The health and wellbeing of children during early developmental years can play a critical role in establishing good health and the skills necessary to achieve optimum health throughout life. Some of the factors that may influence a child’s physical health, emotional and mental wellbeing are the socioeconomic environment of the child’s family; community; physical environment; and access to services.

This chapter presents data on five indicators of child health, development, learning and wellbeing:

- **Breastfeeding** – associated with improved nutritional outcomes for babies and decreased infections
- **Enrolment in kindergarten** – associated with child wellbeing, especially for those children at risk or at disadvantage
- **School attendance** – associated with development and learning in critical academic and social stages
- **Literacy rates** – associated with child well being and socioeconomic outcomes such as employment opportunities, income, housing and health
- **Child protection re-notifications** – associated with child wellbeing and safety
Women fully breastfeeding at three months and six months

Support for the importance of breastfeeding for the short and long term development of an infant is very well established. Breastfeeding has received increased attention as a focus of public health, both in Australia and internationally.

The Victorian Government supports and promotes breastfeeding as an important determinant of maternal and child health and wellbeing. Promotion and support of breastfeeding is addressed through antenatal services and a variety of service and post-natal programs including Maternal and Child Health and Best Start. The ‘Go for your life’ strategic plan 2006–2010, ‘Go for your life’ Victoria – leading the way to a healthy and active community, includes the promotion of breastfeeding as a priority strategy. It acknowledges that breastfeeding has health benefits in protecting against obesity for both mother and child.

One of the key initiatives included in this framework is the promotion of optimal nutrition for women, infants and children; and as part of this initiative the promotion of breastfeeding is identified as a priority area for action. The benefits of breastfeeding are cited as providing protection against infectious diseases and childhood malnutrition, and may also be a contributing factor to improved health over a person’s whole lifespan.

In Australia, the current National Health and Medical Research Council (NHMRC) recommendations are for exclusive breastfeeding from birth until six months of age, and continuation of breastfeeding until age two or beyond with appropriate complementary feeds (NHMRC, 2003 cited in DEECD, 2007).

While most Australian mothers are likely to breastfeed their children immediately following birth, the duration of breastfeeding can vary considerably. Research has found that breastfeeding practices are influenced by a number of attitudinal, medical and societal factors. Research has also linked the duration of breastfeeding to key maternal characteristics, with the three most important factors related to place of residence (urban/rural), education and income.
Breastfeeding data are sourced from the Maternal and Child Health Services, Early Childhood Programs Division of the Victorian Department of Education and Early Childhood Development.

Breastfeeding data for maps 5.1a to 5.2b relate to women fully breastfeeding at three and six months as a percentage of the total number of Infant Record Cards for 1 to 2 years olds, within each LGA in Victoria for the 2005–06 financial year. See Glossary under ‘fully breastfed’ for further information.

Women fully breastfeeding at three months

Of the 64,816 infant record cards for 1 to 2 years olds in Victoria, 33,590 or 51.8 per cent were fully breastfed at three months in 2005–06. The percentage has been decreasing slightly each year since 2000–01 from 53.1 per cent and dropping to 48.5 per cent in 2004–05 before increasing to above 50 per cent again in 2005–06.

In regional Victoria the percentage of infants fully breastfed at 3 months was 52.2 per cent compared to 51.7 per cent in metropolitan Melbourne for 2005–06.

Women fully breastfeeding at six months

The percentage of women fully breastfeeding decreases at the six month age. In 2005–06, the percentage for Victoria was 38.7 per cent and slightly less than in 2000–01 (40.1 per cent). The percentage has remained slightly under 40 per cent at each financial year following 2000–01.

There was very little difference between the percentage of women fully breastfeeding at six months in regional Victoria (39.0 per cent) and metropolitan Melbourne (38.6 per cent) in 2005–06.
Map 5.1a:
Women fully breastfeeding at three months, within each LGA in Victoria, 2005–06
As a percentage of the number of clients registered in 2005–2006 aged 1–2 years in each LGA

- The highest percentages of women fully breastfeeding at three months in regional Victoria were recorded in the LGAs of Queenscliffe (B) (80.9%), Warrnambool (C) (73.1%), Towong (S) (71.4%), West Wimmera (S) (71.0%) and Indigo (S) (70.2%).
- The lowest percentages were in Loddon (S) (33.3%), South Gippsland (S) (41.0%) and Mitchell (S) (42.9%).
The highest percentages in metropolitan Melbourne of women fully breastfeeding at three months, were located in Boroondara (C) (70.9%), Yarra (C) (68.6%), Port Phillip (C) (67.6%) and Bayside (C) (66.4%).

The lowest percentages were recorded in Melton (S) (35.8%), Casey (C) (35.9%), Whittlesea (C) (37.6%) and Frankston (C) (39.5%).
The highest percentages of women fully breastfeeding at six months in regional Victoria were located in the LGAs of Queenscliffe (B) (70.2%), Towong (S) (64.9%), Indigo (S) (60.3%) and Hindmarsh (S) (55.9%).

The lowest percentages were in Wodonga (RC) (22.9%), Pyrenees (S) (25.9%) and Mitchell (S) (29.6%).
In metropolitan Melbourne, the highest percentages of women fully breastfeeding at six months were recorded in Yarra (C) (56.4%), Boroondara (C) (54.4%), Port Phillip (C) (52.7%), Bayside (C) (51.7%) and Nillumbik (S) (51.0%).

The lowest percentages were recorded in Casey (C) (23.2%), Whittlesea (C) (25.3%), Melton (S) (25.5%) and Frankston (C) (27.9%).
Education and learning

The Best Start Indicators Project recognises that early childhood education is important in preparing children for school and introducing them to organised learning. The project states that evidence gained internationally suggests that children’s participation in early childhood education and organised learning can produce a range of short-term and long-term benefits, including improved literacy and numeracy, improved self-esteem, positive social, emotional, cognitive and linguistic effects, better employment prospects and improved health outcomes. As an indicator of early childhood education, this atlas presents children enrolled in four year old kindergarten.

Attendance at a quality preschool program is considered to have a number of benefits for children including better intellectual development and independence, sociability and concentration, cognitive development in the short-term and preparation for success in school (AIHW, 2005 cited in DEECD, 2007).

Currently, kindergartens in Victoria fall under the jurisdiction of the Victorian Department of Education and Early Childhood Development. The department is the provider of data presented in this chapter for the indicator ‘children enrolled in four year old kindergarten’.

In the context of Best Start, the inclusion of indicators for kindergarten enrolments and days absent in primary school follows the lead of the Sure Start project in the UK and the Head Start program in the US. The Best Start Indicators Project cites the Head Start program, which included attendance at a kindergarten program as a key indicator of wellbeing, especially for those children at risk or at disadvantage.

The indicator is presented as a kindergarten participation rate based on the number of children enrolled in their first year of kindergarten, divided by the Estimated Resident Population aged four for that year. Enrolments data are based on the funded location of the Kindergarten.
Kindergarten participation must be interpreted with some caution. At small area level (LGA), the participation rate is distorted to the extent that children attend kindergarten outside the LGA where they usually reside, which means some percentages will be over 100 per cent. It is also sensitive to the extent that some children attend four year old kindergarten when they are actually younger or older than age four.

The population base for this indicator was finalised in 2007; therefore participation rates from this Atlas cannot be accurately compared with 2001 data previously reported in the Best Start Atlas.

See the Glossary under ‘Kindergarten participation' for more details on this indicator.

Maps 5.3a and 5.3b relate to the percentage of children enrolled in four year old kindergarten within each LGA in Victoria for 2006.

Kindergarten

In 2006, the number of first year enrolments in kindergarten was 56,673, decreasing by 629 or 1.1 per cent since the previous year. The percentage of children enrolled in four year old kindergarten services in 2006 was 91.4 per cent, slightly down from 2005 (92.7 per cent).

In regional Victoria the percentage of children enrolled in 4 year old kindergarten was higher (93.3 per cent) than in metropolitan Melbourne (90.7 per cent) in 2006.
The LGAs with the highest kindergarten participation rates in regional Victoria were in Queenscliffe (B), Mansfield (S), Hindmarsh (S), Corangamite (S), Northern Grampians (S), Hepburn (S), Ballarat (C), Macedon Ranges (S), Central Goldfields (S), Gannawarra (S), Towong (S), Indigo (S) and Colac-Otway (S), all above 100% (see Glossary under ‘kindergarten participation’ for explanatory notes on percentages above 100).

The lowest percentages were found in the LGAs of West Wimmera (S) (57.1%), Loddon (S) (73.9%) and Moorabool (S) (78.4%).
Map 5.3b:
Children enrolled in four year old kindergarten, within each LGA in Melbourne, 2006
As a percentage of the estimated resident population for four year olds within each LGA

- In metropolitan Melbourne, the LGAs with the highest kindergarten participation rates were Melbourne (C), Yarra (C), Stonnington (C), Banyule (C), Bayside (C) and Mornington Peninsula (S) all with participation rates in excess of 100% (see Glossary under ‘kindergarten participation’ for explanatory notes on percentages above 100).
- The LGAs of Cardinia (S) (99.5%), Nillumbik (S) (98.9%), Boroondara (C) (97.1%), Brimbank (C) (96.2%) and Moonee Valley (C) (95.5%) also recorded high participation rates.
- The lowest percentages were recorded in Port Philip (C) (74.9%), Darebin (C) (76.7%), Maribyrnong (C) (77.4%) and Whittlesea (C) (77.4%).
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 minimise the likelihood of academic progress and success. This can compound issues of low self-esteem, social isolation and dissatisfaction that could have triggered the absenteeism (Bond, 2004).

There is no consensus for an exact definition of non-attendance as absenteeism from school. Non-attendance at school can take a number of different forms and students may be absent from time to time. Illness or an accident can be the cause of non-attendance and usually the students return to school promptly (Bonzos, 2005 cited in DEECD, 2006). If a student's absence is habitual, persistent and unexplained then this is of concern to the school community (Bond, 2004 cited in DEECD, 2006).

Absence applies to absences where the parent or carer allows the late arrival or non-attendance at school of the child and is common of children in primary school. This is different to truancy where a student attempts to conceal the absenteeism from the parent and is often relevant to older students at secondary school.

Prolonged non-attendance can have serious effects for the child in later life. An Auditor General's report stated that 'students who are absent from school are at the greatest risk of dropping out of school early, becoming long term unemployed, being caught in the poverty trap, depending on welfare and being involved in the justice system' (Auditor General Victoria, 2004 cited in DEECD, 2006). Families and communities may also be affected by student absenteeism. It may mean a continued cycle of poverty and unemployment and also contribute to family discord, additional stress, encounters with the youth justice system and mental and physical illness. For the community it may mean contact with the police, drug abuse, violence, jail time, unemployment, welfare dependence, homelessness and illness (Bonzos, 2005 cited in DEECD, 2006).
Maps 5.4a to 5.6b show the average number of absence days for Prep, Year 1 and Year 2 students enrolled in Government Schools, within each LGA in Victoria for 2006. This is based on the LGA of the school; children may attend school in a different LGA to which they reside.

Data are sourced from the Department of Education and Early Childhood Development, School Census Data.

Average number of absence days

Since 2001, the average number of absence days has decreased as the year level goes up from Prep, to Year 1 and Year 2. In 2006 the average number of absence days for Prep students enrolled in Government Schools was 13.2, compared to 12.5 days for Year 1 and 12.1 days for Year 2 students.

The average number of absence days increased slightly in Year Prep after 2001 when it was 12.5 days, and then continued at just over 13 average days each year to 2006. The averages for Year 1 and Year 2 student absences have remained stable over the 5 years.
Map 5.4a:
Average number of absence days for Prep students enrolled in Government schools, within each LGA in Victoria, 2006

- The highest number of average absence days, for Prep students enrolled in Government schools in regional Victoria, were in the LGAs of Pyrenees (S) and Queenscliffe (B) (both 17.5), then Towong (S) and Yarriambiack (S) (both 17.0).
- The lowest number of average absence days were found in Golden Plains (S) and Gannawarra (S) (both 11.3), Horsham (RC) (11.5) followed by Benalla (RC) (11.9).
The highest numbers of average absence days, for Prep students enrolled in Government schools in metropolitan Melbourne, were in the LGAs of Brimbank (C) and Melton (S) (both 15.7). The next highest were in Moreland (C) (15.5) and Hume (C) (14.6), followed by Darebin (C) and Melbourne (C) (both 14.5).

The lowest numbers of average absence days were found in Frankston (C) (11.1) and Monash (S) (11.4) followed by Kingston (C) and Boroondara (C) (both 11.5).
The highest numbers of average absence days, for Year 1 students enrolled in Government schools in regional Victoria, were in the LGAs of Strathbogie (S) (16.0), Pyrenees (S) (15.2), West Wimmera (S) (15.1) and Queenscliffe (B) (14.9).

The lowest number of average absence days were found in Horsham (RC) (9.6) followed by Gannawarra (S) (10.4), Ararat (S) (11.0) and Ballarat (C) (11.1).
The highest numbers of average absence days, for Year 1 students in Government schools in metropolitan Melbourne, were in the LGAs of Melton (S) (14.5), Melbourne (C) (14.4) and Hume (C) (14.3).

The lowest numbers of average absence days were found in Boroondara (C), Glen Eira (C) and Whitehorse (C) (all 11.0)
Map 5.6a:
Average number of absence days for Year 2 students enrolled in Government schools, within each LGA in Victoria, 2006

- The highest numbers of average absence days, for Year 2 students enrolled in Government schools in regional Victoria, were in the LGAs of Bass Coast (S) (15.1), Mildura (RC), East Gippsland (S) and Corangamite (S) (all 14.2).
- The lowest numbers of average absence days were found in Southern Grampians (S) (10.1), Wellington (S) (10.4), Ballarat (C) and Wodonga (RC) (both 10.8) and Gannawarra (S) (10.9).
The highest numbers of average absence days, for Year 2 students enrolled in Government schools in metropolitan Melbourne, were in the LGAs of Melbourne (C) (14.1), Moreland (C) (14.0), Melton (S) (13.9), Hume (C) (13.7) and Darebin (C) (13.5).

The lowest numbers of average absence days were recorded in Bayside (C) (10.5), Boroondara (C) and Monash (C) (both 10.8) and Glen Eira (C) (10.9).
Reading Levels

Proficiency in reading, writing and mathematics are essential skills for day-to-day life, educational opportunities and employment prospects. Poor reading skills can have a detrimental effect on a student’s academic pathway and have also been associated with behavioural and emotional problems including aggressive behaviour and poor self-concept (Good et al., 1998 cited in Persampieri et al., 2006, cited in DEECD, 2006). Research has demonstrated that if children cannot read by the fourth grade they have a ‘future of diminished success’ (US Department of Education, 2001 cited in Persampieri et al., 2006, cited in DEECD, 2006). The relationship between literacy skills and later social exclusion has been well established (Bird and Akerman, 2005, Let’s Read, 2004, cited in DEECD, 2006) and poor literacy is associated with loss of employment opportunities, low income and the consequent disadvantage in housing and health.

Educational qualifications are becoming more important as the number of low skill jobs decrease. In Australia, it has been shown that students who fail to complete school have restricted job opportunities and are more likely to experience longer periods of unemployment (Lamb et al., 2000 cited in DEECD, 2006). Early school experiences are important and can have a lasting impact on a person’s attitude to education and training and confidence in their learning abilities (Frigo et al., 2003 cited in DEECD, 2006).

Literacy can be broadly defined as including speaking, listening and critical thinking. The central task of reading and writing provides the foundation for more advanced skills and knowledge (Lemos, 2002 cited in DEECD, 2006). The importance for literacy in individual self-worth and social cohesion is essential in the development of human potential (Bird and Akerman, 2005 cited in DEECD, 2006).

In general, literacy levels are high among Australian students and a recent study showed that Australia had a higher mean score than the mean score for all OECD countries in mathematical and scientific literacy (OECD, 2004 cited in DEECD, 2006). This study also showed a large variation in the performances of students across Australia. However, even though literacy and numeracy skills are high in Australia,
there are some populations that are at a disadvantage. Indigenous children, boys, children in remote areas and children from low socioeconomic status background often do not achieve the same educational outcomes as other students and are more likely to be early school leavers (Hunter and Schwab, 2003, Lamb et al., 2000 cited in DEECD, 2006).

In Australia, children’s literacy is assessed through school based benchmark testing, which is undertaken at a state based level. Benchmarks are nationally agreed minimum acceptable standards of literacy and numeracy at particular year levels and are considered the minimum level a student will need to make sufficient progress at school without major difficulties (National Report on Schooling in Australia, 1999 cited in DEECD, 2006).

In Victoria, testing is undertaken in all Government schools, but is optional at Catholic and Independent schools. Literacy rates presented in this section are the percentage of children enrolled in Government schools who meet the national benchmark for literacy in Prep, Year 1 and Year 2 of primary school.

As with average absences, data in maps 5.7a to 5.9b are based on the LGA of the school; children may attend school in a different LGA to which they reside.

Data are sourced from the Department of Education and Early Childhood Development, School Census Data.

Reading assessment levels of students in Prep, Year 1 and Year 2

The percentage of students who meet or exceed the reading assessment benchmark increases at each year level, which has been consistent every year since 2001. In 2006, 79.9 per cent of Prep students met the national benchmark, compared to 86.3 per cent in Year 1 and 94.9 per cent for Year 2 students. Between 2001 and 2006, the percentages increased for Prep, Year 1 and Year 2 (a total increase of 5.6 per cent, 3.0 per cent and 1.2 per cent respectively).
The highest percentages of Prep children in Government schools scoring 90% or more in Level 5 Reading Assessment, in regional Victoria, were located in the LGAs of Queenscliffe (B) (97.0%), Corangamite (S) (92.1%), Golden Plains (S) (91.5%), Surf Coast (S) (90.2%), Wodonga (RC) (90.1%) and Mansfield (S) (89.1%).

The lowest percentages in regional Victoria were in the LGAs of Ararat (RC) (63.6%), Moira (S) (64.3%), Mount Alexander (S) (68.0), Swan Hill (RC) (68.4%), Hindmarsh (S) (68.5%) and East Gippsland (S) (70.9%).
The highest percentages in metropolitan Melbourne of Prep children scoring 90% or more on Level 5 Reading Assessment, were recorded in Nillumbik (S) (94.1%), Stonnington (C) (91.6%), Boroondara (C) (91.0%), Bayside (C) (90.8%), Monash (C) (87.3%) and Glen Eira (C) (86.2%).

The lowest percentages in metropolitan Melbourne were in Manningham (C) (64.3%), Maribyrnong (C) (69.2%), Brimbank (C) (70.1%), Wyndham (C) (71.7%) and Greater Dandenong (C) (73.3%).
For Year 1 children in Government schools scoring 90% or more in Level 15 Reading Assessment, the highest percentages in regional Victoria were located in the LGAs of Surf Coast (S) (95.6%), Moyne (S) (95.2%), Corangamite (S) (94.8%), Mansfield (S) (94.1%) and Horsham (RC) (92.4%).

The lowest percentages in regional Victoria were in the LGAs of Swan Hill (RC) (73.1%), Pyrenees (S) (75.0%), Queenscliffe (B) (76.9%), Moira (S) (77.0%) and Yarriambiack (S) (77.9%).
In Melbourne, the LGAs with the highest percentages of Year 1 students scoring 90% or more of the Level 15 Read Assessment were in, Boroondara (C) (96.5%), Stonnington (C) (95.8%), Bayside (C) (95.3%), Nillumbik (S) (94.7%), Kingston (C) (94.2%), Monash (C) (94.1%) and Port Phillip (C) (94.0%).

The lowest percentages were located in Maribyrnong (C) (71.8%), Greater Dandenong (C), (75.8%), Wyndham (C) (78.7%) and Brimbank (C) (79.3%).
In regional Victoria, the highest percentages of Year 2 children in Government schools scoring 90% or more in Level 20 Reading Assessment in regional Victoria were located in Buloke (S) and West Wimmera (S) (both 100%). This was followed by the LGAs: Mansfield (S), Surf Coast (S), Moyne (S), Murrindindi (S), Mitchell (S), Corangamite (S) and Macedon Ranges (S), all with percentages between 97.0% and 97.8%.

The lowest percentages in regional Victoria were in the LGAs of Swan Hill (RC) (84.9%), Greater Shepparton (C) (91.4%), Mildura (RC) (91.8%) and Horsham (RC) (91.9%).
Map 5.9b: Year 2 children in Government schools scoring 90% or more on Level 20 Reading Assessment, within each LGA in Melbourne, 2006
As a percentage of the total number of students enrolled in Government schools in Year 2 within each LGA

- The highest percentages in metropolitan Melbourne of Year 2 children scoring 90% or more on Level 20 Reading Assessment, were recorded in Nillumbik (S) (98.8%), Bayside (C) (98.5%), Whitehorse (C) (98.2%), Boroondara (C) and Monash (C) (98.1%).

- The lowest percentages in metropolitan Melbourne were in Greater Dandenong (C) (88.3%), Maribyrnong (C) (88.5%) and Wyndham (91.3%).
Child protection re-notifications

Child abuse and neglect are a major issue of public concern in Australia. The definition of child abuse and neglect has expanded over the last decade, with the focus of investigation on a broader definition of whether the child has suffered harm (Cashmore, 2001). Child abuse and neglect are generally classified into one of four categories: physical abuse, sexual abuse, emotional abuse, and neglect (AIHW, 2005). Many of the victims are often subject to more than one type of abuse.

Child abuse and neglect can be related to a number of risk factors including poor parental mental health, substance misuse, low socioeconomic status leading to economic stress and disadvantage, and family disruption. However, other factors may help to minimise the negative effects of abuse, for example, if the child received emotional support from another important adult (Shonkoff and Phillips, 2000).

Abuse and neglect have both short-term and long-term adverse consequences for children, including fear and bodily harm, poor school performance, poor peer relations, anti-social behaviour and mental health disorders (Paolucci et al., 2001). In severe cases, the abuse can lead to injury or serious harm and subsequent hospitalisation.

Children who are abused or neglected or have a parent who cannot protect or care for them adequately may be notified to child protection authorities. Abuse is substantiated if there is reasonable cause to deem that a child has been, is being, or is likely to be abused or neglected or otherwise harmed.
State and territory departments responsible for child protection have been concerned about rising rates of re-notifications and re-substantiations. The Victorian Department of Human Services undertook detailed research and analysis of children in their child protection system (VDHS 2002). The study found that key underlying features, such as low income, substance abuse, mental health issues and the burdens of sole parenting, which led to some families coming into contact with child protection systems, were complex and chronic.

The child protection re-notification rate is supported as an indicator of child safety (Melhuish et al., 2001). The client re-notification rate is the number of clients re-notified within twelve months as a percentage of the total number of clients notified during the reference period. A client is classified as being ‘re-notified within 12 months’ if one or more additional notifications were made during the 12 months prior to the most recent notification made for that client.

**Child protection re-notifications in Victoria**

In 2005–06, 30.9 per cent of child protection notifications for children aged 0 to 8 years in Victoria were re-notifications. The percentage was higher in regional Victoria (34.2 per cent) than in metropolitan Melbourne (28.7 per cent).

Compared to 2000–01, the percentage of re-notifications has decreased in regional Victoria (36.0 per cent to 34.2 per cent) and in metropolitan Melbourne (31.7 per cent to 28.7 per cent).
Map 5.10a:
Children aged 0 to 8 years re-notified to child protection services during 2005–06 within each LGA in Victoria
As a percentage of the total number of notifications for children aged 0 to 8 years during 2005–06, within each LGA

- The highest percentages of child protection re-notifications for children aged 0 to 8 years in regional Victoria, were located in the LGAs of Golden Plains (S) (56.0%), Gannawarra (S) (51.8%), Alpine (S) (50.0%), Horsham (RC) (44.8%) and Moorabool (S) (44.6%).
- The lowest percentages in regional Victoria were located in Loddon (S) (17.5%), Corangamite (S) (18.2%), Colac-Otway (S) (20.0%), Murrindindi (S) (22.2%) and Surf Coast (S) (22.9%).
In metropolitan Melbourne, the highest percentages of child protection re-notifications for children aged 0 to 8 years, were located in the LGAs of Yarra (C) (40.4%), Knox (C) (35.6%), Manningham (C) (35%), Hume (C) (33.0%) and Frankston (C) (33.7%).

The lowest percentages in metropolitan Melbourne were located in the LGAs of Whittlesea (C) (20.5%), Brimbank (C) (22.4%), Greater Dandenong (C) (22.7%), Moreland (C) and Darebin (C) (both 22.9%).