88.6
Victoria	87.0	86.3	86.9	86.7	86.4

- In 2008, 84.8 of Year 1 students enrolled in government schools in Warrnambool (C) achieved a reading accuracy score of 90% or more on Level 15 text. This was less than the percentage in the Barwon South West region (88.6 per cent) and less than the percentage of Year 1 students enrolled in government schools reading Level 15 texts with 90% accuracy or higher in Victoria (86.4 per cent).
- In 2008, Warrnambool (C) was ranked 42 out of 79 LGAs on the percentage of Year 1 students reading Level 15 texts with a reading accuracy score of 90% or higher. A rank of 1 was assigned to the LGA with the highest percentage of Year 1 students achieving 90% accuracy score or higher.



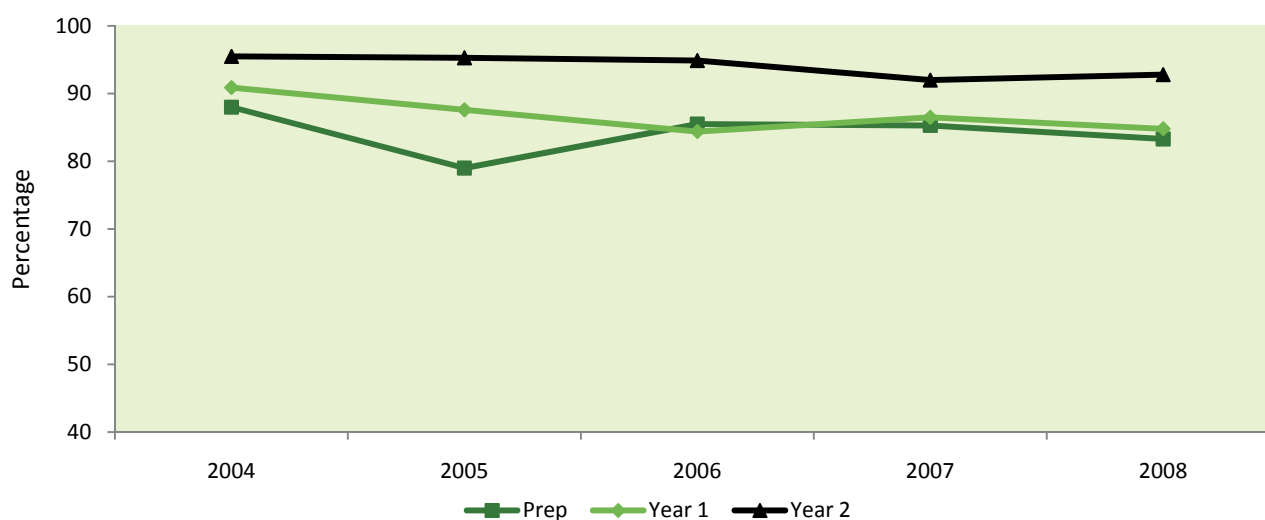


**Percentage of Year 2 students enrolled in government schools, achieving a reading accuracy score of 90% or more on Level 20 texts in Warrnambool (C), Barwon South West region and Victoria, 2005 to 2009 ... continued**

	2004	2005	2006	2007	2008
Warrnambool (C)	95.5	95.3	94.9	92.0	92.8
Barwon South West region	95.6	95.2	94.7	94.0	94.2
Victoria	94.8	94.8	94.9	94.8	94.5

- In 2008, 92.8 per cent of Year 2 students enrolled in government schools in Warrnambool (C) achieved a reading accuracy score of 90% or more on Level 20 text. This was less than the percentage in the Barwon South West region (94.2 per cent) and less than the percentage of Year 2 students enrolled in government schools reading Level 20 texts with 90% accuracy or higher in Victoria (94.5 per cent).
- In 2009, Warrnambool (C) was ranked 55 out of 79 LGAs on the percentage of Year 2 students reading Level 5 texts with a reading accuracy score of 90% or higher. A rank of 1 was assigned to the LGA with the highest percentage of Year 2 students achieving 90% accuracy score or higher.

**Figure 27: Percentage of Prep, Year 1 and Year 2 students enrolled in government schools in Warrnambool (C), achieving a reading accuracy score of 90% or more at designated text levels, 2004 to 2008.**



*Note: The Y-axis on this chart does not start at zero.*

- In Victoria, the percentage of students enrolled in government schools who achieve a reading accuracy score of 90% or more at designated text levels improves as the child progresses through school. During 2008, 81.3 per cent of Prep students achieved a reading accuracy score of 90% or higher, compared to 86.4 per cent in Year 1 and 94.5 per cent in Year 2.
- Over the five year period between 2004 to 2008, an average of 84.2 per cent Prep students in Warrnambool (C) were reading Level 5 texts with 90% accuracy or higher. This was higher than the average percentage of Prep students in Victoria achieving at least 90% accuracy when reading Level 5 texts during this period (80.4 per cent).
- Over the five year period between 2004 to 2008, an average of 86.8 per cent Year 1 students in Warrnambool (C) were reading Level 15 texts with 90% accuracy or higher. This was similar to the average percentage of Year 1 students in Victoria achieving at least 90% accuracy when reading Level 15 texts during this period (86.7 per cent).
- Over the five year period between 2004 to 2008, an average of 94.1 per cent Year 2 students in Warrnambool (C) were reading Level 20 texts with 90% accuracy or higher. This was similar to the average percentage of Year 2 students in Victoria achieving at least 90% accuracy when reading Level 20 texts during this period (94.8 per cent).



## VCAMS Domain: Confident and Capable Families

### Outcome: Healthy adult lifestyle

#### Indicator: Children exposed to tobacco smoke in the home

##### What is measured?

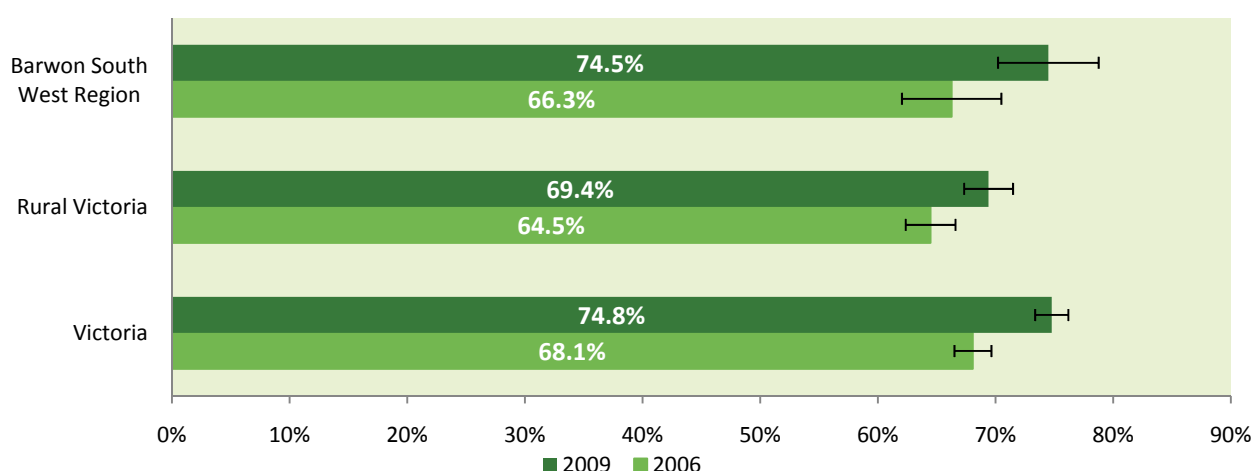
The proportion of children, aged from birth to 12 years, who live in a household where no one smokes cigarettes.

##### Why is it important?

In a recent review of the health consequences of exposure to second hand tobacco smoke, the US Surgeon General concluded that there is no risk free level of exposure to tobacco smoke and that even brief exposure can be harmful to children.<sup>31</sup>

Exposure to tobacco smoke in childhood is known to be associated with an increase in risk for a range of adverse health conditions including, asthma and wheezing illnesses, SIDS, infant mortality, croup, bronchiolitis and pneumonia in infancy, otitis media (glue ear), tonsillitis and serious bacterial infection.<sup>31</sup>

**Figure 28: Children aged 0 to 12 years living in a smoke free household, Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In Victoria, significantly more children aged 0 to 12 years were reported to live in a smoke free home in 2009 (74.8%) than compared to 2006 (68.1%). This pattern is consistent across Rural and Metropolitan Victoria.
- In the Barwon South West region, the proportion of children aged 0 to 12 years reported to live in a smoke free household in 2009 (74.5%) was higher, but not significantly different to that reported in 2006 (66.3%).
- Based on the 2009 VCHWS survey results, the proportion of children aged 0 to 12 years reported to live in a smoke free household in the Barwon South West region (74.5%) was similar to that reported across Victoria (74.8%).

## VCAMS Domain: Confident and Capable Families

### Outcome: Healthy adult lifestyle

#### Related Information: Parental general health

Within the VCHWS survey, the respondent was asked to rate his or her own general health as either 'excellent', 'very good', 'good', 'fair' or 'poor'. Responses are summarised in the figure below.

**Figure 29: Reported general health of parents or main carers of children aged 0 to 12 years in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- Based on the 2009 VCHWS Survey results, the majority of parents or carers of children aged 0 to 12 years in Victoria were reported to be in 'excellent' or 'very good' general health (68.3%). This was lower than, but not statistically different from the proportion of parents reported to be in 'excellent' or 'very good' general health in the 2006 survey (69.0%).
- In 2009, a small proportion of parents or carers of children aged 0 to 12 years in Victoria rated their general health as 'fair' or 'poor' (7.2%). This was similar to the proportion of parents reported to be in 'fair' or 'poor' general health in the 2006 survey (7.0%).
- In the Barwon South West region, the majority of parents or carers of children aged 0 to 12 years were reported to be in 'excellent' or 'very good' general health (68.6%). This was lower than, but not statistically different from the proportion of parents reported to be in 'excellent' or 'very good' general health in the 2006 survey (71.9%).
- In 2009, a small proportion of parents or carers of children aged 0 to 12 years in the Barwon South West region rated their general health as 'fair' or 'poor' (6.2%). This was higher than, but not statistically different from the proportion of parents reported to be in 'fair' or 'poor' general health in the 2006 survey (5.5%).



## VCAMS Domain: Confident and Capable Families

### Outcome: Parent promotion of child health and development

#### Indicator: Children who are read to by a family member every day

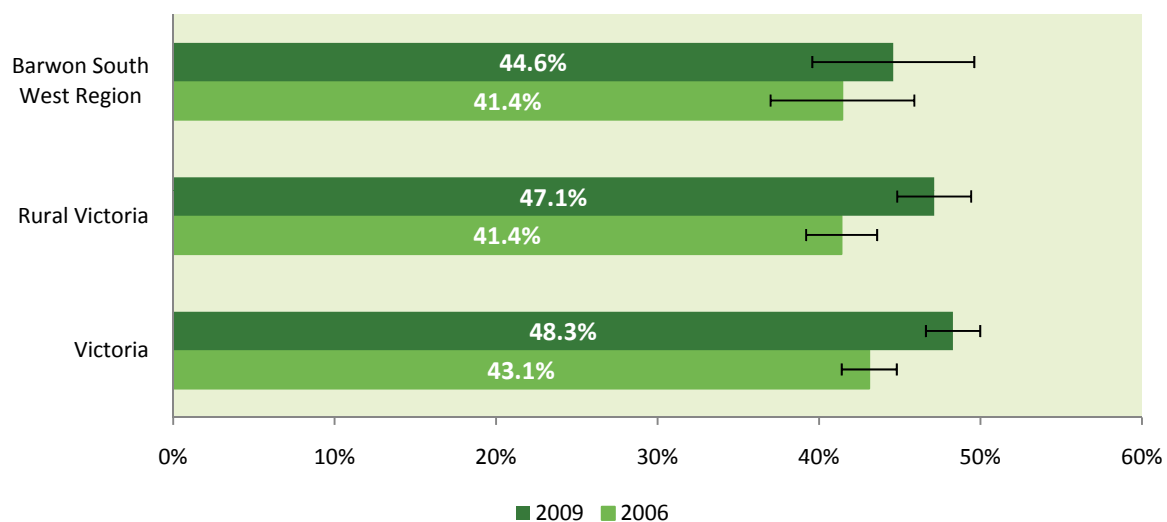
##### What is measured?

Percentage of children aged from 6 months to 12 years, who are read to almost every day (6 or 7 days a week) from a book by a family member.

##### Why is it important?

Positive early exposure to books is important for a child's future literacy. Reading provides opportunities for children and their parents to bond, promotes language development and contributes to school readiness. Children who struggle with reading when they start school often fall behind. Literacy is related to school performance, self-esteem and life chances.<sup>32</sup>

**Figure 30: Children aged 6 months to 12 years who were read to by a family member almost every day, in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- In Victoria, significantly more children aged 6 months to 12 years were read to by a family member almost every day in 2009 (48.3%) than compared to 2006 (43.1%). This pattern is consistent across Rural and Metropolitan Victoria.
- In the Barwon South West region, the proportion of children aged 6 months to 12 years reported to have been read to almost every day in 2009 (44.6%) was higher, but not significantly different to than that reported in 2006 (41.4%).
- Based on the 2009 VCHWS survey results, the proportion of children aged 6 months to 12 years who were reported to have been read to almost every day in the Barwon South West region (44.6%) was lower, but not significantly different to than that reported across Victoria (48.3%).

## VCAMS Domain: Confident and Capable Families

### Outcome: Parent promotion of child health and development

#### Indicator: Parents aware of sun protection

##### What is measured?

The proportion of children aged from birth to 12 years, with parents who report attempting to protect their child from the sun everyday in the summer months.

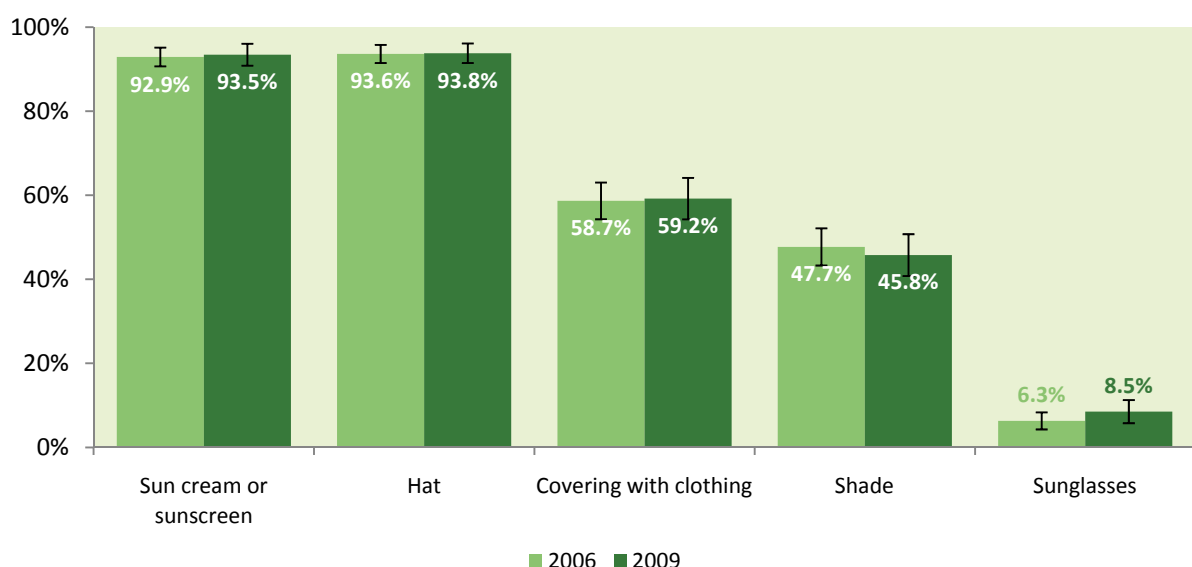
##### Why is it important?

While skin cancer in childhood is very rare, exposure to sunlight in childhood is a key determinant of skin cancer risk in later life.<sup>33,34</sup> Strategies to reduce exposure to the sun in the summer time include avoiding the sun during the middle of the day, keeping the skin covered with clothing and the use of a high sun protection factor sunscreen. Sunlight can be damaging to the eyes as well as the skin.

- The proportion of parents of children aged 0 to 12 years in Victoria who reported protecting their child from the sun everyday in the summer months in 2009 (81.7%) was lower, but not significantly different to, the proportion reported in 2006 (82.5%). This pattern is consistent across Rural and Metropolitan Victoria.
- In the Barwon South West region, the proportion of parents who reported protecting their child from the sun everyday in the summer months in 2009 (85.0%) was lower, but not significantly different to than that reported in 2006 (86.3%).
- Based on the 2009 VCHWS survey results, the proportion of children aged 0 to 12 years in the Barwon South West region whose parents were reported to protect them from the sun everyday in the summer months (85.0%) was more than that reported across Victoria (81.7%).

#### Most common forms of sun protection reported by parents

**Figure 31: Most common forms of sun protection used by parents of children aged 0 to 12 years in the Barwon South West region, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- The majority of parents in the Barwon South West region reported using sun cream or sunscreen and a hat to protect their children from the sun. The least common form of sun protection reported by parents of children aged 0 to 12 years was sunglasses.

## VCAMS Domain: Confident and Capable Families

### Outcome: Good parental mental health

#### Indicator: Children and young people who have parents with mental health difficulties

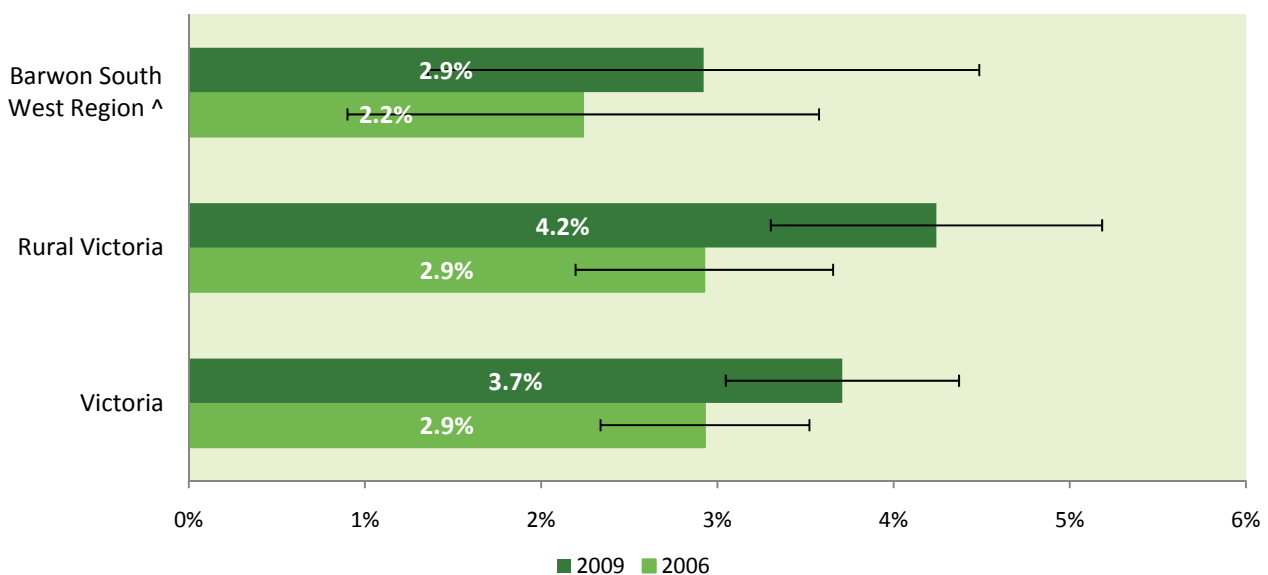
##### What is measured?

The Kessler 6 is used to measure the psychological health of the child's main caregiver. A score of 19 or more on the Kessler 6 signifies that an individual is at high risk of psychological distress.<sup>35</sup>

##### Why is it important?

Mental health problems and disorders not only impacts on the wellbeing of the individual directly affected, but also upon those close to them. When a parent has poor mental health, this has serious implications for immediate family members, especially the children. Young people face issues associated with parental mental illness that can result in disconnection from family, friends, school and their communities. In addition, research indicates that young people from families affected by parental mental illness are at higher risk for the onset of mental illness themselves.<sup>36,37,38</sup>

**Figure 32: Proportion of main carers who were at high risk of psychological distress in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

^ Estimates have a relative standard error of 25-50% and should be used with caution.

- **The proportion of main carers in Victoria who were classified as being of high risk of psychological distress in 2009 (3.7%) was higher than the proportion reported in 2006 (2.9%), but this difference was not significant.**
- In the Barwon South West region, more main carers of children aged 0 to 12 years were classified as being of high risk of psychological distress in 2009 (2.9%) as compared to 2006 (2.2%), but as the relative standard error for these estimates are between 25-50%, these figures should be used with caution.
- Based on the 2009 VCHWS, the proportion of main carers of children aged 0 to 12 years in the Barwon South West region, who were classified as being of high risk of psychological distress (2.9%) was lower, but not significantly different to that reported across Rural Victoria (4.2%) and lower, but not significantly different to that reported across Victoria (3.7%).



## VCAMS Domain: Confident and Capable Families

### Outcome: Free from abuse and neglect

#### 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 harm.<sup>39</sup>

##### Why is it important?

Childhood trauma, abuse and neglect is one of the most significant factors impacting on child health, wellbeing and development.<sup>30</sup>

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.<sup>11</sup>

#### Number and rate of child protection substantiations for children aged 0 to 8 years in Warrnambool (C), 2004 - 2005 to 2008 - 2009.

	Warrnambool (C)			Victoria		
	Number of substantiations	ERP of children aged 0 to 8 years at 30 June (a)	Rate per 1000 children aged 0 to 8 years	Number of substantiations	ERP of children aged 0 to 8 years at 30 June (a)	Rate per 1000 children aged 0 to 8 years
2004 - 2005	58	3,800	15.3	4,266	564,120	7.6
2005 - 2006	70	3,748	18.7	4,368	566,750	7.7
2006 - 2007	45	3,732	12.1	4,179	572,710	7.3
2007 - 2008	42	3,760	11.2	4,282	582,221	7.4
2008 - 2009	63	3,809	16.5	4,177	595,545	7.0

(a) Due to the time lag in the production of the Estimated Resident Population at an LGA level the population base used is the estimated resident population for the first year in the financial year period. For example the 2007-2008 rate is (Substantiations 2007-2008)/(ERP at 30 June 2007) x 1000. 2007 ERP is revised and 2008 is preliminary.

- In 2008 - 2009, the rate of child protection substantiations in Victoria was 7.0 per 1000 children aged 0 to 8 years. This rate was similar to the rate in 2007 - 2008 (7.4 per 1000 children aged 0 to 8 years) and has decreased from 7.6 per 1000 children aged 0 to 8 years in 2004 - 2005.
- In 2008 - 2009, the rate of child protection substantiations in Warrnambool (C) was 16.5 per 1000 children aged 0 to 8 years. This rate has increased from 11.2 per 1000 children aged 0 to 8 years in 2007 - 2008 and increased from 15.3 per 1000 children aged 0 to 8 years in 2004 - 2005. Over the 5 year period between 2004 - 2005 to 2008 - 2009, the rate of child protection substantiations in Warrnambool (C) has been increasing at an average rate of 0.3 per 1000 children aged 0 to 8 years per year.
- In 2008 - 2009, the rate of child protection substantiations per 1000 children aged 0 to 8 years in Warrnambool (C) was greater than the rate of child protection substantiations for children aged 0 to 8 years in Victoria (7.0 per 1000 children aged 0 to 8 years).





## VCAMS Domain: Confident and Capable Families

### Outcome: Ability to pay for family essentials

#### Indicator: Children from families that ran out of food in the past 12 months and could not afford to buy more

##### What is measured?

The proportion of children aged from birth to 12 years who are from households where the respondent reported there has been a time in the last 12 months when they ran out of food and were unable to buy more.

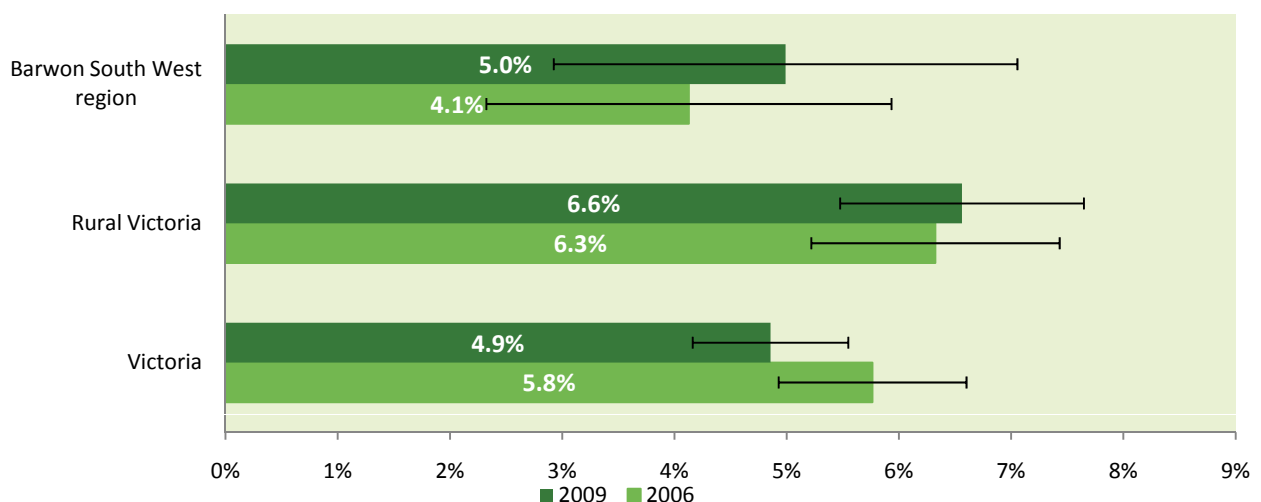
##### Why is it important?

The availability of nutritious foods is essential for physical and mental wellbeing. Food insecurity has been described as the inability to obtain nutritionally adequate, culturally acceptable and safe foods regularly, through local non-emergency services.<sup>40</sup>

Food insecurity is closely related to poverty. A review of food insecurity within Australia highlighted that the low-income groups at risk for food insecurity included unemployed people, single parents, those living in rental accommodation, young people and homeless people<sup>41</sup>. In the recent Victorian Child Health and Wellbeing Survey, single parents were again highlighted as being a group at risk of food insecurity.<sup>4</sup>

Paradoxically, food insecurity is linked to unhealthy weight, as low income and disadvantaged families are more likely to select foods which are perceived to be cheaper or acceptable to family members. These foods are often of poorer quality, with high fat, salt and/or sugar content.<sup>40</sup>

**Figure 33: Proportion of children aged 0 to 12 years from a household that ran out of food in the past 12 months and could not afford to buy more, the Barwon South West region, Rural Victoria and Victoria.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009

- The proportion of households in Victoria with young children who were reported to have run out of food in the past 12 months and could not afford to buy more decreased, but not significantly, from 5.8% in 2006 to 4.9% in 2009.
- In the Barwon South West region, the proportion of households with young children who were reported to have run out of food in the past 12 months and could not afford to buy more increased, but not significantly, from 4.1% in 2006 to 5.0% in 2009.
- Based on the 2009 VCHWS survey results, the proportion of households that ran out of food in the last 12 months and could not afford to buy more in the Barwon South West region (5.0%) was similar to that reported across Victoria (4.9%).

## VCAMS Domain: Confident and Capable Families

### Outcome: Adequate family housing

#### Indicator: Public housing retention rate for families with children

##### What is measured?

This indicator measures public housing retention for children aged 8 and under. See glossary at Appendix F for more information on public housing retention.

##### Why is it important?

Housing is considered a basic necessity for children and impacts upon them through both the quality and physical environment and the extent to which it is a secure environment. Transience and homelessness are known to be significant risk factors for children.<sup>11</sup> Parental stress can be increased if tenure is unknown or short-term, as can be the case for low-income families.<sup>30</sup>

#### Public housing retention for households with children aged 8 and under in Warrnambool (C), Rural Victoria and Victoria, 2003 - 2004 to 2007 - 2008.

2003 - 2004			
	Number of public housing allocations	Retention 12 months after allocation	Retention Rate (%)
Warrnambool (C)	58	52	89.7
Rural Victoria	1,248	1,158	92.8
Victoria	2,613	2,464	94.3
2004 - 2005			
	Number of public housing allocations	Retention 12 months after allocation	Retention Rate (%)
Warrnambool (C)	59	57	96.6
Rural Victoria	1,321	1,243	94.1
Victoria	2,819	2,691	95.5
2005 - 2006			
	Number of public housing allocations	Retention 12 months after allocation	Retention Rate (%)
Warrnambool (C)	41	36	87.8
Rural Victoria	1,101	946	85.9
Victoria	2,421	2,178	90.0
2006 - 2007			
	Number of public housing allocations	Retention 12 months after allocation	Retention Rate (%)
Warrnambool (C)	54	43	79.6
Rural Victoria	1,320	1,040	78.8
Victoria	2,545	2,161	84.9



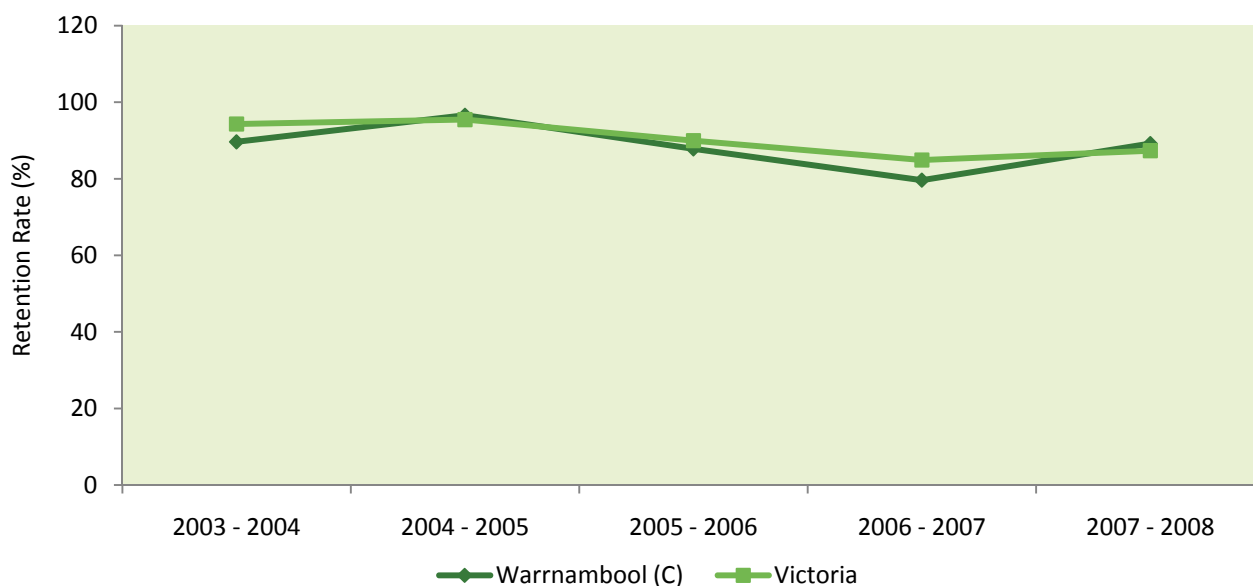
**Public housing retention for households with children aged 8 and under in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009 ... continued.**

<b>2007 - 2008</b>			
	Number of public housing allocations	Retention 12 months after allocation	Retention Rate (%)
Warrnambool (C)	37	33	89.2
Rural Victoria	1,143	943	82.5
Victoria	2,164	1,890	87.3

- The percentage of families with children aged 0 to 8 who remained in public housing 12 months or more after allocation in Warrnambool (C) during 2007 - 2008 was 89.2%. This was greater than the public housing retention rate for families with children in this age group in Rural Victoria (82.5%) and greater than the rate in Victoria (87.3%).
- Warrnambool (C) was ranked 24 out of 48 LGAs in terms of the retention rate of public housing for families with children aged 0 to 8 during 2007 - 2008. A rank of 1 was assigned to the LGA with the highest retention rate. Ranks were not assigned to LGAs who had 10 or less allocations during this period.

*Note: In LGAs where there are less than 10 allocations the data is not reported for confidentiality reasons. If applicable, this is represented by "np" in the above tables and data points are not plotted on the chart below.*

**Figure 34: Public housing retention rate for households with children aged 0 to 8 years in Warrnambool (C) and Victoria, 2003 - 2004 to 2007 - 2008.**



- The percentage of families with children aged 0 to 8 years in Victoria who have remained in public housing for 12 months or more has decreased from 94.3% in 2003 - 2004 to 87.3% in 2007 - 2008. The public housing retention rate for households with young children in Victoria has been decreasing at an average rate of 1.5% per year over the past five years.
- The percentage of families with children aged 0 to 8 years in Warrnambool (C) who have remained in public housing for 12 months or more has varied slightly from 89.7% in 2003 - 2004 to 89.2% in 2007 - 2008. The public housing retention rate for households with young children in Warrnambool (C) has been decreasing at an average rate of 0.1% per year over the past five years.

## VCAMS Domain: Confident and Capable Families

### Outcome: Adequate family housing

#### Related Information: Satisfaction with housing

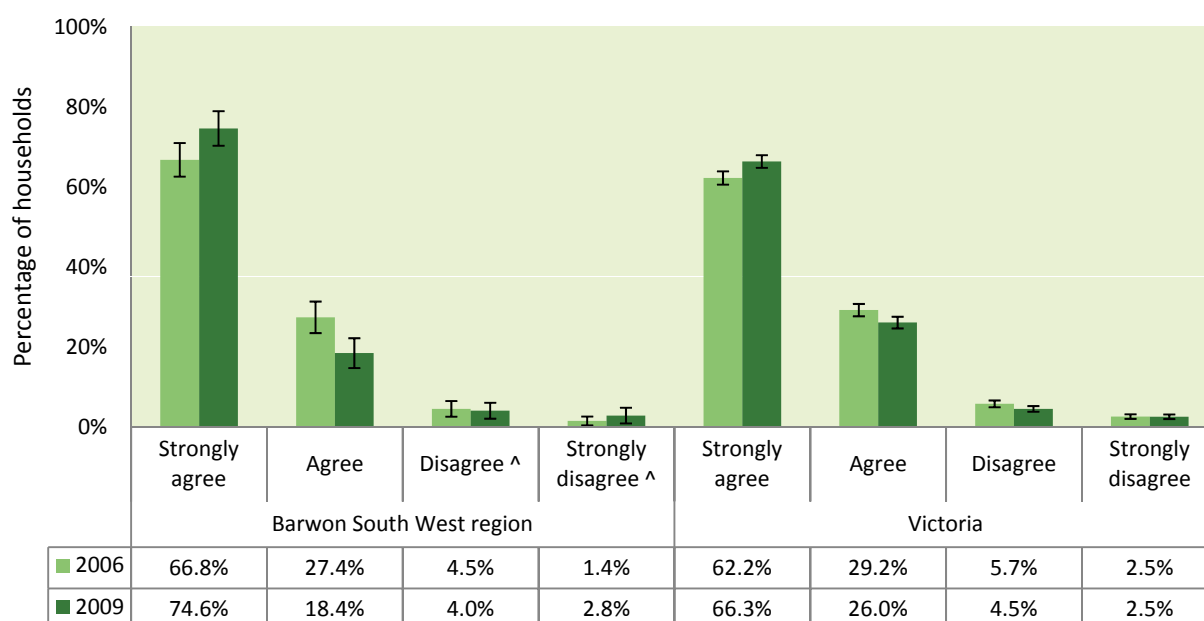
##### What is measured?

Within the VCHWS survey, respondents were asked to report if they 'agreed' or 'disagreed' that their home met their family's housing needs.

##### Why is it important?

A child's home is a key setting for many of their daily activities and social interactions. Housing characteristics such as lighting, ventilation, number of rooms, building materials and heating can all impact on health. For example, a damp home may increase risk of allergies or respiratory problems.

**Figure 35: Respondent agreement to whether their home meets their family's housing needs, households in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.

Note: Percentages will not sum to 100% as respondents who refused to answer or who did not know whether their house met their housing needs were not represented in the figure above.

^ Estimates have a relative standard error of 25-50% and should be used with caution.

- The proportion of parents of children aged 0 to 12 years in Victoria who 'strongly agreed' that their home met their family's housing needs in 2009 (66.3%) was significantly higher than the proportion reported in 2006 (62.2%).
- The proportion of parents in Victoria who 'strongly disagreed' that their home meets their family's housing needs in 2009 (2.5%) was similar to the proportion reported in 2006 (2.5%).
- In the Barwon South West region, more children aged 0 to 12 years were from homes that met their family's housing needs in 2009 (74.6%) as compared to 2006 (66.8%), but this difference was not significant.
- The proportion of parents in the Barwon South West region who 'strongly disagreed' that their home meets their family's housing needs in 2009 (2.8%) was higher than the proportion reported in 2006 (1.4%), but this difference was not significant.

## VCAMS Domain: Confident and Capable Families

### Outcome: Positive family functioning

#### Indicator: Children living in families with healthy family functioning

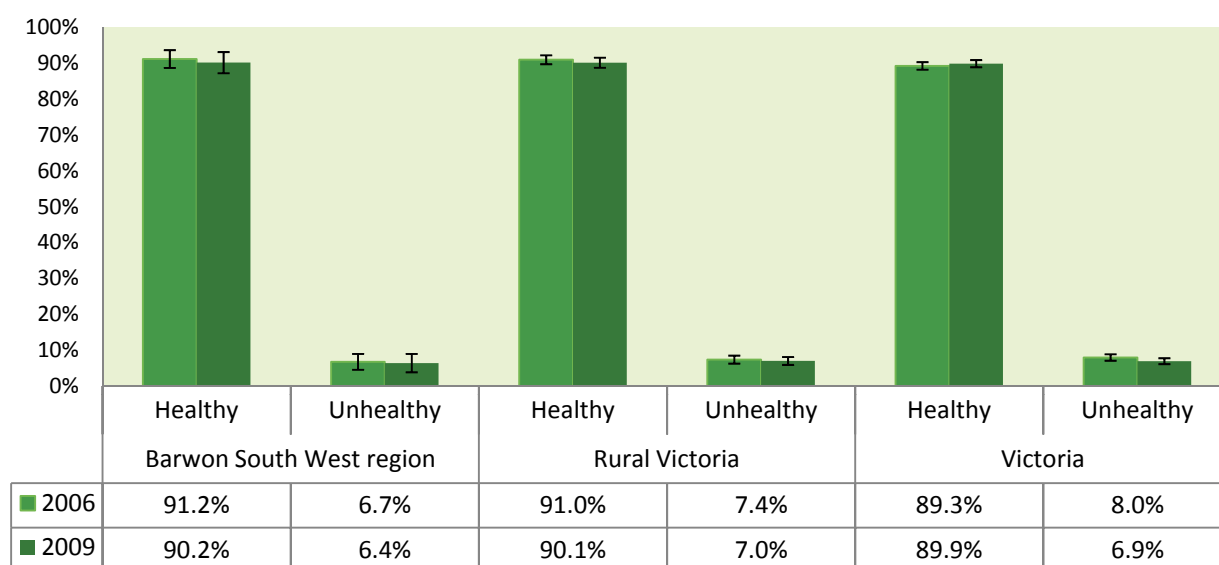
##### What is measured?

Family functioning is measured using the McMaster Family Assessment Device.<sup>42</sup> Households scoring 2.0 or below on the on the General Functioning Scale of the McMaster Family Assessment Device are considered to have healthy family functioning.

##### Why is it important?

The home environment and relationships between family members are key determinants of healthy development during childhood.<sup>43</sup> Benefits for children in families where cohesion is high, include having positive role models for building relationships, the ability to cope with stressful life events and the development of high self-esteem. Family discord and conflict can adversely effect the wellbeing of children and young people.<sup>44</sup>

**Figure 36: Reported family functioning of households with children aged 0 to 12 years in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.

Note: Percentages will not sum to 100% as those who reported unknown family functioning were not included in the figure above.

- In Victoria, more children aged 0 to 12 years were from households with healthy family functioning in 2009 (89.9%) as compared to 2006 (89.3%), but this difference was not significant.
- In the Barwon South West region, the proportion of children aged 0 to 12 years from households with healthy family functioning in 2009 (90.2%) was lower, but not significantly different to that reported in 2006 (91.2%) and similar to that reported across Victoria in 2009 (89.9%) .
- The proportion of children aged 0 to 12 years in the Barwon South West region from households with unhealthy family functioning in 2009 (6.4%) was similar to that reported in 2006 (6.7%) and lower, but not significantly different to that reported across Victoria in 2009 (6.9%) .



## VCAMS Domain: Confident and Capable Families

### Outcome: Positive family functioning

#### Indicator: Children living in families with high levels of family stress

##### What is measured?

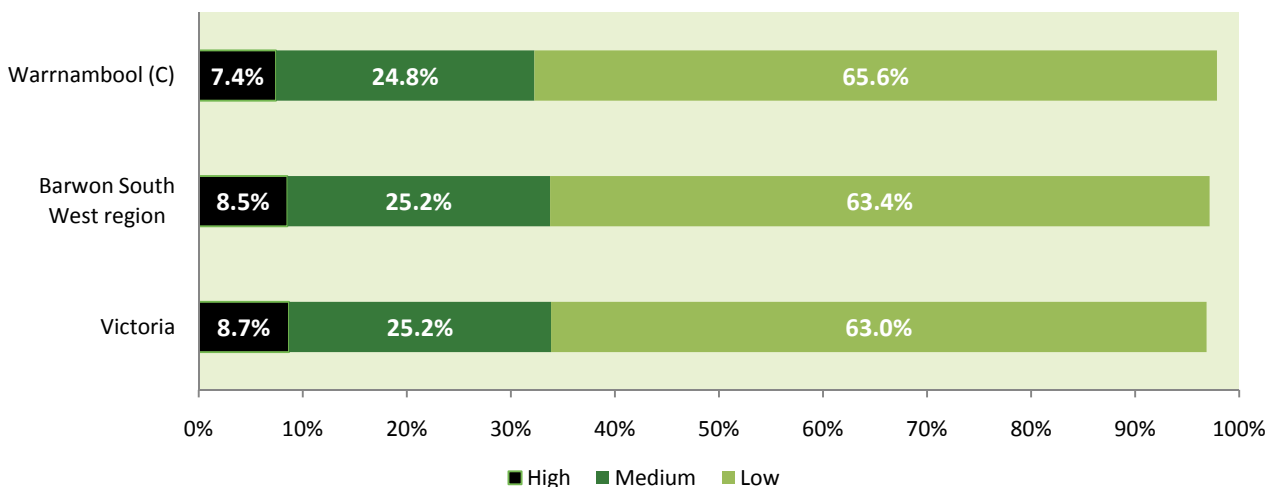
Percentage of children entering primary school whose parents report that their child has been affected by family stress over the past month, sourced from the School Entrant Health Questionnaire (SEHQ). For more information on SEHQ, refer to glossary at Appendix F).

##### Why is it important?

Stress occurs when the demands of life that a person experiences exceed (or they feel they exceed) their ability to cope. A variety of factors can contribute to the feeling of being 'stressed'. This may include: environmental (work, home, school etc), lifestyle and emotional issues. An individual person's attitude, personality and approach to life will influence how they respond to stress.

Exposure to life stressors can impact on health and wellbeing. Events such as a death in the family, serious illness, divorce, financial hardship including many other stresses, can have an effect on an individual or can also be experienced by other family members.<sup>45</sup> These adverse events can occur at any time in one's life and in various settings. For most people the impact is short-lived, but for some it can continue and impact on emotional wellbeing.

**Figure 37: Proportion of children entering school whose parents reported some level of family stress in the past month in Warrnambool (C), the Barwon South West region and Victoria, 2008.**



Source: School Entrant Health Questionnaire, 2008.

Notes: 1. Percentages will not sum to 100% as not all respondents of the SEHQ completed this item on the questionnaire.

2. Areas with less than five children in a reported family stress category are not represented in the figure above

- Based on the 2008 SEHQ, almost two thirds of families with children entering school in Victoria reported low levels of family stress over the past month (63.0%). However, a quarter of families in Victoria reported mid level family stress (25.2%) and a further 8.7% reported high levels of family stress over the past month.
- In Warrnambool (C), 7.4% of families with children entering school reported a high level of family stress over the past month. This was lower than the proportion reported in the Barwon South West region (8.5%) and lower than the proportion reported in Victoria (8.7%).
- The majority of families with children entering school In Warrnambool (C) reported low levels of family stress over the past month (65.6%). This proportion was higher than the proportion of families who reported low levels of family stress in the Barwon South West region (63.4%) and higher than the proportion reported in Victoria (63.0%).



## VCAMS Domain: Confident and Capable Families

### Outcome: Positive family functioning

#### Related information: Children affected by family stress

The School Entrant Health Questionnaire (SEHQ) asks respondents to indicate whether their child had been affected by a range of family stressors. Responses to this question are summarised in the table below.

#### Causes of family stress in the past 12 months, for children entering school in Warrnambool (C), the Barwon South West region and Victoria, 2008

Family stressor	Warrnambool (C)		Barwon South West region		Victoria	
	No.	%	No.	%	No.	%
Recent divorce / separation of parents	31	8.2	365	8.9	4553	8.5
Death of a relative or friend	24	6.4	368	9.0	4788	8.9
Move to a new house	58	15.4	723	17.7	8484	15.7
Move to a new school	43	11.4	561	13.8	7618	14.1
Parent's change of job	37	9.8	324	7.9	3713	6.9
Parent's loss of job	5	1.3	80	2.0	901	1.7
New baby in the house	39	10.4	420	10.3	5480	10.2
Remarriage of parent(s)	5	1.3	59	1.4	716	1.3
Serious illness of parent(s)	5	1.3	109	2.7	1272	2.4
Serious illness of sibling(s)	np	np	67	1.6	742	1.4
History of abuse to parent	np	np	96	2.4	1145	2.1
History of abuse to child(ren)	np	np	47	1.1	509	0.9
Alcohol or drug related problems in family	6	1.6	92	2.3	999	1.9
History of mental illness of parent	5	1.3	115	2.8	1394	2.6
Child was witness to violence	np	np	117	2.9	1352	2.5
Parent was witness to violence	np	np	67	1.6	750	1.4
Gambling problem in family	np	np	32	0.8	343	0.6

Source: School Entrant Health Questionnaire, 2008.

Note: As respondents were able to report more than one type of stressor, percentages in the table below will not sum to 100%.

- In Victoria, the three most common family stressor affecting children entering school were 'Move to a new house', with 15.7 per cent of children in Victoria affected by this stressor, followed by 'Move to a new school' (14.1 per cent) and 'New baby in the house' (10.2 per cent).
- In Victoria, the three least common family stressor affecting children entering school were 'Gambling problem in family', with 0.6 per cent of children in Victoria affected by this stressor, followed by 'History of abuse to child(ren)' (0.9 per cent) and 'Remarriage of parent(s)' (1.3 per cent).
- The three most common family stressor affecting children entering school in Warrnambool (C) were 'Move to a new house', with 15.4 per cent of children in Warrnambool (C) affected by this stressor, followed by 'Move to a new school' (11.4 per cent) and 'New baby in the house' (10.4 per cent).
- The three least common family stressor affecting children entering school in Warrnambool (C) were 'Parent's loss of job', with 1.3 per cent of children in Warrnambool (C) affected by this stressor, followed by 'Parent's loss of job' (1.3 per cent) and 'Remarriage of parent(s)' (1.3 per cent).





## VCAMS Domain: Strong and supportive communities

### Outcome: Safe from environmental toxins

#### Indicator: Children living in clean neighbourhoods

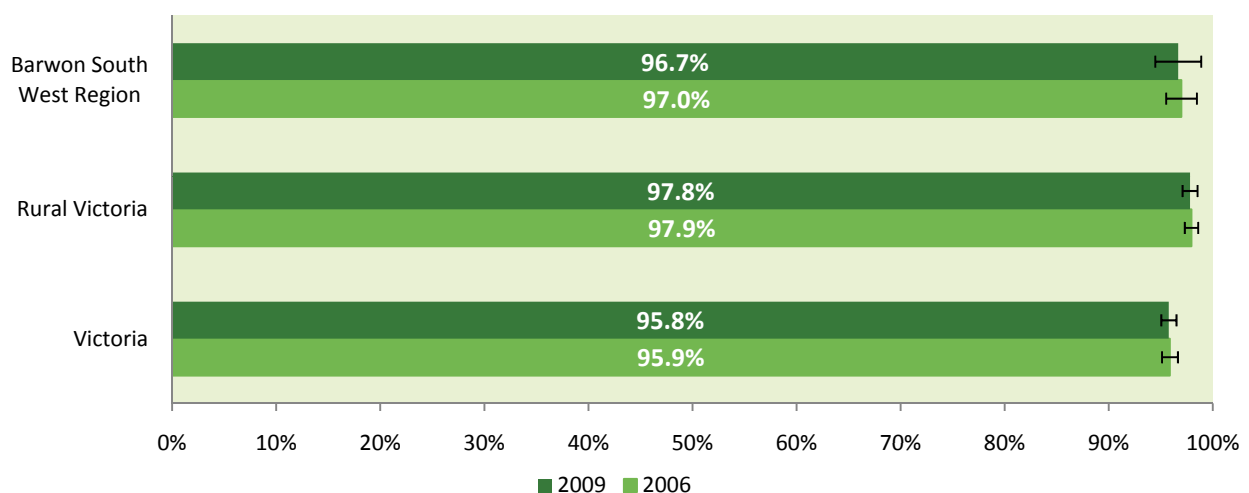
##### What is measured?

The proportion of children aged birth to 12 years with parents or carers who 'agreed' or 'strongly agreed' that they lived in a clean neighbourhood. Respondents were asked to report on the area that they considered to be their neighbourhood.

##### Why is it important?

The World Health Organisation recognises the influence the physical urban environment has on health.<sup>46</sup> Adults with positive perceptions of their environment are less likely to be obese or to rate their own health negatively.<sup>47</sup> The physical characteristics of a neighbourhood, such as the quality of the homes, the presence or absence of graffiti or litter influence people's perceptions of neighbourhood safety and willingness to exercise.

**Figure 38: Percentage of parents of children aged 0 to 12 years, who agree that their neighbourhood is clean, in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.

- An extremely high proportion of children aged 0 to 12 years in Victoria were from households where the parent or guardian agreed that their neighbourhood was clean (95.8% in 2009).
- The proportion of respondents across Victoria who agreed that their neighbourhood was clean in 2009 was similar to the proportion reported across Victoria in 2006 (95.9%).
- In 2009, 96.7% of children aged 0 to 12 years in the Barwon South West region were from households where the parent or guardian agreed that their neighbourhood was clean. This proportion was lower than, but not significantly different to the proportion reported across Rural Victoria (97.8%) and higher than, but not significantly different to the proportion reported across Victoria (95.8%).
- The proportion of households in the Barwon South West region where the parent or guardian agreed that their neighbourhood was clean in 2009 was similar to the proportion reported across the Barwon South West region in 2006 (97.0%).



## VCAMS Domain: Strong and supportive communities

### Outcome: Safe from environmental toxins

#### Indicator: Children living in neighbourhoods with heavy traffic

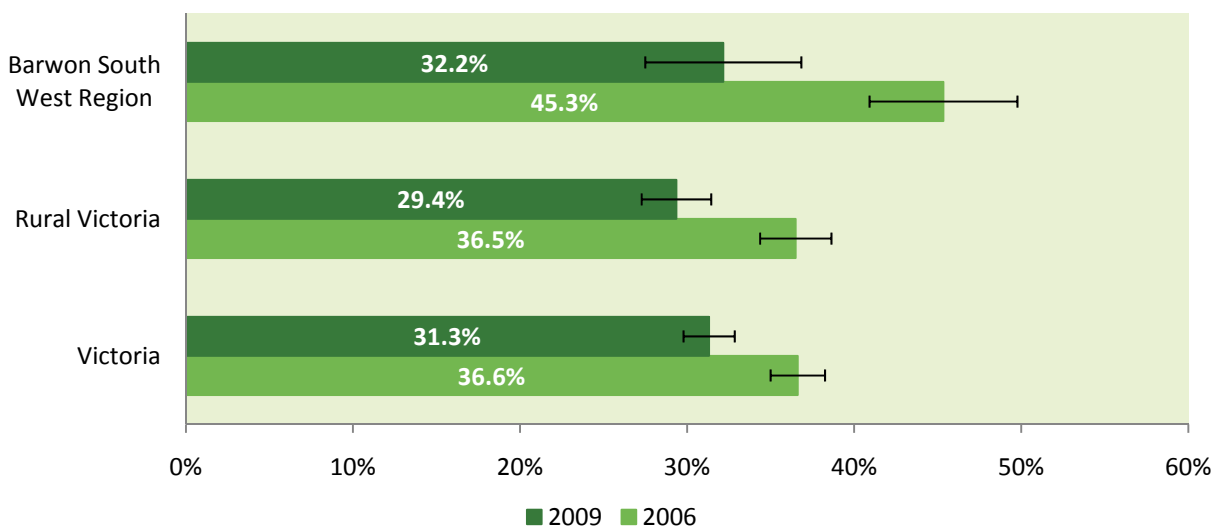
##### What is measured?

The proportion of children aged birth to 12 years with parents or carers who 'agreed' or 'strongly agreed' that they had heavy traffic on their street or road. Respondents were asked to report on the area that they considered to be their neighbourhood.

##### Why is it important?

Road traffic can influence children's health directly and indirectly. Children who live next to busy roads are at increased risk of suffering from respiratory problems.<sup>48</sup> Parents who live on a street or road with heavy traffic and who are concerned about the potential for traffic accidents, may restrict their child's freedom to walk or cycle.<sup>48,49</sup> This in turn may hinder the development of independence, reduce social contact and inhibit physical activity.

**Figure 39: Percentage of parents of children aged 0 to 12 years, who agree that their neighbourhood has heavy traffic, in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.

- In Victoria, almost one third (31.3%) of households with children aged 0 to 12 years old reported that their neighbourhood had heavy traffic in the 2009 VCHWS survey. This was significantly lower than the proportion reported in 2006 (36.6%).
- The proportion of households in Rural Victoria with children 0 to 12 years who reported that they had heavy traffic in their neighbourhood in 2009 (29.4%) was significantly lower than that reported in 2006 (36.5%).
- In the Barwon South West region, 32.2% of households with children aged 0 to 12 years old reported that their neighbourhood had heavy traffic in the 2009 VCHWS survey. This was significantly lower than the proportion reported in 2006 (45.3%) and higher than, but not significantly different to the proportion reported across Victoria in 2009.



## VCAMS Domain: Strong and supportive communities

**Outcome: Communities that enable parents, children and young people to build connections and draw informal assistance**

**Indicator: Children from families who are able to get support when needed**

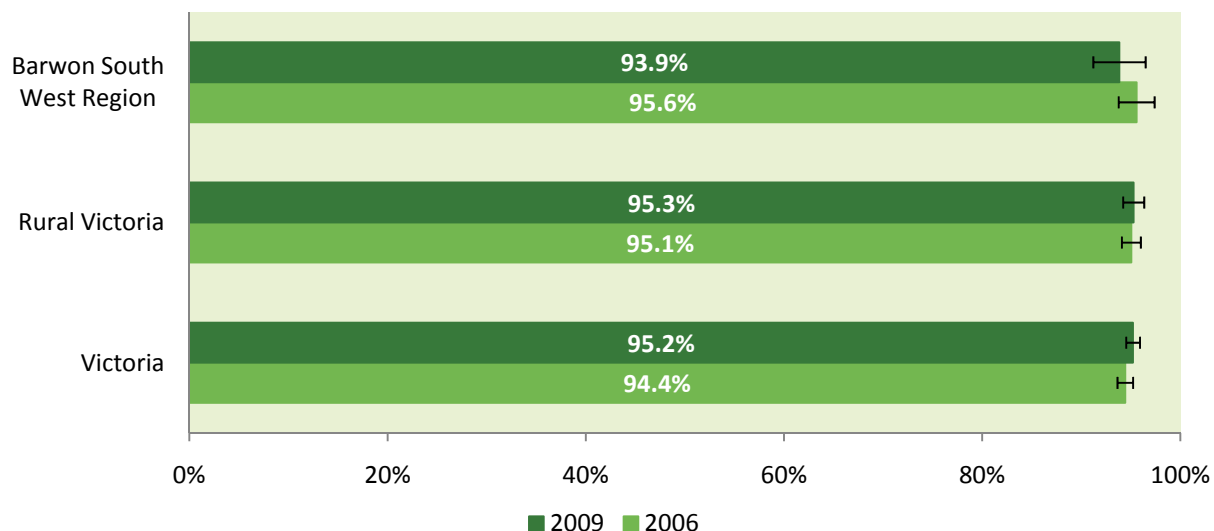
### What is measured?

The proportion of children, aged under thirteen, with parents or carers who reported being able to get support in a time of crisis/when needed.

### Why is it important?

People who live in disadvantaged neighbourhoods but who have access to good social support networks seem to cope better than people from disadvantaged areas where social cohesion is poorer.<sup>50</sup>

**Figure 40: Percentage of parents of children aged 0 to 12 years, who reported being able to get help from families, friends and neighbours in a time of crisis/when needed, in the Barwon South West region, Rural Victoria and Victoria.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.

- In 2009, the vast majority (95.2%) of households in Victoria with children aged 0 to 12 years old, reported that they were able to get support when needed. This was higher than, but not significantly different to the proportion reported in 2006 (94.4%).
- In 2009, 93.9% of children aged 0 to 12 years in the Barwon South West region were from households who reported being able to get support from friends, family and neighbours in times of crisis/need. This proportion was lower than, but not significantly different to the proportion reported across Rural Victoria (95.3%) and similar to the proportion reported across Victoria (95.2%).
- The proportion of children aged 0 to 12 years in the Barwon South West region who were from households where the parent or guardian reported that they were able to get support when needed in 2009 was lower than, but not significantly different to the proportion reported across the Barwon South West region in 2006 (95.6%).

## VCAMS Domain: Strong and supportive communities

**Outcome: Communities that enable parents, children and young people to build connections and draw informal assistance**

**Indicator: Children from families who are able to raise \$2000 in an emergency**

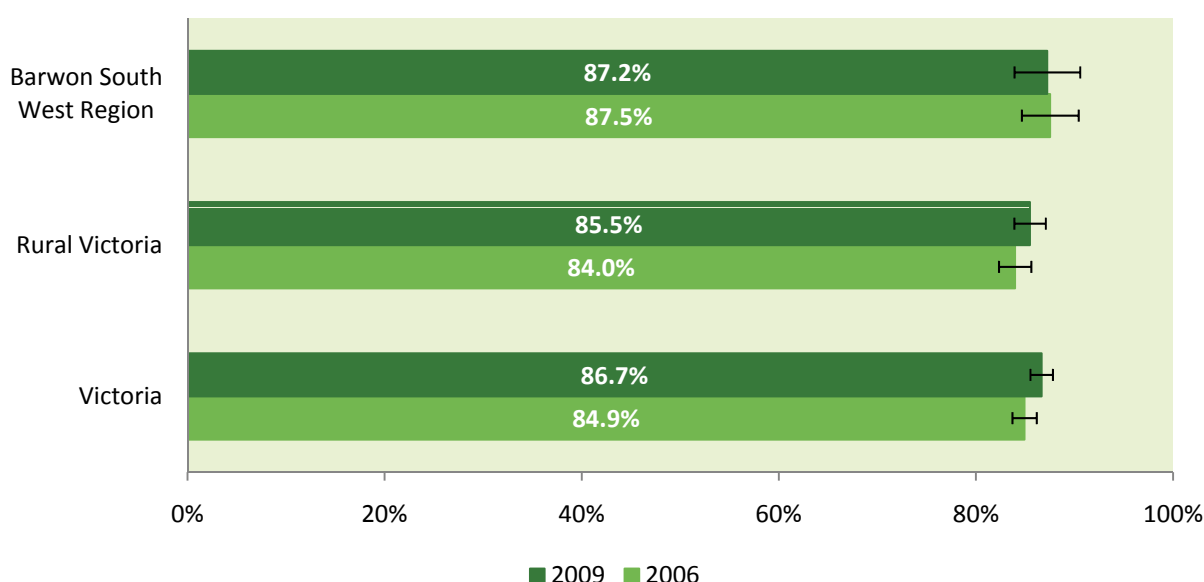
### What is measured?

The proportion of children (aged under 13 years) from households where the respondent agreed that they would be able to raise \$2000 (including the use of a credit card) within two days in an emergency.

### Why is it important?

From time to time all families have unexpected expenses. Having access to emergency funds may help to buffer families against stress and help them cope during difficult times.

**Figure 41: Percentage of parents of children aged 0 to 12 years, who reported being able to raise \$2000 within two days in an emergency, in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.

- In 2009, the majority (86.7%) of households in Victoria with children aged 0 to 12 years old, reported that they were able to raise \$2000 within two days in an emergency. This was higher than, but not significantly different to the proportion reported in 2006 (84.9%).
- In 2009, 87.2% of children aged 0 to 12 years in the Barwon South West region were from households who reported being able to raise \$2000 within two days in an emergency. This proportion was higher than, but not significantly different to the proportion reported across Rural Victoria (85.5%) and higher than, but not significantly different to the proportion reported across Victoria (86.7%).
- The proportion of children aged 0 to 12 years in the Barwon South West region who were from households where the parent or guardian reported that they were able to raise \$2000 within two days in an emergency in 2009 was similar to the proportion reported across the Barwon South West region in 2006 (87.5%).



## VCAMS Domain: Strong and supportive communities

### Outcome: Communities that enable parents, children and young people to build connections and draw informal assistance

#### Indicator: Children with parents who have someone to turn to for advice when having problems

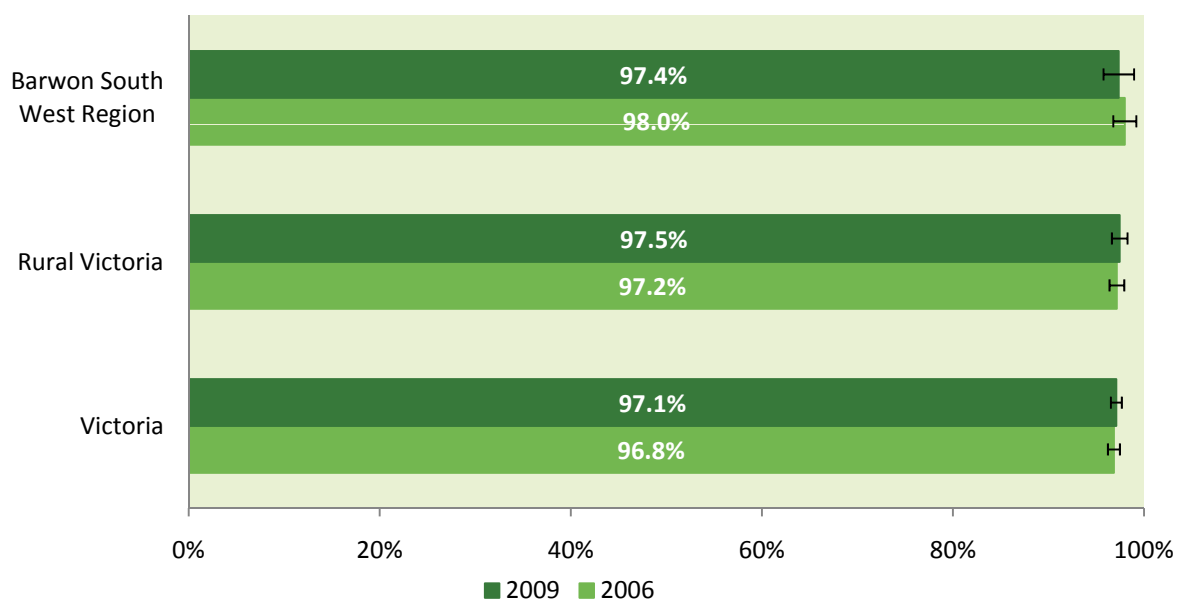
##### What is measured?

The proportion of children aged under 13 with parents or carers who 'agreed' or 'strongly agreed' that they had someone they trusted, who they could turn to for advice when having problems.

##### Why is it important?

Social cohesion has been defined as the connections and relations between individuals, groups and associations. High levels of trust and healthy relationships within communities and families impact positively on the development of the child.<sup>18,44</sup>

**Figure 42: Percentage of parents of children aged 0 to 12 years, who reported having someone to turn to for advice when having problems, in the Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.

- An extremely high proportion of parents of children aged 0 to 12 years in Victoria reported having someone they could turn to for advice when having problems (97.1% in 2009).
- In 2009, 97.4% of parents of children aged 0 to 12 years in the Barwon South West region reported that they have someone they could turn to for advice when having problems. This proportion was similar to the proportion reported across Rural Victoria (97.5%) and similar to the proportion reported across Victoria (97.1%).
- The proportion of households in the Barwon South West region where the parent reported to have someone they could turn to for advice when having problems in 2009 was lower than, but not significantly different to the proportion reported across the Barwon South West region in 2006 (98.0%).



## VCAMS Domain: Strong and supportive communities

### Outcome: Accessible local recreation spaces, activities and community facilities

#### Indicators:

Proportion of children and young people living in neighbourhoods with basic shopping facilities

Proportion of children and young people living in neighbourhoods with basic services

Proportion of children and young people living in neighbourhoods with good parks, playgrounds or play spaces;

Proportion of children living in neighbourhoods with close, affordable, regular public transport;

#### What is measured?

The proportion of parents with children aged under 13 who 'agreed' or 'strongly agreed' with the descriptions of their neighbourhood. Respondents were left to define what area they considered to be their 'neighbourhood'.

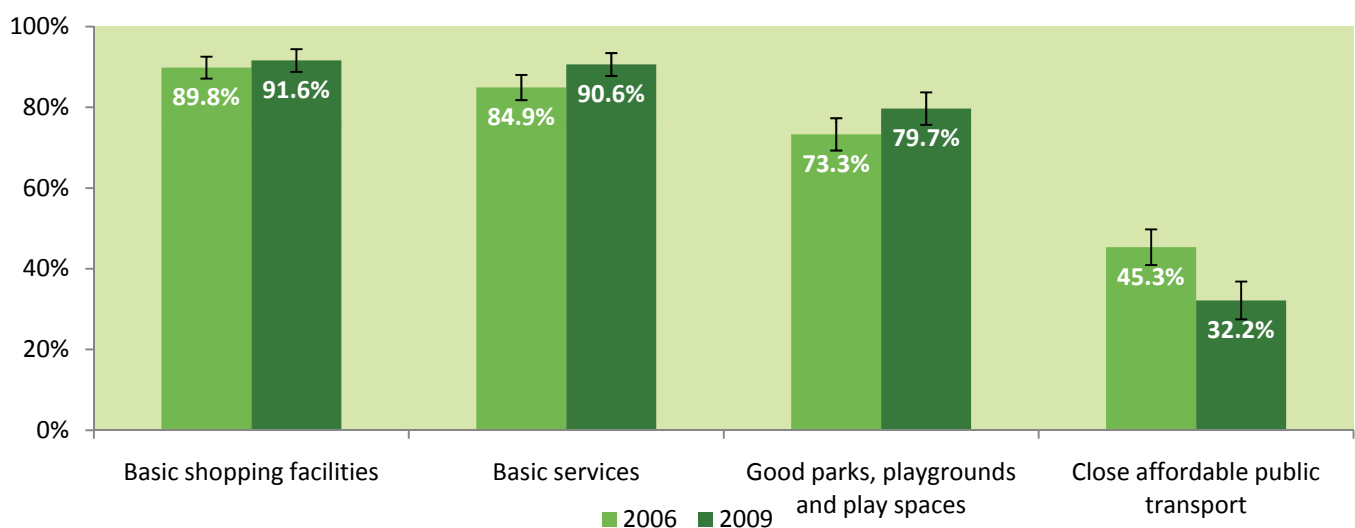
#### Why is it important?

Local amenities, such as shops, banks and recreation facilities can help to create a 'sense of place', and provide opportunities for members of the local community to interact.<sup>51</sup> Urban planning that incorporates local shops and recreational opportunities promotes walking and activity within the neighbourhood. Local facilities are particularly important for children who are likely to have restrictions placed upon how far away from home they can travel unsupervised and who are reliant on adults for transport outside of their local area.

Good access to public transport has the potential to decrease the risk of social exclusion among vulnerable families, by increasing accessibility to services and employment or training opportunities.<sup>52</sup>

Access to green and open spaces is thought to be beneficial to general health and mental health.<sup>52</sup> Play spaces provide children with the freedom to explore their environment and to expand their activities beyond what is possible in the home, for example through participation in play that incorporates greater levels of activity, more participants and/ or more noise.<sup>53</sup> Stimulating play spaces that encourage children to explore, build, climb and move encourage children to problem solve, think creatively, build independence, develop motor skills, strength and co-ordination, interact positively with others....and to have fun!

**Figure 43: Parents of children aged 0 to 12 years who 'agreed' or 'strongly agreed' with descriptions of access to local facilities and services in their neighbourhoods, Barwon South West region, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.



### Children living in neighbourhoods with basic shopping facilities

- Based on the 2009 VCHWS, the vast majority (94.1%) of parents of children aged 0 to 12 years in Victoria agreed that their neighbourhood had basic shopping facilities. This proportion was higher than, but not significantly different to that reported in 2006 (93.1%).
- In the Barwon South West region, 91.6% of parents of children aged 0 to 12 years agreed that their neighbourhood had basic shopping facilities in 2009. This proportion was higher than, but not significantly different to the proportion reported across the Barwon South West region in 2006 (89.8%) and lower than, but not significantly different to the proportion reported across Victoria in 2009 (94.1%).

### Children living in neighbourhoods with basic services

- Based on the 2009 VCHWS, the majority (92.0%) of parents of children aged 0 to 12 years in Victoria agreed that their neighbourhood had basic services. This proportion was significantly higher than that reported in 2006 (87.7%).
- In the Barwon South West region, 90.6% of parents of children aged 0 to 12 years agreed that their neighbourhood had basic services in 2009. This proportion was higher than, but not significantly different to the proportion reported across the Barwon South West region in 2006 (84.9%) and lower than, but not significantly different to the proportion reported across Victoria in 2009 (92.0%).

### Children living in neighbourhoods with good parks, playgrounds or play spaces

- Based on the 2009 VCHWS, the majority (85.9%) of parents of children aged 0 to 12 years in Victoria agreed that their neighbourhood had good parks, playgrounds and play spaces. This proportion was significantly higher than that reported in 2006 (83.1%).
- In the Barwon South West region, 79.7% of parents of children aged 0 to 12 years agreed that their neighbourhood had good parks, playgrounds and play spaces in 2009. This proportion was higher than, but not significantly different to the proportion reported across the Barwon South West region in 2006 (73.3%) and significantly lower than the proportion reported across Victoria in 2009 (85.9%).

### Children living in neighbourhoods with close affordable public transport

- Only 31.3% of parents of children aged 0 to 12 years in Victoria agreed that their neighbourhood had close, affordable public transport in the 2009 VCHWS. This proportion was significantly lower than that reported in 2006 (36.6%).
- In the Barwon South West region, 32.2% of parents of children aged 0 to 12 years agreed that their neighbourhood had close, affordable public transport in 2009. This proportion was significantly lower than the proportion reported across the Barwon South West region in 2006 (45.3%) and higher than, but not significantly different to the proportion reported across Victoria in 2009 (31.3%).





## VCAMS Domain: Strong and supportive communities

### Outcome: Low levels of crime in community

#### Indicator: Proportion of children and young people who feel safe

##### What is measured?

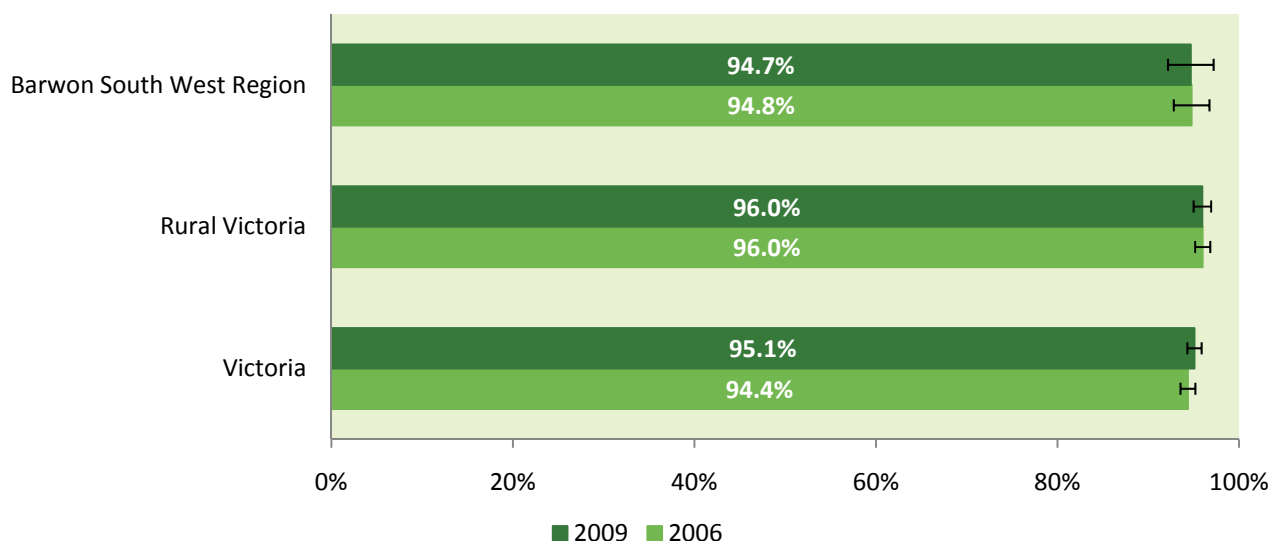
The proportion of children aged from birth to 12 years of age with a parent or carer who 'agreed' or 'strongly agreed' that their neighbourhood was safe.

##### Why is it important?

An individual's perceptions of how safe their neighbourhood is, closely relates to their overall level of satisfaction with their community.<sup>51</sup> Having negative neighbourhood perceptions can deter individuals from building and maintaining social networks in their local area, and from accessing local services and recreational facilities.<sup>18</sup> There is evidence that it is perceived levels of safety rather than actual levels of crime that are most likely to influence activity levels within neighbourhoods.<sup>54</sup> Parents who consider their neighbourhood to be unsafe are likely to put greater constraints on their child's activities.

Parents from higher socio economic groups are more likely to report feeling safe in their communities. In the 2006 Victorian Child Health and Wellbeing Survey, parents with children listed on health care cards were less likely to agree or strongly agree that their neighbourhood was a safe place to live than those without health care cards.<sup>9</sup>

**Figure 44: Parents of children aged 0 to 12 years who 'agreed' or 'strongly agreed' that their neighbourhood was safe, Barwon South West region, Rural Victoria and Victoria, 2006 and 2009.**



Source: Victorian Child Health and Wellbeing Survey, DEECD, 2006 and 2009.

- In 2009, 95.1% of parents with children aged 0 to 12 years in Victoria 'agreed' or 'strongly agreed' that their neighbourhood was safe. This proportion was higher than, but not significantly different to that reported in 2006 (94.4%).
- In 2009, 94.7% of children aged 0 to 12 years in the Barwon South West region were from households where the parent or guardian agreed that their neighbourhood was safe. This proportion was lower than, but not significantly different to the proportion reported across Rural Victoria (96.0%) and similar to the proportion reported across Victoria (95.1%).
- The proportion of households in the Barwon South West region where the parent or guardian agreed that their neighbourhood was safe in 2009 was similar to the proportion reported across the Barwon South West region in 2006 (94.8%).



## VCAMS Domain: Supports and services

### Outcome: Early identification of and attention to child health needs

#### Indicator: Hospital admissions for gastroenteritis in children under one year of age

##### What is measured?

This indicator measures hospital separations for gastroenteritis in infants aged under one. Separation refers to a completed episode of care in a hospital. Therefore, by counting separations, one is counting episodes of care.

##### Why is it important?

Gastroenteritis is one of the Ambulatory care sensitive conditions (ACSCs). ACSCs are 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.

**Number and rate of hospital separations for gastroenteritis in infants aged under one in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009.**

##### 2004 - 2005

	Number of hospital separations for gastroenteritis	Estimated Resident Population of infants aged 0 to 1	Rate per 1000 infants aged 0 to 1
Warrnambool (C)	8	378	21.2
Barwon South West region	68	4,104	16.6
Victoria	844	61,621	13.7

##### 2005 - 2006

	Number of hospital separations for gastroenteritis	Estimated Resident Population of infants aged 0 to 1	Rate per 1000 infants aged 0 to 1
Warrnambool (C)	18	370	48.6
Barwon South West region	81	4,090	19.8
Victoria	1,201	62,304	19.3

##### 2006 - 2007

	Number of hospital separations for gastroenteritis	Estimated Resident Population of infants aged 0 to 1	Rate per 1000 infants aged 0 to 1
Warrnambool (C)	19	378	50.3
Barwon South West region	107	4,240	25.2
Victoria	1,306	65,041	20.1

##### 2007 - 2008

	Number of hospital separations for gastroenteritis	Estimated Resident Population of infants aged 0 to 1	Rate per 1000 infants aged 0 to 1
Warrnambool (C)	12	406	29.6
Barwon South West region	56	4,341	12.9
Victoria	926	68,665	13.5



**Number and rate of hospital separations for gastroenteritis in infants aged under one in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009 ... continued.**

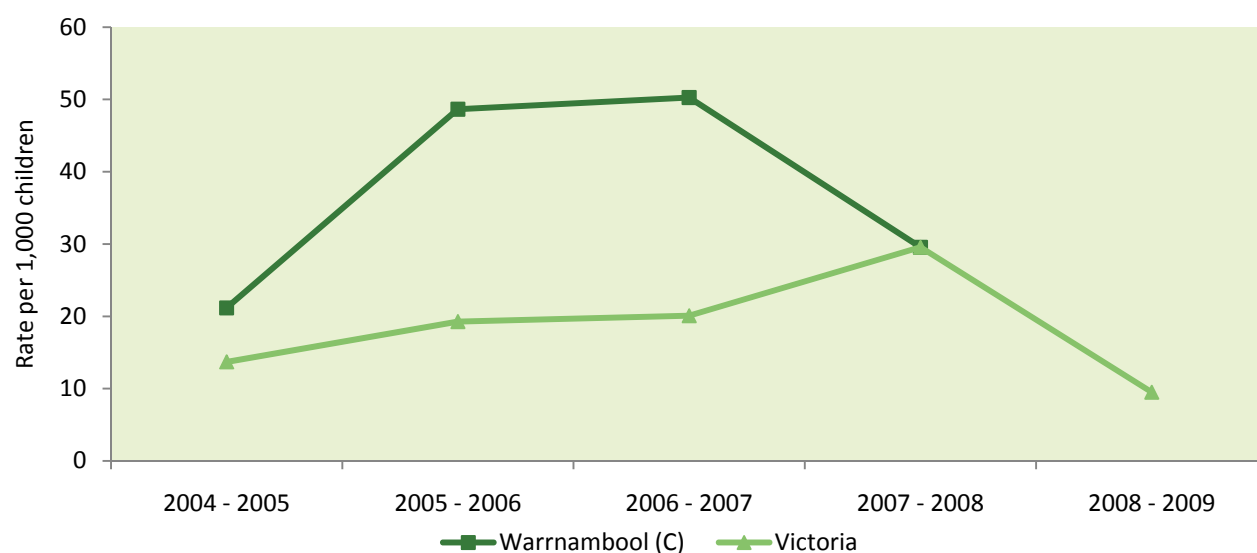
	<b>2008 - 2009</b>		
	Number of hospital separations for gastroenteritis	Estimated Resident Population of infants aged 0 to 1	Rate per 1000 infants aged 0 to 1
Warrnambool (C)	np	420	np
Barwon South West region	46	4,655	9.9
Victoria	694	73,079	9.5

- Due to small numbers of hospital separations for gastroenteritis among infants aged under one in Warrnambool (C), the rate of hospital separations for gastroenteritis during 2008 - 2009 could not be derived. During 2008 - 2009, there were 9.9 hospital separations for gastroenteritis per 1,000 infants aged under one in the broader Barwon South West region. This was similar to the rate of hospital separations for gastroenteritis in Victoria (9.5 per 1,000 infants aged under one).

- #N/A

*Note: In LGAs where there are less than 5 hospital separations, the data is not reported for confidentiality reasons. If applicable, this is represented by "np" in the above tables and data points are not plotted on the chart below.*

**Figure 45: Rate of hospital separations for gastroenteritis in infants aged under one in Warrnambool (C) and Victoria, 2004 - 2005 to 2008 - 2009.**



- The rate of hospital separations for gastroenteritis in Victoria in infants aged under one has decreased from 13.7 per 1,000 children aged 0 to 1 in 2004 - 2005 to 9.5 in 2008 - 2009. This represents a an average annual decline of 1.4 hospital separations for gastroenteritis over the five year period between 2004 - 2005 and 2008 - 2009.
- The rate of hospital separations for gastroenteritis in Warrnambool (C) has increased from 21.2 per cent in 2004 - 2005 to 29.6 per cent in 2007 - 2008.

## VCAMS Domain: Supports and services

### Outcome: Early identification of and attention to child health needs

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

#### Indicator: Proportion of children attending the 3½ year key ages and stages visits

##### What is measured?

The Maternal and Child Health (MCH) service provides ten key ages and stages consultations from birth to 3½ years. This indicator measures participation in the first and last of these 10 key visits - children seen at home consultation visit and children seen at 3½ year ages and stages visit.

##### 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.<sup>55</sup>

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.<sup>56</sup> All children can benefit from their family having access to helpful guidance as they grow and develop.<sup>56</sup>

#### Number and percentage of children receiving a Maternal and Child Health Service home consultation and attending the 3.5 year key ages and stages visit in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009.

2004 - 2005						
	Home Consultation Visit			3.5 year Key Ages and Stages visit		
	Home Consultation Visits	Infant record cards - children aged 0 to 1 years	Percentage receiving a home consultation visit	3.5 year Key Ages and Stages visit	Mean infant record cards - children aged 3 to 4 and aged 4 to 5	Percentage receiving the 3.5 year key ages and stages visit
Warrnambool (C)	326	316	103.2	178	358	49.7
Barwon South West region	4,071	4,036	100.9	2,556	4,275	59.8
Victoria	60,327	62,226	96.9	35,189	63,188	55.7
2005 - 2006						
	Home Consultation Visit			3.5 year Key Ages and Stages visit		
	Home Consultation Visits	Infant record cards - children aged 0 to 1 years	Percentage receiving a home consultation visit	3.5 year Key Ages and Stages visit	Mean infant record cards - children aged 3 to 4 and aged 4 to 5	Percentage receiving the 3.5 year key ages and stages visit
Warrnambool (C)	366	362	101.1	162	400	40.5
Barwon South West region	3,907	4,044	96.6	2,640	4,391	60.1
Victoria	62,410	65,028	96.0	37,425	64,473	58.0
2006 - 2007						
	Home Consultation Visit			3.5 year Key Ages and Stages visit		
	Home Consultation Visits	Infant record cards - children aged 0 to 1 years	Percentage receiving a home consultation visit	3.5 year Key Ages and Stages visit	Mean infant record cards - children aged 3 to 4 and aged 4 to 5	Percentage receiving the 3.5 year key ages and stages visit
Warrnambool (C)	417	399	104.5	230	409	56.3
Barwon South West region	4,321	4,355	99.2	2,463	4,350	56.6
Victoria	67,069	68,441	98.0	37,811	65,385	57.8

Number and percentage of children receiving a Maternal and Child Health Service home consultation and attending the 3.5 year key ages and stages visit in Warrnambool (C), the Barwon South West region and Victoria, 2004 - 2005 to 2008 - 2009 ... continued.

## 2007 - 2008

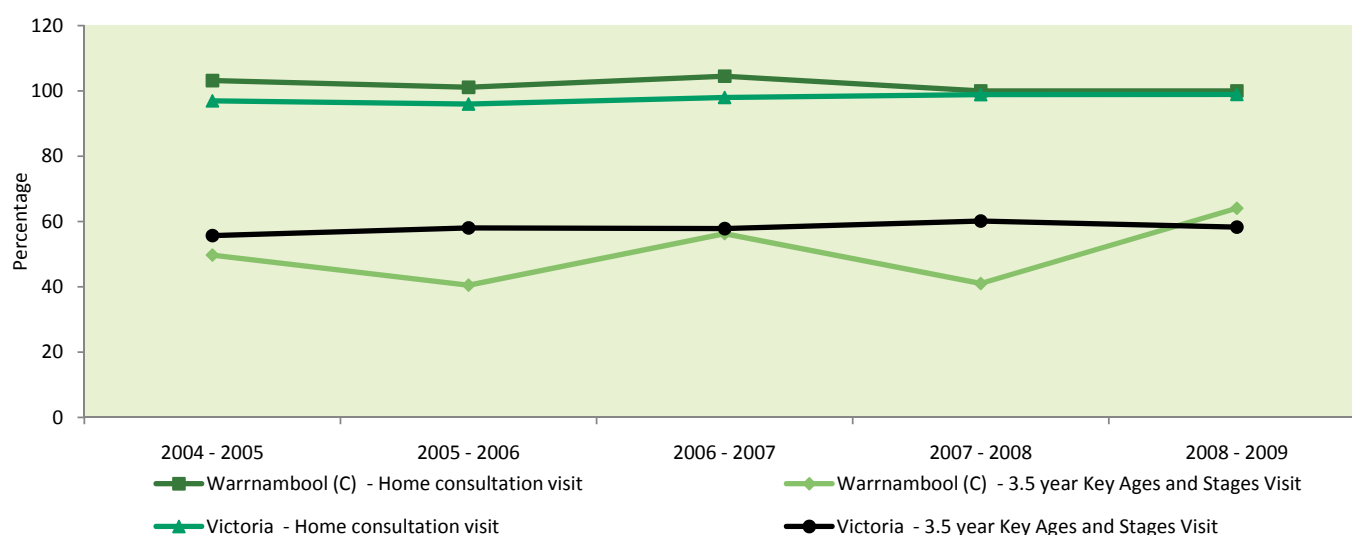
	Home Consultation Visit			3.5 year Key Ages and Stages visit		
	Home Consultation Visits	Infant record cards - children aged 0 to 1 years	Percentage receiving a home consultation visit	3.5 year Key Ages and Stages visit	Mean infant record cards - children aged 3 to 4 and aged 4 to 5	Percentage receiving the 3.5 year key ages and stages visit
Warrnambool (C)	395	395	100.0	184	449	41.0
Barwon South West region	4,386	4,394	99.8	2,623	4,427	59.3
Victoria	68,162	68,952	98.9	38,757	64,441	60.1

## 2008 - 2009

	Home Consultation Visit			3.5 year Key Ages and Stages visit		
	Home Consultation Visits	Infant record cards - children aged 0 to 1 years	Percentage receiving a home consultation visit	3.5 year Key Ages and Stages visit	Mean infant record cards - children aged 3 to 4 and aged 4 to 5	Percentage receiving the 3.5 year key ages and stages visit
Warrnambool (C)	391	391	100.0	287	448	64.1
Barwon South West region	4,249	4,327	98.2	2,801	4,485	62.5
Victoria	68,919	69,664	98.9	39,213	67,261	58.3

- In Victoria, the percentage of infants receiving the home consultation has increased from 96.9 per cent in 2004 - 2005 to 98.9 per cent in 2008 - 2009. During this period, the percentage of children attending the 3.5 yr key ages and stages visit in Victoria has increased from 55.7 per cent in 2004 - 2005 to 58.3 per cent in 2008 - 2009.
- In 2008 - 2009, 100.0 per cent of infants in Warrnambool (C) received a home consultation visit. This was greater than the percentage of infants in the Barwon South West region receiving a home consultation visit (98.2 per cent) and greater than the percentage of infants in Victoria who received a home consultation visit (98.9 per cent).
- In 2008 - 2009, 64.1 per cent of children in Warrnambool (C) attended the 3.5 year key ages and stages visit. This was greater than the percentage of children in the Barwon South West region who attended the 3.5 year key ages and stages visit (62.5 per cent) and greater than the percentage of children in Victoria who attended the 3.5 year key ages and stages visit (58.3 per cent)

**Figure 46: Percentage of children receiving a Maternal and Child Health Service home consultation and attending the 3.5 year key ages and stages visit in Warrnambool (C) and Victoria, 2004 - 2005 to 2008 - 2009.**



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.



## VCAMS Domain: Supports and services

### Outcome: Early Identification of and attention to child health needs

#### Indicator: Proportion of children who are the subject of a child abuse re-report within 12 months of a report

##### What is measured?

This indicator measures the rate of child protection re-reports for children aged 0 to 8 years. A child is "reported" 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.<sup>30</sup> 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.<sup>11</sup>

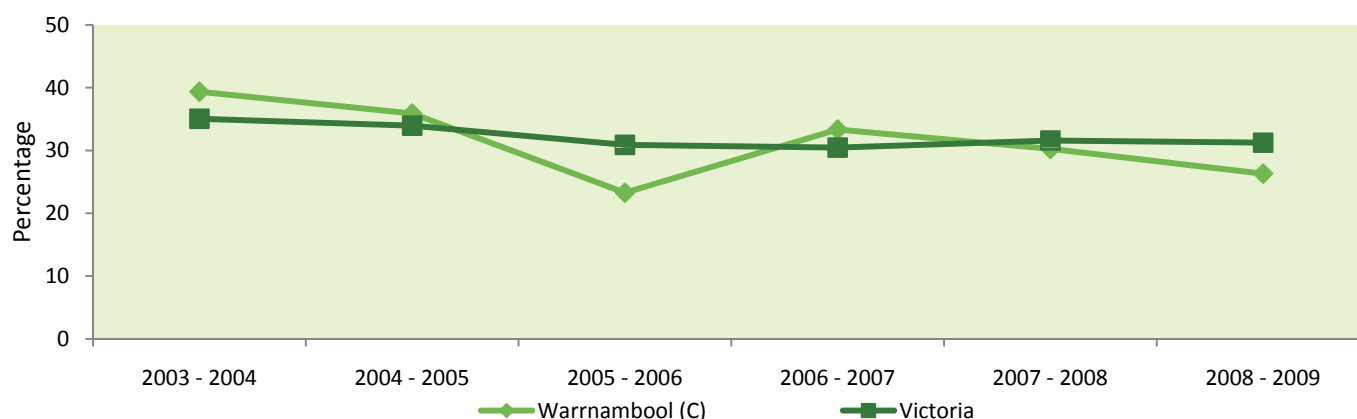
#### Number and rate of child protection reports and re-reports within a year, for children aged 0 to 8 years in Warrnambool (C), 2003 - 2004 to 2008 - 2009.

Financial year	Warrnambool (C)			Victoria		
	Number of Reports	Number of Re-Reports	Re-Reports within a year (%)	Number of Reports	Number of Re-Reports	Re-Reports within a year (%)
2003 - 2004	94	37	39.4	15,487	5,427	35.0
2004 - 2005	131	47	35.9	14,744	5,007	34.0
2005 - 2006	159	37	23.3	14,838	4,585	30.9
2006 - 2007	138	46	33.3	15,245	4,643	30.5
2007 - 2008	162	49	30.2	16,809	5,310	31.6
2008 - 2009	152	40	26.3	17,688	5,526	31.2

\* From 23 April 2007 the child protection reporting system changed resulting in notifications being replaced by child protection reports. There is no change to the way in which reports/re-reports are defined, therefore data is comparable to previous years.

- In 2008 - 2009, 31.2 per cent of children aged 0 to 8 years in Victoria were re-reported to child protection services within 12 months of a report. This rate has decreased from 35.0 per cent in 2003 - 2004. Over the 6 year period between 2003 - 2004 to 2008 - 2009, the percentage of re-reports within 12 months of a report in children aged 0 to 8 years in Victoria has been decreasing at an average rate of 1.9 per cent per year.
- In 2008 - 2009, 26.3 per cent of children aged 0 to 8 years in Warrnambool (C) were re-reported to child protection services within 12 months of a report. This rate has decreased from 39.4 per cent in 2003 - 2004. The rate of children re-reported within 12 months has been decreasing at an average rate of 6.5 per cent per year over the past six years.

**Figure 47: The rate of children aged 0 to 8 years in Warrnambool (C) re-reported to child protection within 12 months of a report, 2003 - 2004 to 2008 - 2009.**





## VCAMS Domain: Supports and services

### Outcome: High quality early education and care experiences available

#### Indicator: Kindergarten participation rate

##### What is measured?

This indicator measures the number and percentage of children who are enrolled in funded four-year old kindergarten (the year before they start school). See glossary at Appendix F for more information about kindergarten and kindergarten participation rates.

##### Why is it important?

Kindergarten (or preschool) is a Victorian State Government funded program for all children in the year before entering primary school. Preschool programs aim to develop children's social, emotional, intellectual, physical and language abilities, encourage family involvement and help prepare for the transition to school.<sup>11</sup>

International evidence suggests that children's participation in early childhood education and organised learning can offer short and long term benefits including improved literacy and numeracy, enhanced self esteem, better employment prospects and improved health outcomes.<sup>30</sup>

#### Children enrolled in 4 year old kindergarten in Warrnambool (C), the Barwon South West region and Victoria, 2005 to 2009.

*Related information:* Children do not necessarily attend Kindergarten in the LGA in which they reside, therefore these participation rates should be interpreted with caution. In some instances, the participation rate is over 100%. See glossary at Appendix F for more information about kindergarten participation rates.

2005			
	Children enrolled in first year of kindergarten	3 year old population at 30 June in previous year	Kindergarten participation rate (%)
Warrnambool (C)	408	428	95.3
Barwon South West region	3,979	4,324	92.0
Victoria	57,302	61,837	92.7
2006			
	Children enrolled in first year of kindergarten	3 year old population at 30 June in previous year	Kindergarten participation rate (%)
Warrnambool (C)	400	417	95.9
Barwon South West region	4,083	4,349	93.9
Victoria	56,673	62,015	91.4
2007			
	Children enrolled in first year of kindergarten	3 year old population at 30 June in previous year	Kindergarten participation rate (%)
Warrnambool (C)	418	410	102.0
Barwon South West region	4,106	4,404	93.2
Victoria	57,497	62,618	91.8





### Children enrolled in 4 year old kindergarten in Warrnambool (C), the Barwon South West region and Victoria, 2005 to 2009 ... continued

2008			
	Children enrolled in first year of kindergarten	3 year old population at 30 June in previous year	Kindergarten participation rate (%)
Warrnambool (C)	432	431	100.2
Barwon South West region	4,153	4,321	96.1
Victoria	58,818	63,682	92.4

2009			
	Children enrolled in first year of kindergarten	3 year old population at 30 June in previous year	Kindergarten participation rate (%)
Warrnambool (C)	445	405	109.9
Barwon South West region	4,272	4,397	97.2
Victoria	59,740	64,462	92.7

- In 2009, 92.7% of children were enrolled in kindergarten in Victoria. This kindergarten participation rate has remained the same as the rate in 2005 (92.7%).
- The kindergarten participation rate in Warrnambool (C) during 2009 was 109.9%. This was higher than the kindergarten participation rate in the Barwon South West region (97.2%) and higher than the kindergarten participation rate in Victoria (92.7%).
- The 79 LGAs in Victoria were ranked in terms of kindergarten participation rates in 2009. A rank of 1 was assigned to the LGA with the highest kindergarten participation rate in 2009. Warrnambool (C) was ranked 8 out of 79 LGAs.

**Figure 48: Kindergarten participation rates in Warrnambool (C) and Victoria, 2005 to 2009.**



Note: The Y-axis on this chart does not start at zero.

Note that this measure is based on the LGA of the funded location of the kindergarten. Children may not attend kindergartens in the LGA where they reside and therefore participation rates will be over 100% in some LGAs. See Appendix F under 'kindergarten participation rate' for more information.

- The kindergarten participation rate for children in Warrnambool (C) was higher than that in Victoria for the five years between 2005 to 2009.



## VCAMS Domain: Supports and services

### Outcome: Children attend and enjoy school

#### Indicator: Average absence days in primary school

##### What is measured?

This indicator measures the average absence days in each school year for children in Prep, Year 1 and Year 2 who attend Government schools in each local government area.

##### Why is it important?

Regular attendance at school is crucial for a student's education and social skills. Students that do not attend are at a disadvantage both academically and socially and miss out on key stages of interaction with their peers and reduce the likelihood of academic progress and success. This can compound issues of low self-esteem, social isolation and dissatisfaction which may have triggered the absenteeism.<sup>57</sup>

#### Average absence days of Prep, Year 1 and Year 2 students enrolled in government schools in Warrnambool (C) and Victoria, 2005 to 2009.

	Prep		Year 1		Year 2	
	Warrnambool (C)	Victoria	Warrnambool (C)	Victoria	Warrnambool (C)	Victoria
2006	14.7	14.3	15.4	13.4	13.0	13.0
2007	12.9	14.7	16.0	13.8	13.9	13.1
2008	14.1	14.8	14.3	14.2	14.6	13.5
2009	15.2	14.7	14.6	14.4	14.6	14.0

Note: (1) Prior to 2006, student absence figures were based on student headcount. From 2006 onwards, student absence figures are now based on FTE. Therefore student absence figures prior to 2006 are not comparable to later years.

(2) Local area student absence data presented above are preliminary as at 02 March 2010. Figures may be subject to minor revision in the future.

- Prep students attending government schools in Victoria were absent for an average 14.7 days over the 2009 school year. This has remained similar to 14.8 in 2008 and increased from 14.3 in 2006.
- Prep students attending government schools in Warrnambool (C) were absent for an average 15.2 days over the 2009 school year. The average absence days for Prep students in Warrnambool (C) has increased from 14.1 days in 2008 and increased from 14.7 days in 2006.
- Warrnambool (C) was ranked 35 out of the 79 LGAs in Victoria in terms of average student absence days of Prep students over the 2009 school year. A rank of 1 was assigned to the LGA with the highest average absence days over the school year.
- Year 1 students attending government schools in Victoria were absent for an average 14.4 days over the 2009 school year. This has remained similar to 14.2 in 2008 and increased from 13.4 in 2006.
- Year 1 students attending government schools in Warrnambool (C) were absent for an average 14.6 days over the 2009 school year. The average absence days for Year 1 students in Warrnambool (C) has increased from 14.3 days in 2008 and decreased from 15.4 days in 2006.
- Warrnambool (C) was ranked 35 out of the 79 LGAs in Victoria in terms of average student absence days of Year 1 students over the 2009 school year. A rank of 1 was assigned to the LGA with the highest average absence days over the school year.
- Year 2 students attending government schools in Victoria were absent for an average 14.0 days over the 2009 school year. This has increased from 13.5 in 2008 and increased from 13.0 in 2006.
- Year 2 students attending government schools in Warrnambool (C) were absent for an average 14.6 days over the 2009 school year. The average absence days for Year 2 students in Warrnambool (C) has decreased from 14.6 days in 2008 and increased from 13.0 days in 2006.
- Warrnambool (C) was ranked 32 out of the 79 LGAs in Victoria in terms of average student absence days of Year 2 students over the 2009 school year. A rank of 1 was assigned to the LGA with the highest average absence days over the school year.



## Appendix A: Data Sources

### Part A: Child and Family Demographics

#### Population profile

Australian Bureau of Statistics 2009, Population by Age and Sex, Victoria, preliminary 2008 estimates, ABS data available on request.

#### Population projections

Department of Sustainability and Environment 2009, Victoria in Future Population projections 2008.

#### Measuring Disadvantage

Australian Bureau of Statistics 2008, Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, ABS data available on request.

#### Statistical Local Areas within the Local Government Area

Australian Bureau of Statistics 2009, Population by Age and Sex, Victoria, preliminary 2008 estimates, ABS data available on request.

#### Family Type

Australian Bureau of Statistics, 2006 Census of Population and Housing, ABS data available on request.

#### Family Income

Australian Bureau of Statistics, 2006 Census of Population and Housing, ABS data available on request.

#### Family Employment

Australian Bureau of Statistics, 2006 Census of Population and Housing, ABS data available on request.

#### Education level of families

Australian Bureau of Statistics, 2006 Census of Population and Housing, ABS data available on request.

#### Aboriginal children and families

Australian Bureau of Statistics, 2006 Census of Population and Housing, ABS data available on request.

#### Family Tenure

Australian Bureau of Statistics, 2006 Census of Population and Housing, ABS data available on request.

#### Cultural and Linguistic Diversity

Australian Bureau of Statistics, 2006 Census of Population and Housing, ABS data available on request.

#### Need for assistance with core activities

Australian Bureau of Statistics, 2006 Census of Population and Housing, ABS data available on request.

### Part B: Safe, Healthy child, Learning, Developing, Achieving Wellbeing

#### Infants exposed to tobacco while in utero

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

#### Infants exposed to alcohol while in utero

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

#### Proportion of infants that are fully breastfed

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.



## Appendix A: Data Sources ... continued

### Proportion of infants that are fully breastfed at 3 and 6 months

Department of Education and Early Childhood Development, Maternal and Child Health online reports  
[http://www.education.vic.gov.au/ocecd/earlychildhood/library/data/annual\\_mch.html](http://www.education.vic.gov.au/ocecd/earlychildhood/library/data/annual_mch.html).

### Proportion of children who eat the recommended serves of fruit and vegetables everyday

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Proportion of children who are 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.

### Proportion of children who are developmentally vulnerable

Australian Early Development Index (AEDI), prepared by Department of Education and Early Childhood Development, April 2010.

### Parental Evaluation of Development Status (PEDS)

Department of Education and Early Childhood Development, *Primary school nursing program* School Entrant Health Questionnaire (SEHQ), 2008, unpublished.

### Proportion of children who brush their teeth twice a day

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Proportion of children and young people with special health care needs

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Proportion of children and young people with current asthma

Department of Education and Early Childhood Development, *Primary School Nursing Program* School Entrant Health Questionnaire (SEHQ), 2008, unpublished.

### Proportion of children and young people with current asthma who have a written asthma plan

Department of Education and Early Childhood Development, *Primary school nursing program* School Entrant Health Questionnaire (SEHQ), 2008, unpublished.

### Hospitalisation rate for asthma

Department of Human Services, 2009, Victorian Admitted Episodes Dataset (VAED), Funding, Health Information Policy Branch, unpublished.

Australian Bureau of Statistics, Population by age and sex, Australian States and Territories, June 2008 (Cat no. 3201.0)

### Leading causes of hospitalisations

Department of Human Services, 2009, Victorian Admitted Episodes Dataset (VAED), Funding, Health Information Policy Branch. Unpublished.

Australian Bureau of Statistics, Population by age and sex, Australian States and Territories, June 2008 (Cat no. 3201.0)

### Proportion of children and young people in good health

Department of Education and Early Childhood Development, *Primary school nursing program* School Entrant Health Questionnaire (SEHQ), 2008, unpublished.

### Children entering school with the basic skills for life and learning

Department of Education and Early Childhood Development, *Primary school nursing program* School Entrant Health Questionnaire (SEHQ), 2008, unpublished.



## Appendix A: Data Sources ... continued

### Proportion of children and young people who do the recommended amount of physical activity every day

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Proportion of children with emotional or behavioural difficulties

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Proportion of children who are bullied

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

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

Department of Education and Early Childhood Development, Data, Outcome and Evaluation Division, 2009, unpublished.

## Part C: Confident and Capable Families

### Children exposed to tobacco in the home

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Parental general health

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Children who are read to by a family member every day

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Parental awareness of sun protection

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Children and young people who have parents with mental health difficulties

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Number of children who are subject to a child abuse substantiation

Department of Human Services, 2009, Client and Service Information System (CRIS database), Children, Youth & Families Division. unpublished.

### Children from families that ran out of food in the past 12 months and could not afford to buy more

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Public Housing retention rate for families with children

Department of Human Services; Office of Housing.

### Satisfaction with housing

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Children living in families with healthy family functioning

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.



## Appendix A: Data Sources ... continued

### Children living in families with high levels of family stress

Department of Education and Early Childhood Development, *Primary school nursing program* School Entrant Health Questionnaire (SEHQ), 2008, unpublished.

## Part D: Strong and supportive communities

### Children living in clean neighbourhoods

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Children living in neighbourhoods with heavy traffic

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Children from families who are able to get support when needed

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Children from families who are able to raise \$2000 in an emergency

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Children with parents who have someone to turn to for advice when having problems

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Children living in neighbourhoods with basic shopping facilities, basic services, good parks, playgrounds and playspaces and with close affordable, regular public transport

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

### Proportion of children and young people who feel safe

Department of Education and Early Childhood Development, 2006 and 2009, Victorian Child Health and Wellbeing Survey (VCHWS), unpublished.

## Part E: Enabling society - Services and Supports

### Hospital admission for gastroenteritis in children under one year of age

Department of Human Services, 2009, Victorian Admitted Episodes Dataset (VAED), Funding, Health Information Policy Branch, unpublished.

### Proportion of children participating in Maternal and Child Health services

Department of Education and Early Childhood Development, Maternal and Child Health Service online reports: [http://www.education.vic.gov.au/oecd/earlychildhood/library/data/annual\\_mch.html](http://www.education.vic.gov.au/oecd/earlychildhood/library/data/annual_mch.html)

### Proportion of children receiving a Maternal and Child Health home consultation

### Proportion of children attending the 3½ year key ages and stages visit

Department of Education and Early Childhood Development, Maternal and Child Health Service online reports: [http://www.education.vic.gov.au/oecd/earlychildhood/library/data/annual\\_mch.html](http://www.education.vic.gov.au/oecd/earlychildhood/library/data/annual_mch.html)

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

Department of Human Services, 2009, Client and Service Information System (CRIS database), Children, Youth & Families Division, unpublished.

### Kindergarten participation rate

Department of Education and Early Childhood Development, Legislation and Regulation Reform Branch of Office for Children, 2009, Statewide Overview Report.

### Average absence days in primary school

Department of Education and Early Childhood Development, School Census Data, unpublished.





## Appendix B: Victorian Child Health and Wellbeing Survey

### Survey methodology and how to interpret results

#### VCHWS Survey Methodology

During the fieldwork period, computer assisted telephone interviews were carried out with the parents (or carers) of children aged under 13 years. Households were contacted at random, using random digit dialling, a technique that ensured that all households with a telephone within a selected area, had an equal chance of being invited to participate.

The appropriate respondents to the survey were selected on the basis that they were proficient in English and could answer all questions without the assistance of an interpreter, were over 18 and were the individual who knew 'the most about the health and daily routine of the child'. Individuals that did not meet these criteria were not included in the survey.

Only one interview, focussing on one, randomly selected child was carried out per household. All data were reported by the parent or carer of a child. Interviews lasted for approximately 23 minutes and covered a broad range of issues relating directly to the child, the child's family and the child's neighbourhood.

#### Why a telephone survey?

A computer assisted telephone interviewing (CATI) system was chosen because it provides an efficient, reliable and accurate way to obtain information from a large number of families at a reasonable cost. For example, an interviewer can easily reschedule an interview at a time to suit a busy parent, regardless of whether the respondent lives in a metropolitan or rural area. All responses were reported by a parent or carer and entered directly into the CATI system.

#### Interview content

The survey has been designed to provide data relating to the health and wellbeing of children and their families. Respondents tend to answer these types of questions more honestly in interviews that offer greater anonymity. In the Victorian Child Health and Wellbeing Survey, an extremely high response rate was achieved, indicating that the telephone methodology was highly acceptable to Victorian parents.

In order to enable comparison of results, attempts were made to align questions to those used in existing surveys, including CATI surveys used for monitoring the health of child populations in other states, and the national, Longitudinal Study of Australian Children. A limited number of new questions were introduced where suitable questions could not be found.

#### Limitations of the survey

A general population survey such as the VCHWS is unsuited to data collection around minority population groups or minority problems or experiences. Data are not collected on diseases, conditions or determinants of low incidence, or where reporting is likely to be unreliable. DEECD is committed to collecting information on priority population groups of children and young people in Victoria via development of targeted surveys and alternative collection strategies, for example through its involvement in the ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2008.

#### How to interpret the survey data

All the data sourced from the VCHWS survey within these community profile are estimates based on the responses of survey participants. Since the survey estimates are obtained from a sample of parents and carers, the estimates are subject to sampling variability, that is, the estimates may differ from the 'true' value that would have been obtained had every child's parent or carer within the LGA been interviewed during the survey.

Confidence intervals are used when presenting the VCHWS survey results to indicate the precision of the survey estimates. A confidence interval is a range of values within which the 'true' value (had every parent or carer within the LGA been surveyed) is expected to fall. In this report, all confidence intervals are reported at the 95% confidence level. This means that if we were to repeat the survey 100 times, the estimates from 95 of the surveys would lie within the confidence interval. A narrow confidence interval is therefore indicative of a highly precise estimate. The 'whiskers' on the graphs sourcing the VCHWS data depict the confidence intervals for the survey estimate presented.



## Appendix B: Victorian Child Health and Wellbeing Survey

### How to interpret the VCHWS survey data ... continued

As significance tests have not been conducted in this analysis to compare difference between the means, it is better to avoid making statements as to whether differences are statistically significant based on confidence intervals. However, we are able to comment on the similarities or differences between groups in the population, with reference to whether the confidence intervals of the estimates overlap or not.

The estimates provided are based on sample data, and the confidence intervals indicate that there is a 95% probability that the true values lies between the upper and lower limits of the confidence interval. Therefore, if the confidence intervals of two population groups do not overlap, we can assume that the true values of the two estimates are unlikely to fall within the same distribution and there **may be** a significant difference between the survey estimates.

For example, when comparing results from the 2006 and 2009 Victorian Child Health and Wellbeing Surveys, 75.7% of children from the Southern Metropolitan region were estimated to live in a smoke free household in 2009 and 68.8% of children in the Southern Metropolitan region were estimated to live in a smoke free household in 2006. The confidence interval for the proportion of children who lived in a smoke free household in 2009 ranged from 72.4% to 79.0%. The lower limit of the 95% confidence range for children in the Southern Metropolitan region in 2009 (72.4%) is greater than the upper limit for children in the Southern Metropolitan region in 2006 (72.2%), therefore the confidence intervals do not overlap. We can infer that there is a difference in the occurrence of children living in smoke free households from 2006 to 2009, and that this difference **may be** statistically significant.

**Figure 49: Example of a graph sourced from the VCHWS 2006 and 2009 surveys, for the Southern Metropolitan region, Metropolitan Victoria and Victoria.**



Within these profiles, region level data is compared to data for rural or metropolitan Victoria and the Statewide estimate and tested for overlap in the confidence intervals, both across areas (eg region estimate compared to Victorian estimate) and over time (2006 survey estimate compared to 2009 estimate).

Population weights have been applied to the VCHWS survey data to account for:

- a) the probability of the selection of the household and the child within the household; and
- b) the age, sex and geographic distribution of Victoria's children.



## Appendix C: VCHWS Respondent characteristics

### Respondent characteristics for the Barwon South West Region.

#### Response

The survey response rate was calculated as the proportion of contacted households with children aged under 13 years where the parent or carer went on to complete an interview. In the 2009 VCHWS survey, the response rate in the Barwon South West region was 76.2%. This compares to an overall response rate of 75.8% across Victoria.

#### Characteristics of the respondents

All data was reported by the parent or carer of a child aged under 13 years. Given that respondents were selected on the basis that they were the parent or carer who was most familiar with the child's health and daily routine, it was not surprising to find that almost all respondents were the biological parent of the survey child and that the majority of respondents were female.

#### Characteristics of VCHWS respondents in the Barwon South West region.

Respondent characteristics	Survey outcome	
	2006	2009
<b>Area of residence</b>		
Metropolitan Victoria	72.4%	71.1%
Rural Victoria	27.6%	28.9%
<b>Sex</b>		
Male	17.3%	15.7%
Female	82.7%	84.3%
<b>Relationship to child</b>		
Biological parent	98.2%	98.5%
Step parent	0.7%	0.9%
Grandparent	0.6%	0.1%
Legal guardian (includes foster)	0.4%	0.5%
Other	-	-
<b>Family Type</b>		
Couple family	83.1%	86.0%
One parent family	16.9%	14.0%
Unknown	-	-
<b>Education</b>		
Completed Year 12 or a non-school qualification	66.0%	77.8%
Did not complete Year 12 or a non-school qualification	34.0%	22.2%
Unknown	-	-
<b>Employment</b>		
Permanent or ongoing	44.1%	50.3%
Fixed term	3.6%	1.9%
Casual	16.6%	15.0%
Not in employment	35.2%	32.8%
Unknown	0.4%	-
<b>Home</b>		
Privately owned/being purchased	75.2%	80.3%
Privately rented	17.3%	13.0%
Rented from housing trust	5.5%	5.7%
Unknown	2.0%	1.0%



## Appendix C: VCHWS Respondent characteristics ... continued

Characteristics of the VCHWS survey children in the Barwon South West region.

Child characteristics	Survey outcome	
	2006	2009
<b>Sex</b>		
Male	17.3%	15.7%
Female	82.7%	84.3%
<b>Age group</b>		
Birth to 4 years	37.2%	36.5%
5 to 8 years	29.7%	31.6%
9 to 12 years	33.1%	31.9%
<b>Socio-demographic characteristics</b>		
Aboriginal or Torres Strait Islander	2.0%	0.9%
Listed as a dependent on a health care card	31.8%	29.2%
From a household with private health insurance	42.6%	51.8%
From a household where no parent is in employment	10.9%	8.1%
<b>Mean number of children aged under 13 years in the household</b>	1.87	1.92



## Appendix D: School Entrant Health Questionnaire (SEHQ)

### About the SEHQ

The School Entrant Health Questionnaire (SEHQ) is a part of the Victorian Primary School Nurse Program (PSNP) and records parent's concerns and observations about their child's health and wellbeing. The questionnaire is designed to assist School Nurses by providing detailed information on parental concerns about children's health in areas including general health, speech, hearing, vision, development, behaviour, well-being and family stress.

The major aims of the Victorian School Nursing Program are the promotion of health and early identification of health and wellbeing issues in school children, offers a health assessment to children in their first year of primary school, first year at an English Language School or who have newly arrived from overseas. The School Entrant Health Questionnaire (SEHQ) is distributed as part of this process and is completed by approximately 55,000 parents/carers annually.

The SEHQ is a tool for clinical practice and a point of engagement with parents and educators. The parents of all children beginning primary school in Victoria are asked to complete the SEHQ. Analysis of the SEHQ is complementary to existing information on children's health and wellbeing such as the Burden of Disease findings. It creates one of the largest databases available in Australia capturing parent perceptions about the health and wellbeing of children in this particular age cohort.

The SEHQ questionnaire cover the areas of:

- General health
- Medication
- Dental health
- Speech/language
- Hearing
- Vision
- General development
- Behaviour and emotional wellbeing
- Family stress

In addition, data from the SEHQ provides the Department of Education and Early Childhood Development with valuable information to advise government and service providers on how well our children are faring at the point of school entry. Findings and recommendations from SEHQ data analysis inform forward planning and potential service delivery of the Primary School Nursing Program.

### 2008 SEHQ Survey Respondent characteristics

Respondent characteristics	Survey outcome
Parents of Prep students who completed the SEHQ	54,602
Born in Australia	93.0%
English was not the main language spoken at home	12.5%
Child does not speak English	1.7%
Aboriginal or Torres Strait Islander children	1.5%
<b>Family structure</b>	
Children live with both parents	82.0%
Children live with their mother	14.0%
Children live with their father	0.6%



## Appendix E: Australian Early Development Index (AEDI)

### What is the AEDI?

The Australian Early Development Index (AEDI) is a population measure of how young children are developing in Australian communities, across five areas, or domains, of early childhood development. These five domains are important areas of child development and also good predictors of adult health, education and social outcomes.

- **Physical health and wellbeing** this domain measure children's physical readiness for the school day, physical independence and gross and fine motor skills;
- **Social competence** – this domain measures children's overall social competence, responsibility and respect, approaches to learning and readiness to explore new things;
- **Emotional maturity** – this domain measures children's pro-social and helping behaviour, anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention;
- **Language and cognitive skills (school-based)** – this domain measures children's basic literacy, interest in literacy/numeracy and memory, advanced literacy and basic numeracy;
- **Communication skills and general knowledge** – this domain measures children's communication skills and general knowledge based on teacher observations of developmental competencies and skills as measured in the school context.

### How is the AEDI data collected?

Data was collected by teachers via an on-line checklist, in the first year of formal schooling. The average age of the Victorian children was 5 years and 7 months. Between May and July 2009, AEDI checklists were completed for 61,187 children in Victoria, representing 94.2 per cent of the estimated five year old population. While data collection included children with special needs, the results for these children were excluded in the reporting of the AEDI due to their already substantial developmental needs.

Although checklists are completed by teachers, the data collected refers to the local community in which the child lives, not the school they attend. The intention of the AEDI is to provide communities with a picture of how their children are developing.

### What is the difference between a 'community' and a 'local community'?

The local community is the smallest areas for which AEDI data is available. These are, in most cases, equivalent to suburbs as gazetted by the relevant Geographic Place Name authority. The community, or local government area, is the second geographic level at which AEDI data is available. Communities usually consist of one or more local communities. However in some cases a local community falls into more than one community.

### How is vulnerability determined?

Each checklist receives a score for each domain, which ranges from 0 to 10, with 10 being the highest score. These domain scores, for all Australian children, are recorded from highest to lowest, and then organised into percentiles.

Children with domain scores below the 10th percentile (in the lowest 10 percent of all Australian children) are considered 'developmentally vulnerable' (see illustration). Children with a score between the 10th and 25th percentile are considered 'developmentally at risk', and those above the 25th percentile (that is, those who scored in the top 75 percent of all Australian children) are considered 'developmentally on track'.

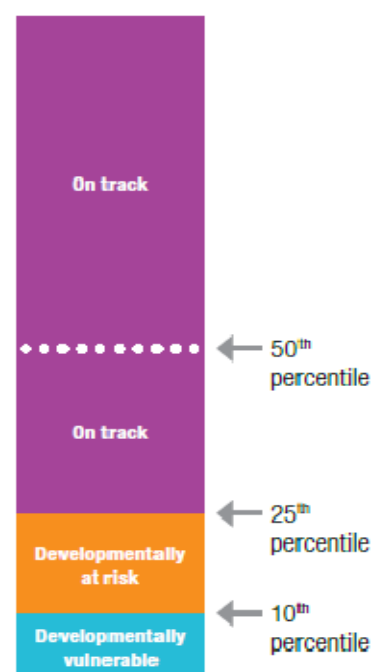
The AEDI results presented in this community profile show the proportions of children in the local community who were considered 'developmentally vulnerable', and the proportions of children vulnerable on one or more and two or more domains.

### Why do some local communities have no AEDI results?

To maintain confidentiality, AEDI results are not publicly available if the local community has less than 15 children or less than two teachers have contributed to the AEDI results.

### For more information

For more information on the AEDI and to access community and local community maps, please visit [www.aedi.org.au](http://www.aedi.org.au)





## Appendix F: 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 these profiles, Aboriginal and Torres Strait Islanders have been referred to as 'Aboriginal'.

### 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

An Aboriginal family with at least one child aged 0 to 8 years enumerated at home on Census night. That enumerated child was not necessarily aboriginal.

### Aboriginal households

A family, single 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.

### Ambulatory care sensitive conditions (ACSCs)

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 characterised by sudden recurring attacks of laboured breathing, chest constriction and coughing. This is caused by the narrowing of the small air passages (breathing tubes/bronchi) of the lungs. The air passages become swollen and inflamed reducing the flow of air in and out of the lungs.

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.

Asthma is one of the Ambulatory Care Sensitive Conditions (ACSC) where hospitalisation is considered avoidable.

See also: International Classification of Diseases (ICD-10-AM).

See also: Ambulatory care sensitive conditions.

### Average absence days

The average number of days absent in each school year for children in Prep, Year 1 and Year 2 who attend government schools.

### Bullying

In Australia, there is currently no agreed definition for bullying; however, the most commonly cited definition is the 'repeated oppression, psychological or physical harm, of a less powerful person by a more powerful person or group of persons' Bullying typically involves a power imbalance and deliberate acts that cause physical, psychological and emotional harm. It can either be direct (for example, hitting and teasing) or indirect/covert (for example, spreading gossip, deliberately excluding or enforcing social isolation, and sending malicious text messages).<sup>29</sup>



## Appendix F: Glossary of terms ... continued

### Child abuse substantiation

Substantiations of reports received during the year refer to child protection reports 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 significantly harmed.

### Child behaviour

Proportion of children scoring normal, abnormal or borderline on the child behaviour scale in the Strengths and Difficulties Questionnaire. Sub-scales include emotional symptoms, conduct problems, hyperactive behaviour, peer relationships and pro-social behaviour (Goodman 2001<sup>27</sup> and Goodman 1997<sup>58</sup>).

### Child protection reports

Child protection reports are made to the DHS Child Protection service by people making allegations of child maltreatment or likely significant harm to a child. Reports can be made by any member of the community, and are often made by health or welfare professionals, teachers or the police. In Victoria, registered medical practitioners, nurses, teachers and the police are mandated to report suspected sexual abuse or physical injury.

Reports can also be made where a person has a significant concern for a child's wellbeing, but does not believe that the child is in need of protection, and these types of report are best responded to in Victoria by Child FIRST and Family Services.

Where a report involves more than one child, each child is considered as a separate report even if the children are from one family.

### Child protection re-reports

Where there is more than one child protection report made to relevant authorities during the year ended 30 June, and these are related to the same child, these are counted as re-reports.

Note: On 23 April 2007 the child protection legislation changed, resulting in notifications being replaced by child protection reports.

### Cultural and linguistic diversity (CALD)

The Australian Bureau of Statistics (ABS) defines CALD by three variables:

- Country of birth (COB)
- Language other than English (LOTE) spoken at home
- English language proficiency

As CALD is a combination of factors, it is acknowledged that there is no one definition of CALD. Within the Australian context, the following description is used:

*'Individuals from a CALD background are those who identify as having a specific cultural or linguistic affiliation by virtue of their place of birth, ancestry, ethnic origin, religion, preferred language, language(s) spoken at home, or because of their parents' identification on a similar basis'* (Department of Human Services, Multicultural Strategy Unit).

In these profiles, two variables have been used to describe the CALD of the LGA:

- Language other than English (LOTE) spoken at home; and
- English language proficiency.

### Developmentally Vulnerable

Children who score below the 10th percentile (in the lowest 10 per cent) of the national Australian Early Development Index (AEDI) population. These children demonstrate a much lower than average ability in the developmental competencies measured in that domain.

See Appendix E for more information on AEDI.

### Electronic media

According to current guidelines developed by the Commonwealth Department of Health and Ageing in consultation with an expert reference group, children and young people aged 5 to 18 years should not spend more than 2 hours a day using electronic media for entertainment (eg computer games, Internet, TV).





## Appendix F: Glossary of terms ... continued

### 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.

### Estimated Resident Population (ERP)

ERP is the official ABS estimate of the Australian population. Among its many uses, are the determination of the number of representatives from each State (and Territory) to sit in the House of Representatives, and the annual allocation of Commonwealth funds for state governments and local government. The ERP is based on Census of Population and Housing usual residence counts. It is compiled as at 30 June of each census year and updated quarterly between censuses. These intercensal estimates of the resident population are revised after each census is conducted. In compiling 30 June ERP for a census year, three important factors are taken into account:

- Census net underenumeration (or undercount): The level of underenumeration is derived from the Census Post Enumeration Survey which is conducted soon after the Census, and from estimates based on demographic analysis
- Australian residents who are temporarily overseas on Census Night and are therefore not covered by the Australian Census. The number of such people is obtained from statistics on overseas arrivals and departures
- The Census does not fall on 30 June. For example, the 2006 Census was held on 8 August. Backdating of population estimates from 8 August to 30 June is accomplished using data from birth and death registrations, overseas arrivals and departures, and estimates of interstate migration, for the period 1 July to 8 August

The population base used to derive rate based measures have been revised since the last edition of these profiles. ERP to 2006 are based on final ERP, 2007 ERP are based on revised estimates and 2008 ERP are based on preliminary estimates.

#### Exposed to alcohol while in utero

Mothers (with infants aged under 2 years) who reported drinking any amount of alcohol at any time during pregnancy.

#### Exposed to tobacco while in utero

Mothers (with infants aged under 2 years) who reported smoking cigarettes at any time during pregnancy.

### 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

#### 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



## Appendix F: Glossary of terms ... continued

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 single 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.

A single 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.

### **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 single 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.

### **Fully Breastfed**

A fully breastfed child is one who does not regularly (at least once a day) receive milk other than breast milk, but may receive some solids.

### **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**

DTP = Diphtheria 3 + Pertussis 3 + Tetanus 3

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 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.



## Appendix F: Glossary of terms ... continued

### 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 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 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 (6-6.25 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.

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@health.vic.gov.au](mailto:immunisation@health.vic.gov.au)).

### Gastroenteritis

Inflammation of the mucous membrane of the stomach and intestines. The hospital separations for gastroenteritis shown in these profiles are counted based on a principal diagnosis of one of the following ICD-10-AM coded conditions:

- A080 – Rotaviral enteritis
- A081 – Acute Gastroenteropathy due to Norwalk agent
- A082 – Adenoviral enteritis
- A083 – Other viral enteritis
- A084 – Viral intestinal infection unspecified
- A085 – Other specified intestinal infections
- A09 – Diarrhoea and gastroenteritis presumed infectious.

Gastroenteritis is one of the Ambulatory care sensitive conditions (ACSC) where hospitalisation is considered avoidable.

See also: International Classification of Diseases (ICD-10-AM).

See also: Ambulatory care sensitive conditions.

### General health status

Respondent's perception of their child's health status. 'Self-assessed health status' has been used in many studies including the Australian Bureau of Statistics (ABS) National Health Survey. This is based on the definition by Ware et al's (1993 9.1-9.32).<sup>59</sup>

### Healthy family functioning

Proportion of children from households with 'unhealthy' family functioning based on McMaster Family Assessment Device-General Functioning Scale (Epstein et al 1983).<sup>60</sup>



## Appendix F: 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.

### International Classification of Diseases (ICD-10-AM)

The ICD-10-AM is the classification system of diseases used in Victorian hospitals. It stands for the International Classification of Diseases, Tenth Edition, 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 (Australian Bureau of Statistics 2006, Census Dictionary).

### Key ages and stages visit

The Maternal and Child Health (MCH) 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 and 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.

### Kindergarten

Kindergarten is a state funded service for children in the year before school. Kindergarten education aims to develop children's social, emotional, intellectual, physical and language abilities and encourages family involvement. Policy and funding information on kindergartens is described in the *Victorian kindergarten policy, procedures and funding criteria 2010–12* available from:

<http://www.eduweb.vic.gov.au/edulibrary/public/earlychildhood/childrensservices/kindergartenpolicycriteria.pdf>.



## Appendix F: Glossary of terms ... continued

### 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 (generally 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 release of annual ABS population estimates, the number of three year olds in the previous year is used as 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 and 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 2008, in response the Department revised the participation rates for the years 2003 to 2007 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.

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.

### 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.

### Maternal and Child Health (MCH) Service

The MCH Service 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 Department of Education and Early Childhood Development (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 MCH 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.

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.

Data on breastfeeding and key ages and stages participation is sourced from Maternal and Child Health Annual Reports, which are submitted by funded services each year to the Department of Education and Early Childhood Development (DEECD) and detail the key activity and performance information on each service provider.

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

1. Attendance at Home consultation visits
2. Attendance at 3.5 year key ages and stages visit

See also: Key ages and stages visit.





## Appendix F: Glossary of terms ... continued

### 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'.

### Parental Evaluation of Development Status (PEDS)

The Parental Evaluation of Developmental Status (PEDS) is a methodology for detecting developmental and behavioural problems in children from birth to eight years of age. The PEDS can be used as a development screening test or as an informal means to elicit and respond to parental concerns. The flexibility of the PEDS means that it can be used in a variety of different ways, and developmental concerns and progress can be monitored over time.

Parents are asked to answer ten questions which elicit their perspectives on their child for each developmental domain including: expressive language, receptive language, fine motor, gross motor, self-help, behavior, social-emotional, academics, global/cognitive, as well as health issues such as sleeping and eating, vision, and hearing.

Some concerns are predictive of developmental/mental health problems and indicate a need for supportive services. Other concerns are not predictive of problems and instead suggest a need for parent education. Predictive concerns vary by age.

The PEDS Interpretation Form houses an algorithm for deciding whether to refer, screen further, watch carefully, counsel parents, or simply reassure them. These PEDS pathways are based on the number of predictive and non-predictive concerns raised by the parent.

PEDS pathways:

- A: Two or more predictive concerns..... High Risk
- B: One predictive concern..... Moderate risk: further screening /vigilant monitoring needed
- C: Non predictive concerns..... Low risk but parent education needed
- D: Parental difficulties communicating... Moderate risk: hands-on measures (or translations) needed
- E: No concerns..... Low risk, typical development

These profiles present the frequencies of Prep children within the local government area classified to PEDS Pathways A, B or C.

See [www.pedstest.com](http://www.pedstest.com) or [www.rch.org.au/ccch/resources.cfm?doc\\_id=10963](http://www.rch.org.au/ccch/resources.cfm?doc_id=10963) for more information on the PEDS, case examples, a short movie about PEDS, Frequently asked Questions, translation information, etc.

### Parental general health

Respondent's perception of their own health status including poor, fair, good, very good or excellent. 'Self-assessed health status' has been used in many studies including the ABS National Health Survey and is based on the definition by Ware et al's (1993 9.1-9.32).<sup>59</sup>

### Parental mental health

Proportion of children with a main carer who is at high risk of non-specific psychological distress based on a score of 19 or above on the Kessler 6 scale. (Kessler et al 2002).<sup>61</sup>

### Population Projections

Population projections are not predictions or forecasts, but are simply illustrations of the growth and change in population which would occur if certain assumptions about future levels of fertility, mortality, internal migration and overseas migration were to prevail over the projection period. The assumptions incorporate recent trends which indicate increasing levels of fertility and net overseas migration for Australia.

The Australian Bureau of Statistics (ABS) produce three main series of projections, Series A, B and C, which have been selected from a possible 72 individual combinations of the various assumptions. Series B largely reflects current trends in fertility, life expectancy at birth, net overseas migration and net interstate migration, whereas Series A and Series C are based on high and low assumptions for each of these variables respectively.



## Appendix F: Glossary of terms ... continued

Projections for Victoria are sourced from Department of Planning and Community Development (DPCD), Victoria in Future 2008 projections and use very similar assumptions to the Australian Bureau of Statistics Series B

DPCD compiles population projections for all 79 local government areas for the period 2006 to 2026 and for regions for 2006 to 2036. The projections are based on Australian Bureau of Statistics population estimates derived from the 2006 census and other recent demographic trends. To develop the projections in Victoria in Future 2008 the department analyses:

- demographic data and housing development information;
- Victoria's economic, social and demographic trends; and
- detailed local knowledge gained through consultation with local governments, regional service providers, peers and stakeholders.

Victoria in Future 2008 projections analyse changing economic and social structures and other drivers of demographic trends to indicate possible future populations if present identified demographic and social trends continue. The assumptions behind Victoria in Future are regularly monitored. If necessary, the assumptions and the projections they generate will be revised.

### Public Housing

Public housing is stock that is owned and managed by Housing and Community Building. Public housing tenants in Victoria pay a reduced amount of rent, known as a rebated rent, equivalent to 25 per cent of the tenants total household income. The amount of rent to be paid is capped at the market rent of the property.

### Public housing retention rate

In these profiles, public housing retention rates are derived from the proportion of households with children aged 0 to 8 years in allocated public housing who have remained in public housing 12 months following initial allocation. This measure tracks public housing allocations 12 months forward, hence there is a 12 month lag between the denominator and numerator data.

### 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).

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 5 text
- Year 1 students - Level 15 text
- Year 2 students - Levels 20 text





## Appendix F: Glossary of terms ... continued

### Recommended amount of physical activity

According to current guidelines developed by the Commonwealth Department of Health and Ageing in consultation with an expert reference group, children and young people aged 5 to 18 years should participate in at least 60 minutes (and up to several hours) of moderate-to vigorous-intensity physical activity every day.

### Recommended serves of fruit and vegetables

The National Health and Medical Research Council (NHMRC) guidelines recommend that children aged 4 to 7 years eat at least one serve of fruit and two serves of vegetables per day; children aged 8 to 11 years eat at least one serve of fruit and three serves of vegetables per day; and young people aged 12 to 18 years eat at least three serves of fruit and four serves of vegetables per day.

### Smoke free household

A household where no one smokes cigarettes.

### Socio-Economic Index for Areas (SEIFA)

SEIFA is a suite of four summary measures that have been created by the Australian Bureau of Statistics (ABS) from the Census of Population and Housing information. The indexes can be used to explore different aspects of socio-economic conditions by geographic areas. For each index, every geographic area in Australia is given a SEIFA number which shows how disadvantaged that area is compared with other areas in Australia.

Each index summarises a different aspect of the socio-economic conditions of people living in an area. They each summarise a different set of social and economic information. The four indexes in SEIFA 2006 are:

1. Index of Relative Socio-economic Disadvantage (IRSED): is derived from Census variables related to disadvantage, such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.
2. Index of Relative Socio-economic Advantage and Disadvantage (IRSEAD): a continuum of advantage (high values) to disadvantage (low values) which is derived from Census variables related to both advantage and disadvantage, like household with low income and people with a tertiary education.
3. Index of Economic Resources (IER): focuses on Census variables like the income, housing expenditure and assets of households.
4. Index of Education and Occupation (IEO): includes Census variables relating to the educational and occupational characteristics of communities, like the proportion of people with a higher qualification or those employed in a skilled occupation.

SEIFA uses a broad definition of relative socio-economic disadvantage in terms people's access to material and social resources, and their ability to participate in society. While SEIFA represents an average of all people living in an area, SEIFA does not represent the individual situation of each person. Larger areas are more likely to have greater diversity of people and households.

A SEIFA score is created using information about people and households in a particular area. This score is standardised against a mean of 1000 with a standard deviation of 100. This means that the average SEIFA score will be 1000 and the middle two-thirds of SEIFA scores will fall between 900 and 1100 (approximately).

The IRSED SEIFA index scores have been presented in these profiles.

### Special health care needs

Within the Victorian Child and Health Wellbeing Survey a child with special health needs is defined as a child who:

- is dependent on medication or
- requires more services than most children of the same age or
- has functional limitations

This item is sourced from Special health care needs screener (Bethell et al, 2002).<sup>17</sup>



## Appendix F: Glossary of terms ... continued

### 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)

### Victorian Child & 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.



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**Notes:**

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