Australian Government



Australian Institute of Health and Welfare

# Making progress

The health, development and wellbeing of Australia's children and young people



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# Foreword

The health and wellbeing of Australia's children and young people is at the centre of policy making in Australia today. Policy initiatives in the areas of health, productivity and social inclusion draw on the principles of early intervention and prevention. The effectiveness of these initiatives depends on the ability to track progress and provide regular feedback to inform the developing reform agendas. This has been recognised as a high priority by all Australian Government departments, and is a primary goal of the Australian Institute of Health and Welfare (AIHW).

This report builds on work undertaken by the AIHW over the last decade on the development and reporting of key national indicators of child and youth health, development and wellbeing, and more recently work undertaken on the Ministerial endorsed Headline Indicators. This report is distinct from previous AIHW reports, as it presents measures of progress for children and young people in a summary, indicator-based format. This report focuses on issues of importance for children and adolescents, including indicators of mental health, risk factors for chronic disease, hospitalisation, mortality, educational achievement in primary and high school, homelessness, jobless families and family economic situation. The analysis in this report shows that, while many children and adolescents in Australia are doing well, some experience significant physical, social, educational and economic disadvantage, and numerous indicators do not compare favourably with other developed countries.

This report reveals that while much progress has been made, a great deal remains to be done to ensure that *all children have the best possible start in life*.

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# How are Australia's children and young people faring?

This report shows that, while many Australian children and adolescents are faring well, some experience considerably worse health, poorer developmental and learning outcomes and generally reduced wellbeing than others in the population, and there are many areas where further gains in health and wellbeing could be achieved. The table below summarises these key areas of concern, as well as some recent achievements, in the areas of health, education and wellbeing for different stages of development—early childhood, childhood, adolescence, and for the overall 0–19 year age group. It also identifies where data gaps exist in the national monitoring of child and youth health and wellbeing in Australia.

In response to the Council of Australian Governments' (COAG) 'Closing the gap' agenda, particular focus is given to Aboriginal and Torres Strait Islander children and youth. Indigenous children and youth continue to be disadvantaged across a broad range of health and socioeconomic indicators, and have not shared the same improvements in health, education and wellbeing as those observed for Australian children and youth generally. This report shows that while Indigenous students are gradually catching up in retention to Year 12, there has been no measurable progress in recent years in closing the gap in the Year 5 writing and numeracy benchmark results. Immunisation coverage of Indigenous 2 year olds is similar to the national average, but Indigenous children are still twice as likely as other children to be of low birthweight, to be hospitalised for chronic conditions and to die before the age of 20. Similarly, children and young people living in regional and remote areas and the most socioeconomically disadvantaged areas also have worse health and education outcomes for many of the indicators where data are available.

The report also shows that Australia does not compare favourably with other developed countries for many of the indicators presented, where comparable data are available. For example, Australia has the second highest percentage of children living in jobless families in the OECD and ranks in the bottom third in the under-5 mortality rate.

Age range	Achievements	Areas of concern	What don't we know?
Across the age span (0—19 years)	Mortality rates falling in all age groups	Poor outcomes for Indigenous children and youth in multiple areas (both health and wellbeing)	Prevalence of child abuse and neglect, and whether rate has changed over time
	Fewer children living in jobless families	High unmet requests for SAAP accommodation for children and youth	Prevalence of disability among Indigenous children and other disadvantaged populations
Early childhood	Immunisation coverage for 1 and 2 year olds is over 90%	Infant morality and teenage fertility compare unfavourably with other OECD countries	Proportion of women exclusively breastfeeding to 4 and 6 months of age
	Gap in Indigenous infant mortality rates narrowing	High unmet demand for child care due to accessibility barriers, particularly availability of places	Number of children attending early childhood education programs delivered by university-qualified teacher in the year before school
Childhood	Good dental health compared with other OECD countries Drop in asthma hospitalisation rate	Gap in literacy and numeracy for Indigenous students remains high Increase in hospitalisation rates for diabetes	How many children are physically active according to National Physical Activity Guidelines
Adolescence	Reduction in rates of smoking, risky alcohol intake, illicit drug use	High youth unemployment and underemployment	Rates of physical and sexual assault, and whether rate has changed over time
	Increase in Year 12 retention rate for Indigenous students	Indigenous youth over-represented in juvenile justice supervision, and no change in rates in 6 years	How Australia compares internationally on many of the health and crime indicators



The table How does Australia compare... summarises information about Australia's international performance and the level of inequality between three population groups of interest within Australia—Aboriginal and Torres Strait Islander people, people living in regional or remote areas, and those living in socioeconomically disadvantaged areas. Comparisons are made internally, that is, between population groups within Australia, and externally with other developed countries. For the groups of interest in the internal comparison, rates for various indicators are compared with those of the remaining population group. Each comparison is expressed as a rate

ratio: the rate for the group of interest over the rate for the rest of the population. For indicators relating to childhood immunisation, breastfeeding, and education, rate ratios of less than 1 indicate disadvantage for the group of interest. The lower the ratio, the greater the disadvantage for the group of interest. For all remaining indicators, a rate ratio of greater than 1 indicates that the group of interest is at a disadvantage—in these cases, the higher the rate ratio, the greater the disadvantage.

International data and data for population groups of interest were not available for each indicator presented in this report.

# How does Australia compare...

# ...internally:

# ...externally:

who fares worse than others?

how do we compare with like countries?

		Indigenous to	Remote/very	Most disadvantaged	
	See	non-Indigenous	remote areas to	to least	OECD rankings (total number
Indicator	page	Australians	major cities	disadvantaged areas	of countries) <sup>(0)</sup>
		HE/	ALTH		
Mortality	7	2.0-3.1			24 (30)
Disability	8				
Teenage births	15	5.2	5.0		16 (24)
Low birthweight	16	2.2	1.4	1.3	13 (30)
Childhood immunisation (12, 24 months) <sup>+</sup>	18	0.9, 1.0			14 (20)
Breastfeeding (NSW) <sup>+</sup>	17		1.1	0.4	
Dental decay (6 years, 12 years)	24	2.5, 1.8	1.7, 1.4	2.2, 1.5	8 (30)
Chronic disease	23	2.1-2.7			
Obesity (6–11 years, 15–19 years)	26, 32	1.4, 2.6		2.0 <sup>(c)</sup>	
Physical activity/screen time	25				
Injury and poisoning	22, 30	1.3			
Mental health	31	1.4			
Substance use	33				
		WELL	BEING		
Child care accessibility	19				
Early childhood education					
(preschool: 3, 4 years) <sup>†</sup>	20		0.4, 1.1		
Literacy and numeracy <sup>†</sup>	27	0.8, 0.9	0.6, 0.9		8 & 16(25) <sup>(d)</sup>
Year 12 retention and completion <sup>+</sup>	34	0.6, 0.5	0.4-0.7		18 (29)
Youth participation (unemployment rate)	35	2.3			16 (25) <sup>(e)</sup> , 12(30)
Jobless families	9	3.1			23 (24)
Family economic situation	10				13 (24)
Child abuse and neglect	11	5.4			
Homelessness	12				
Crime	28, 36	13–49			

For these indicators, rate ratios of less than 1 indicate disadvantage for the population group of interest. For all other indicators, disadvantage is indicated by rate ratios of greater than 1.

(a) The comparison groups included in the table column headings may not apply to all the indicators. For some of the indicators, the comparison is between Indigenous and other Australians, while for others it is Indigenous and all Australians. Different comparison groups also apply for regional and disadvantaged areas. For precise comparison groups, see the relevant sections.

Green shading indicates a ranking in the top third, yellow in the middle third and red in the bottom third. (b)

6-11 years only, based on school socioeconomic status. (c)

(d)

Australia ranked 8th in science and 16th in maths. Includes some non-OECD countries. Percentage of 15–19 year olds neither working nor studying. (e)

# Introduction

Ensuring children get the best possible start in life is central to the health, social inclusion and productivity agendas of the Australian Government. Meeting this goal will involve reforms in the areas of education, early childhood development, preventive health care and housing, as well as strategies to address economic and social disadvantage. The benefits of investing in children and young people flow through to the entire population with outcomes as diverse as greater productivity, lower burden of disease, stronger families, and safer and more connected communities. Promoting the physical, social, emotional, and cognitive development of Australia's children and young people is therefore a matter of national priority.

Australia's children and young people are growing up in an environment of rapid social, economic and technological change. The world in which children and young people live plays an important role in shaping their health, development and wellbeing, both in the short-term and into adulthood. It follows that any reflection on their progress needs to take account of these environmental factors. The indicator framework developed for this report aims to do this, by presenting a range of indicators in the areas of health, development and wellbeing while taking into account the broad social, community and economic factors.

# **Purpose of this report**

Good information is at the heart of good policy development. A great deal of detailed information exists about children and young people in Australia today. The AIHW, in consultation with an expert advisory group and funding assistance from the Australian Government Department of Health and Ageing, has produced six comprehensive, national, statistical reports on the health, development and wellbeing of Australian children and young people over the last decade.<sup>1,2</sup> The next of these reports, focusing on children, will be released in May 2009. The AIHW has also been contracted by three Ministerial Councils (Australian Health Ministers' Advisory Council, the Community and Disability Services Ministers' Advisory Council and the Australian Education Systems Officials Committee) to report on the 19 Headline Indicators of children's

health, development and wellbeing endorsed by the Australian Health Ministers' Conference and the Community and Disability Services Ministers' Conference in 2006.<sup>3</sup> However, given current policy priorities there is an increasing need to also have a timely, targeted indicator-based report drawing together key summary statistics integral to child and youth health and wellbeing in order to inform the COAG and social inclusion agendas. This report aims to meet this need, and in doing so, the following questions have been central:

- What aspects of health and wellbeing have changed for Australia's children and young people in recent years—for better or for worse?
- Where is there a clear need for improvement?
- How do we compare with countries like ours?
- And crucially, in the context of the social inclusion agenda which addresses multiple difficulties or levels of disadvantage, in what areas do some subpopulations within Australia fall behind their peers?

# Changing lives: children and young people in Australia

Children and young people in Australia today are growing up in a very different environment from 20, and even 10, years ago. Major social changes that have directly affected families include a rise in the number of blended and lone-parent families, a trend towards having fewer children and children later in life, increased workforce participation of women with children and the accompanying growth in the use of child care.<sup>4</sup> For infants and young children, research about the importance of the first years of life has led to an increased focus on antenatal care, early learning and development, and early intervention for children at risk of health, educational or social problems. Among older children and adolescents, advances in information technology have changed the way they learn and interact with their friends and society at large. Changes in the labour market, alongside increasing participation in post-secondary education, has seen a rise in the proportion of young people combining study with work, and many remain in the family home well into their 20s.<sup>4</sup> In the area of health, far fewer children than in generations past die before



the age of 20; most grow up free from infectious diseases such as measles and polio, and more survive serious illnesses such as cancer or live longer with genetic conditions such as cystic fibrosis.<sup>1,2</sup> However, these conditions have been replaced with rising concerns about obesity, chronic disease and mental and behavioural problems, and their associated disabilities.

The size and composition of the child and youth population has important implications for planning and policy development, and these, too, are changing. In 2006, there were 1.3 million children aged under 5 years (comprising 6% of the population), 2.1 million children aged 5-12 years (11%), and 1.9 million teenagers (10%)—in total, 5.3 million Australians aged under 20, comprising more than one-quarter (27%) of the population. By 2020 the number of children and youth is projected to be similar, but they will represent only 22% of the population. Some population groups have experienced greater growth than average—the proportion of Australians aged under 20 years who were Indigenous increased from 3.7% to 4.1% between 1996 and 2006, while those born outside Australia rose from 8.2% to 8.8%. Understanding these changing demographic trends contributes to good policy decisions about the provision, delivery and accessibility of services required by children and young people, including child care, schools, and health and welfare services.

# Framework

The indicators selected for this report take into account these different social, community and economic environments that children and young people are growing up in today. Each of the indicators presented relate to one or more highlevel objectives of the Social Inclusion and COAG Reform agendas, and have been chosen on that basis. A mapping of the indicators included in this report to these high-level objectives is shown in Appendix A.

This report focuses on children and young people aged 0–19 years, and is divided into four sections reflecting different stages of development. The first section presents six indicators covering the broad 0–19 year age range. The chosen indicators represent topics of relevance to children and young people aged less than 20 years in the areas of health, development and wellbeing. Each of these indicators signify an issue that can have profound impact on the lives of children, young people, their families and society at large, and interact with many of the indicators covered in the later sections. The remaining three sections are dedicated to specific stages of growing up: infancy and early childhood, 'school age' childhood, and adolescence. These sections include indicators of particular significance and relevance to the age group concerned in the areas of health, development and wellbeing.



# **Overarching indicators (0–19 years)**

This section presents data on six indicator topics for the broad age group 0–19 years. The indicators included here represent issues that affect children and young people of all ages in the areas of health (mortality and disability), family socioeconomic status (jobless families and family economic situation), and safety/social breakdown (homelessness, and child abuse and neglect).

The following table shows how children and young people fare against various measures of the six indicator topics. Measures and trends are reported for the broad age group as well as each of the specific age groups on which this report is focused. Where time series data has been referred to on an indicator page, the direction of the recent trend is shown in the table.

Indicator	Measure	Value	Trend
	Deaths per 100,000 persons aged 1–19 years	20	$\checkmark$
Mortality	Deaths per 100,000 persons aged 1–4 years	21	$\checkmark$
	Deaths per 100,000 persons aged 5–12 years	10	$\checkmark$
	Deaths per 100,000 persons aged 13–19 years	31	$\checkmark$
	Percentage of 0–19 year olds with disability	8	x
	Percentage of 0–4 year olds with disability	4	
	Percentage of 5–12 year olds with disability	10	
	Percentage of 13–19 year olds with disability	10	
	Percentage of 0–19 year olds with severe or profound core activity limitation	4	×
Disability	Percentage of 0–4 year olds with severe or profound core activity limitation	3	
	Percentage of 5–12 year olds with severe or profound core activity limitation	5	
	Percentage of 13–19 year olds with severe or profound core activity limitation	3	
	Percentage of 5–19 year olds with schooling restriction	6	
	Percentage of 5–12 year olds with schooling restriction	7	
	Percentage of 13–19 year olds with schooling restriction	5	
	Percentage of children aged 0–14 years living in jobless families	15	$\checkmark$
Iobless families	Percentage of children aged 0–4 years living in jobless families	16	$\checkmark$
Jobiej Juliniej	Percentage of children aged 5–12 years living in jobless families	15	$\checkmark$
	Percentage of children aged 13–14 years living in jobless families	15	$\checkmark$
	Mean equivalised disposable household income of all low-income households with children aged		_
Family according	0–19 years	\$346	✓
situation	where eldest child was aged 0–4 years	\$353	~
Situation	where eldest child was aged 5–12 years	\$347	$\checkmark$
	where eldest child was aged 13–19 years	\$342	$\checkmark$
	Child protection substantiations per 1,000 children aged 0–17 years	7	?
	Child protection substantiations per 1,000 infants aged less than 1 year	17	?
Child abuse and	Child protection substantiations per 1,000 1–4 year olds	8	?
neglect	Child protection substantiations per 1,000 5–12 year olds	6	?
	Child protection substantiations per 1,000 13–17 year olds	4	?
	Average daily number of 0–19 year olds with unmet requests for SAAP accommodation	415	
Homelessness	Average daily number of children aged 0–11 years with unmet requests for SAAP accommodation	221	
	Average daily number of young people aged 12–19 years with unmet requests for SAAP accommodation	167	

Key: 🖌 = favourable trend; 🔀 = unfavourable trend; .. = no trend data presented; ? = Rate has been increasing, but as data are reflection of Departmental Child Protection activity it is unknown whether an increase indicates an unfavourable or favourable trend.



Measure: Number of deaths of children and youth aged 1–19 years, per 100,000 population

Mortality rates and causes of mortality are key indicators of the health of a population and, as many deaths are potentially preventable, provide crucial information for public health policy and planning. They not only reflect circumstances around the time of death, but also provide insight into changes in social and environmental conditions, medical interventions, lifestyles and trends in underlying risk factors.

High rates of child mortality are strongly associated with social and economic disadvantage, including maternal age, health and parity, exposure to environmental contaminants, nutrition, risk of injury, personal preventive measures and access to medical treatment.<sup>5,6,7,8</sup> For older children and adolescents these factors are exacerbated by the increased independence that comes with adolescence, the period where new skills are developed, such as driving and job skills, and increased exposure to alcohol and other drugs. Injuries from traffic accidents, psychological problems and the harmful effects of alcohol and other drug use are prominent hazards for young people.

As more than half of all deaths before the age of 20 occur in the first year of life, and the causes of mortality in infants are quite different from mortality in children and adolescents, infant mortality is addressed in a separate indicator (p.14), and is not included under this indicator.

COAG has committed to halving the mortality gap for Indigenous children under five within a decade.<sup>9</sup> Improvements in Indigenous child mortality require better access to antenatal care, teenage reproductive and sexual health services, child and maternal health services, and integrated child and family services.<sup>10</sup> 1,055 Australians aged 1–19 years died in 2006—a rate of 20 per 100,000 population. Indigenous children and youth were twice as likely to die between the ages of 1–19 as their non-Indigenous counterparts.

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- Among people aged 1–19 years, mortality rates were highest for teenagers.
- Rates fell by around one-third (1997–2006), and to a greater extent among males (38%) than females (25%).

Deaths per 100,000 population



- The leading specific causes of death were cancers and accidental drowning (each at a rate of 3 per 100,000) for children aged 1–4 years; cancers and transport accidents for children aged 5–12 years (each 2 per 100,000); and transport accidents and intentional self-harm for teenagers (11 and 5 per 100,000).
- Mortality rates were twice as high for teenage males as females, largely due to higher mortality from transport accidents, intentional self-harm and other injuries.



Leading causes of mortality, 2006 (deaths per 100,000 population)

- Australia's under-5 mortality rate is in the best fifth of the world, but the worst third of the OECD (24th out of 30 countries).<sup>11</sup>
- Overall mortality rates are decreasing, but among 1–19 year olds the Indigenous rate is still twice as high as the non-Indigenous rate.
- Many of the leading causes of death in children and young people are potentially preventable: half of all deaths of 1–19 year olds were caused by injuries, and half of these were transport accidents.

# Overarching indicators (0–19 years)

# Disability

Measure: Percentage of children and young people with disability, severe or profound core activity limitations, or schooling restrictions

Disability is a characteristic that goes beyond the presence or absence of particular health conditions; it relates to the way in which an individual functions in society and is strongly influenced by environmental factors. Disability is measured in terms of impairments, activity limitations and participation restrictions, covering the range of activities that people perform in everyday life. People who sometimes or always need assistance with one or more of the core activities of daily living (self-care, mobility or communication tasks) are referred to as having severe or profound core activity limitation.

People with disability may also experience restrictions in other aspects of their lives. For example, children and adolescents with disability may experience schooling restrictions that result in needing special assistance, arrangements or equipment at school, attending special classes or a special school, needing frequent time off school or having difficulty with aspects of schoolwork or the school environment.

Overall, people with disability achieve lower educational qualifications than people without disability, and often have poorer labour market outcomes.<sup>12</sup> However, because the experience of disability stems from the interaction of individual and external factors, it is possible to reduce the impact of disability on the person's participation in all aspects of life through early intervention, and environmental and societal modifications.

The new National Disability Reform Agenda aims to place people with disabilities, their families and carers at the centre of services across Australia and to improve the availability, flexibility and consistency of services across all jurisdictions.<sup>13</sup>

- In 2003, 440,300 young people (8%) aged 0–19 years had a disability, including almost 200,000 (4%) with severe or profound core activity limitations and more than 250,000 (6% of 5–19 year olds) with schooling restrictions.
- Boys aged 5–12 years were twice as likely as girls to have schooling restrictions or severe or profound core activity limitations.





Note: Children and young people with schooling restrictions may have also had severe or profound core activity limitations. Source: ABS 2003 Survey of Disability, Ageing and Carers, unpublished data.

- Almost one in four children with disability had asthma.
- All children aged 5–12 years with autism had schooling restrictions, and 91% had severe or profound core activity limitations.
- 77% of children and youth aged 5 years or over with ADHD and 85% with intellectual disability experienced schooling restrictions, and half had severe or profound core activity limitations.

Estimated number of children with disability who had selected health conditions, 2003

	Asthma	ADD/ADHD	Intellectual disability	Autism	All conditions
Severe or profound cor	e activity lim	itations			
0—4 years	6,900		*3,600	n.p.	35,900
5–12 years	23,900	20,900	16,900	15,300	105,100
13–19 years	10,400	11,200	15,700	n.p.	56,400
Schooling restrictions					
5–12 years	35,500	32,500	28,900	16,700	154,500
13–19 years	18,700	15,700	24,400	*3,900	101,200
All with disability					
0—4 years	12,200	_	*3,700	n.p.	53,500
5–12 years	51,200	34,800	31,900	16,700	207,300
13–19 years	37,300	27,900	30,900	n.p.	179,500

ADD/ADHD = Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder; n.p. = not published but included in totals. <sup>4</sup> Estimate has a relative standard error of between 25% and 50% and should be interpreted with caution.

Note: Children and young people with schooling restrictions may have also had severe or profound core activity limitations. Source: ABS 2003 Survey of Disability, Ageing and Carers, unpublished data.

- ▶ 8% of Australians aged 0–19 years had a disability in 2003; rates were higher for boys than girls.
- Reported rates of disability and severe/profound core activity limitations in children aged under 15 years have increased since the 1980s.<sup>14</sup>
- More than 90% of children with autism had severe or profound core activity limitations and all had schooling restrictions.



# Dash Jobless families

# Measure: The number of children with no co-resident employed parent, as a percentage of all children

One of the notable results of labour market trends over the past generation has been what is termed 'employment polarisation'. As the unemployment rate of individuals has fallen and an increasing number of families have two working parents, joblessness has become more concentrated within some households.<sup>15</sup> Jobless households are disproportionately likely to be reliant on welfare, have low incomes and experience financial stress, and members of these households report worse physical and mental health and lower life satisfaction than members of households where someone is employed.<sup>16</sup>

Studies on the effects of unemployment on other family members have identified relationships between parental joblessness and family conflict, family breakdown and child abuse.<sup>17</sup> Secure employment provides financial stability, self-confidence and social contact for parents, with positive effects flowing onto their children. Paternal employment in particular was associated with adolescent psychological wellbeing, sociability, satisfaction and happiness.<sup>18</sup> Reducing jobless families would not only be a major improvement for society at the time, but could also have positive inter-generational effects, as the likelihood of a young person completing secondary school and finding secure employment is affected by their parent's socioeconomic status.19

The Australian Government has identified addressing the incidence and needs of jobless families with children as an early priority for Australia's Social Inclusion Agenda.<sup>20</sup>

- 15% of all children aged 0–14 years (543,600) lived in jobless families in 2006.
- Half (51%) of all children in one-parent families did not live with an employed parent, compared with 6% in two-parent families.



*Note:* Based on the employment status of co-resident parents. *Source:* ABS 2006 Census, unpublished data.

- 42% of Indigenous children (67,000) lived in jobless families—the rate was 40% higher and 3.6 times as high as other children in one- and two-parent families respectively.
- The proportion of Indigenous and other children without an employed parent decreased for both family types between 1996 and 2006.



Percentage of children living in jobless families

- Australia had the second highest percentage of working-age jobless families out of 24 OECD countries in 2000,<sup>21</sup> largely due to the relatively high rate of one-parent households in Australia and the high rate of joblessness among this group.<sup>22</sup>
- Indigenous children are 3 times as likely as other children to live in jobless families.
- The proportion of children living in jobless families has decreased over the last decade, but half of all children in one-parent families still live with a jobless parent.

*Note:* Based on the employment status of co-resident parents. *Source:* ABS 1996, 2001 and 2006 Census, unpublished data.

# Overarching indicators (0–19 years)

# Family economic situation

Measure: Mean equivalised disposable household income of low-income households with dependent children aged 0–19 years

Children living in families without regular adequate income are at increased risk of poor health and educational outcomes, both in the short and long-term.<sup>23,24</sup> Living on a low income can affect a child's nutrition, access to medical care, environmental safety, quality and stability of their care, and the provision of appropriate housing, heating and clothing. A primary concern for economically disadvantaged children is being excluded from activities that other children take for granted.

Income disadvantage is also a relative concept, as some Australian families may have higher absolute incomes than people in the past, or in other countries, and still experience relative income disadvantage.

Equivalised disposable household income is the after-tax total of all income sources, adjusted for the size and composition of the household. A household's equivalised income shows how much income a person living alone would need to enjoy the same level of economic wellbeing as a household comprising more than one person.<sup>25</sup>

The average real equivalised disposable household income for households with children aged 0-12years in the  $2^{nd}$  and  $3^{rd}$  income deciles has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator for children's health, development and wellbeing.<sup>3</sup>

The Australian Government has identified addressing the incidence and needs of jobless families with children and secure employment as early priorities for Australia's Social Inclusion Agenda.<sup>20</sup>

- Mean equivalised income of low-income households with dependent children (\$346 per week in 2005–06) was \$269 less than the average for all households with dependent children aged 0–19 years.
- Relative income growth for low-income households with dependent children was lower than for all households with dependent children over last decade (27% vs. 37%).

CPI-adjusted mean equivalised income by age of eldest child (\$ per week)



1. In 2005–06 dollars, adjusted using changes in the Consumer Price Index.

2. Persons in low-income households are those in the 2nd and 3rd income deciles after being ranked by their equivalised disposable household income.

Source: ABS Surveys of Income and Housing, unpublished data.

- 20% of all households with dependent children under 20 years were low-income households. Relatively fewer households whose eldest child was aged 0–4 years were low-income households (16%) compared with households with older children.
- Households with the eldest child aged 0–4 years were less likely to be low-income in 2005–06 than in 1996–97, but there was no significant change for households with older children and dependent youth.

Percentage of households with dependent children and youth that were low-income



Note: Persons in low-income households are those in the 2nd and 3rd income deciles after being ranked by their equivalised disposable household income. Source: ABS Surveys of Income and Housing, unpublished data.

- The mean equivalised income of low-income households with dependent children aged 0–19 years (more than half a million households) was \$346 per week in 2005–06.
- The income of low-income households with children and dependent youth has not grown as fast as that of all households with children and youth generally.
- Australia ranked 13th of 24 OECD countries in terms of the percentage of children living in relative income poverty in 1999.<sup>21</sup>



# Child abuse and neglect

Measure: Number of children aged 0–17 years who were the subject of a child protection substantiation in a given year, per 1,000 population

'Children everywhere have the right to survival... to protection from harmful influences, abuse and exploitation'.<sup>26</sup>

There is a demonstrated relationship between the health and wellbeing of children and the environment in which they grow up. Children who are raised in supportive, nurturing environments are more likely to have better social, behavioural and health outcomes.<sup>27,28</sup> The reverse is also true: children who have been abused or neglected often have poor developmental outcomes, such as lower social competence, poor school performance and a higher likelihood of criminal offending later in life.

In Australia, statutory child protection systems are the responsibility of the state and territory governments. Child protection substantiation refers to the determination, after investigation, that a child has been, is being or is likely to be abused or neglected or otherwise harmed. Child abuse may include physical, sexual or emotional abuse or neglect. Due to variation in child protection legislation, policy and practice between jurisdictions and over time, the comparison of substantiation rates across time and across jurisdictions is problematic.

Child abuse and neglect has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator for children's health, development and wellbeing.<sup>3</sup>

The Australian Government has committed to developing a National Child Protection Framework which will focus on preventing abuse through early intervention and better integration of family services.<sup>29</sup> COAG has also committed to identify joint reforms and implementation timetables for basic protective security from violence for Indigenous parents and children.<sup>30</sup>

- 32,585 children aged 0–17 years were subject to child protection substantiations for notifications received during 2006–07—a rate of 7 per 1,000 population.
- Infants had the highest substantiation rate—twice that of other age groups.

Child protection substantiations, 2006–07 (per 1,000 population)



Source: AIHW Child Protection Database.

- Child protection substantiation rate for Indigenous children was 5 times that of other children.
- The gap between substantiation rates for Indigenous and other children was greatest for infants, and declined with age.



Rate ratio of substantiations for Indigenous to other children/youth, 2006–07

- Indigenous children are over-represented in child protection substantiations.
- Substantiation rates are highest for infants, due partly to an increased focus on early intervention.
- At the state and territory level, substantiation rates are not directly comparable due to differences in jurisdictional child protection policy, legislation and practice.

# Homelessness

# Measure: Average daily number of 0–19 year olds with unmet requests for accommodation from the Supported Accommodation Assistance Program (SAAP)

Children who are homeless, whether as part of a family unit or on their own, experience significant negative social and health consequences. Homelessness is associated with increased prevalence of a number of health conditions including gastroenteritis, bronchitis, asthma, depression and schizophrenia.<sup>31</sup> Young people who become homeless face increased risk of exposure to physical and sexual assault, poor diet and inadequate shelter, and are more likely than other youth to engage in risky behaviours such as smoking, drug and alcohol abuse, and unsafe sex.<sup>32</sup>

The factors contributing to homelessness are complex, and may be the result of domestic violence, family or relationship breakdown, poverty or financial crisis, mental illness or lack of affordable housing. Responding to homelessness requires a multi-sectoral approach.

The major government response to homeless people or people at risk of homelessness is SAAP. SAAP provides a range of assistance including emergency accommodation, meals and showers, counselling and advocacy. Children and young people may access SAAP services individually as a SAAP client, or they may accompany a parent or guardian who is a SAAP client.

The Australian government has identified addressing the incidence of homelessness as an early priority for Australia's social inclusion agenda. As part of the new National Housing Affordability Agreement COAG has committed to service delivery improvements to reduce homelessness.<sup>10</sup> The Australian Government will also be releasing a White Paper (policy paper) on homelessness in late 2008 articulating the future policy approach for reducing homelessness in Australia.

- 24,900 clients aged under 20 years and 69,100 accompanying children used SAAP services in 2006–07.<sup>33</sup>
- On average, 415 people aged under 20 had a valid unmet accommodation request per day; two-thirds were accompanying a parent/guardian and half required accommodation within 24 hours.

Average daily unmet requests for SAAP accommodation for 0–19 year olds, 2006–07



(a) Based on the collection periods 2–8 August 2006 and 16–22 May 2007; excludes invalid requests.

(b) Includes accompanying children of unknown age.

- Domestic/family violence was the most common reason for children accompanying a parent/guardian to seek SAAP assistance (around 50% of clients).
- Relationship/family breakdown was the most common reason for seeking SAAP assistance for clients aged less than 17 years (29%), followed by time out from family/ other situation (16%).





Note: Reliable data not available for specific age groups for child and youth clients less than 17 years. Source: AIHW SAAP National Data Collection, unpublished data.

- More than 400 young people aged under 20 years have a valid unmet request for SAAP accommodation on an average day.
- **b** Domestic violence and family breakdown are major drivers of children and families seeking SAAP assistance.
- Indigenous accompanying children are over-represented in SAAP and account for over a quarter of all accompanying children under 18 years (77 per 1,000 compared to 14).<sup>35</sup>
- 34,100 children and adolescents were homeless on Census night in 2006 (one-third of the homeless population). Children accounted for a higher proportion of the homeless population in 2006 than in 2001 (22% increase), while the proportion of adolescents has declined. <sup>36</sup>

Source: AIHW SAAP Demand for Accommodation Collection; AIHW 2008.<sup>34</sup>

# Early childhood (0–4 years)

This section focuses on infants and young children (0–4 year olds). COAG, supported by a growing body of research into the importance of the early years of life, has initiated a series of reforms to maternal and child health care and early childhood education. With the principle of early intervention for children at risk of poor outcomes underpinning policy development in this area, many initiatives have particular focus on disadvantaged population groups. Improving maternal and child health services and early learning opportunities for Aboriginal and Torres Strait Islander children are important steps on the pathway to closing the gap in Indigenous disadvantage.

The following table presents national data for each of the measures of the five indicator topics relating to infant and child health, and for the indicators related to child care accessibility and early learning. Where time series data has been referred to on an indicator page, the direction of the recent trend is shown in the table.

Indicator	Measure	Value	Trend
Infant mortality	Deaths per 1,000 live born infants	5	$\checkmark$
Teenage births	Live births per 1,000 females aged 15–19 years	17	$\checkmark$
Low birthweight infants	Percentage of live born infants with low birthweight	6	
Desite	Percentage of infants fully breastfed at 4 months of age	46	
breastieeunig	Percentage of infants fully breastfed at 6 months of age	14	
Childhood immunisation	Percentage of 1 year olds on the ACIR fully immunised	92	$\checkmark$
	Percentage of 2 year olds on the ACIR fully immunised	93	$\checkmark$
	Number of 0–4 year olds with unmet demand for formal child care	110,000	~
	Number of 0–4 year olds with unmet demand for formal child care mainly due to cost	17,000	$\checkmark$
Access to child care	Number of 0–4 year olds with unmet demand for formal child care mainly due to lack of places	49,500	×
	Number of 0–4 year olds with unmet demand for formal child care mainly due to lack of services locally	5,100	$\checkmark$
Early childhood education	Percentage of 3–4 year olds attending pre-school or long day care	68	$\checkmark$
	Percentage of 3 year olds attending preschool or long day care	56	$\checkmark$
	Percentage of 4 year olds attending preschool or long day care	80	$\checkmark$

Key: 🖌 = favourable trend; 🗶 = unfavourable trend; ~ = no change or clear trend; . . = no trend data presented.

# Dash Infant mortality

### Measure: Number of deaths of infants aged less than 1 year per 1,000 live births

A child's risk of death is greatest in the first year of life, and the first month in particular. The infant mortality rate reflects the effect of structural factors on population health, such as the prevailing health and hygiene conditions, and accessibility and effectiveness of the health system in maternal and perinatal health.<sup>37</sup> The infant mortality rate is used internationally as a key measure of population and child health.

Infant deaths have fallen substantially over the last two decades, and are a result of the work of neonatal intensive care units, increased community awareness of the risk factors for SIDS and the importance of early and exclusive breastfeeding, and reductions in vaccinepreventable diseases through the national childhood immunisation program.

Infant mortality has been chosen as the mortality indicator to report on for early childhood, as the vast majority of deaths (85%) in this age group occur within the first year of life, and the causes of mortality in infants are quite different from mortality in young children. See *Mortality* (p. 7) for child mortality rates for 1–4 year olds.

Infant mortality has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator for children's health, development and wellbeing.<sup>3</sup>

COAG has committed to halving the mortality gap for Indigenous children under five within a decade.<sup>9</sup> Improvements in Indigenous child mortality require better access to antenatal care, teenage reproductive and sexual health services, child and maternal health services, and integrated child and family services.<sup>10</sup>

- The infant mortality rate almost halved between 1986 and 1998, and has since stabilised at 4.7 deaths per 1,000 live births in 2006 (1,262 infants died in 2006).
- The Indigenous infant mortality rate was 3 times the non-Indigenous rate (2002–2006).

Infant deaths per 1,000 live births



Note: Infant mortality rates for 'Indigenous infants' and 'Non-Indigenous infants' are presented for the period 2002–06, based on death registrations in Qld, WA, SA and NT only.

Source: AIHW National Mortality Database.

The leading causes of infant mortality were perinatal conditions (such as SIDS, complications of the placenta, cord and membrane) and congenital malformations, accounting for 80% of infant deaths.



Note: Each cause not listed separately (in 'all other causes' category) contributed less than 1% of the total number of infant deaths. Source: AIHW National Mortality Database.

- Indigenous infants were 3 times as likely as non-Indigenous infants to die in their first year of life, but the gap is closing.<sup>38</sup>
- Australia's infant mortality rate ranks 20th out of 30 OECD countries.<sup>39</sup> Excluding the high Indigenous rate, Australia still ranks in the middle of the OECD (14th).
- 80% of infant deaths are caused by perinatal conditions (including SIDS) and congenital abnormalities. Mortality rates for Indigenous infants were particularly high for respiratory and parasitic or infectious diseases, compared to non-Indigenous infants.<sup>38</sup>

# Dash Teenage births

# Measure: Number of live births to teenage mothers, per 1,000 females aged 15–19 years

Teenage motherhood, particularly at younger ages, can pose significant long-term risks to both mother and child. Teenage mothers often delay having their pregnancy confirmed and/ or seeking antenatal care, and are more likely to engage in risky behaviour, including smoking and drinking alcohol during pregnancy. Consequently, teenage mothers face increased risk of miscarriage, preterm delivery, low birthweight and other complications, and perinatal mortality.<sup>40</sup>

Parenthood during the teenage years often results in interrupted schooling, a high risk of single parenthood, greater dependence on government assistance, increased problems in engaging with the labour market, and poverty.<sup>41</sup> All of these factors can affect the health, education and economic futures of children born to teenage parents. While not all teenage pregnancies result in negative outcomes for mother and child, the circumstances that often contribute to teenage pregnancy mean that many young mothers do not receive the support they need before and after birth.

Factors thought to contribute to teenage fertility include family history of teenage pregnancy, violence and sexual abuse in childhood, unstable housing arrangements, poor school attendance and performance, socioeconomic disadvantage, and absence of a father figure.<sup>40</sup>

The teenage fertility rate has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator of children's health, development and wellbeing.<sup>3</sup>



The teenage fertility rate fell from 22 to 17 births per 1,000 between 1995 and 2005.

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- The Indigenous teenage fertility rate was 5 times the non-Indigenous rate in 2005.
- The rate increases with geographical remoteness—the rate in inner and outer regional areas was twice as high, and in remote/very remote areas 5 times as high, as in major cities.



#### Live births per 1,000 females aged 15–19 years

- Australia's teenage fertility rate ranked 16th out of 24 OECD countries in 2003.<sup>21</sup>
- Rates are substantially higher for Indigenous Australians and those living outside major cities.

# Early childhood (0-4 years)

# Birthweight

# Measure: Percentage of live born infants with a birthweight of less than 2,500 grams

Birthweight is an important indicator of a baby's chance of survival and good health. Low birthweight increases the probability of lengthy hospitalisation after birth, the need for resuscitation, or death, and is a risk factor for neurological and physical disabilities.<sup>42</sup> In 2005, 70% of high-risk infants admitted to level III neonatal intensive care units in Australia were of low birthweight.<sup>43</sup>

A baby may be small for its gestational age (intrauterine growth retardation) or due to being born early (preterm). Factors that contribute to low birthweight include maternal age, illness during pregnancy, low socioeconomic status, multiple fertility, maternal history of spontaneous abortion, harmful behaviours such as smoking or excessive alcohol consumption, poor nutrition during pregnancy and poor prenatal care.<sup>43,44</sup>

Mothers aged less than 20 years, or 40 years or over, are at heightened risk of delivering a low birthweight infant. The increasing number of infants born to older mothers in Australia, and the disproportionate risk faced by certain population groups, including Indigenous women, makes this an important indicator of antenatal care and neonatal health.

The proportion of live born infants of low birthweight has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator for child health, development and wellbeing.<sup>3</sup>

- 6.4% of live born infants were of low birthweight in 2005 (17,241 infants), including 1.1% of very low or extremely low birthweight.
- The rate was double for Indigenous mothers (13.2%), and the gap between Indigenous and non-Indigenous mothers grew between 1991 and 2004.<sup>45</sup>
- The percentage of low birthweight infants was also higher in remote and very remote areas (8.7%) and the most socioeconomically disadvantaged areas (7.2%).

#### Percentage of live born infants with low birth weight, 2005



Source: AIHW National Perinatal Data Collection

#### Australia ranked 13th out of 30 OECD countries in the proportion of low birthweight infants in 2005.



Percentage of live born infants with low birth weight, selected OECD countries, 2005

- Australia ranked in the middle of the OECD in 2005 (13th out of 30 countries).<sup>46</sup>
- Indigenous mothers are twice as likely as non-Indigenous mothers to have a low birthweight infant, and the gap is widening.
- Infants born in remote areas or areas of high socioeconomic disadvantage were 30–40% more likely to be of low birthweight.

*Note:* Data for France from 2004. *Source:* OECD Health Database, OECD 2008.<sup>46</sup>



# Dash Breastfeeding

# Measure: Percentage of infants fully or exclusively breastfed at 4 and 6 months of age

Breastfeeding is extremely important in promoting healthy development in children. Breast milk provides the best nutritional start for infants and helps to protect against infectious disease.<sup>47</sup> Breastfeeding is also associated with long-term benefits, including improved cognitive development and protection against immunerelated diseases such as Type 1 diabetes, celiac disease, inflammatory bowel disease and possibly some forms of cancer.<sup>48</sup> Breastfeeding has many positive health effects for mothers, as well as encouraging bonding between mother and child.<sup>47</sup>

'Exclusive' breastfeeding is defined as the infant receiving only breast milk and no other food or drink, including water, while 'fully' breastfeeding infants can receive other fluids such as juice or water. The Australian dietary guidelines for children and adolescents recommend exclusive breastfeeding of infants until around 6 months of age to achieve optimal growth, development and health.<sup>47</sup>

Currently, Australia has no reliable national data collection to effectively monitor infant feeding practices, and the inconsistent use of definitions and terms makes it difficult to compare studies of the rates of breastfeeding.

The proportion of infants exclusively breastfed at 4 months of age has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator of children's health, development and wellbeing.<sup>3</sup>

46% of infants were fully breastfed at 4 months of age, falling to 14% at 6 months, according to a longitudinal study of infants in 2004.



Source: Growing up in Australia: The Longitudinal Study of Australian Children, AIFS 2008.<sup>49</sup>

- According to state surveys, 18% of children in NSW<sup>51</sup> (2005–06) and 15% in Victoria<sup>50</sup> (2006) had been exclusively breastfed up to 6 months of age.
- Exclusive breastfeeding rates in NSW were substantially lower for infants with mothers younger than 25, mothers without tertiary qualifications and those living in areas of the greatest socioeconomic disadvantage.





- Rates of breastfeeding decline substantially within the first 6 months after birth.
- One in seven infants were fully breastfed at 6 months of age, and there is currently no national data available on exclusive breastfeeding.
- Rates of exclusive breastfeeding in NSW were half as high among younger and less educated women, and women living in the most disadvantaged areas.

# Early childhood (0–4 years)

# Childhood immunisation

# Measure: Percentage of children on the Australian Childhood Immunisation Register (ACIR) who are fully immunised at 1 and 2 years of age

Immunisation against childhood diseases is one of the most cost effective public health interventions in preventing childhood mortality and morbidity.<sup>52</sup> Increased immunisation coverage has been one of the most important public health successes of the past three decades, and has resulted in significant declines in infant and child mortality.

Australian children are protected against a number of communicable diseases through routine immunisation as part of the Immunise Australia Program. Large-scale immunisation programs exist for a wide variety of communicable diseases including diphtheria, tetanus, pertussis (whooping cough), rotavirus, poliomyelitis, measles—mumps—rubella (MMR), *Haemophilus influenzae* type b (Hib), hepatitis B, varicella (chickenpox), meningococcal C and pneumococcal disease.

The ACIR, administered by Medicare Australia, records information on the immunisation status of approximately 99% of children aged less than 7 years.

Immunisation coverage at 2 years of age of children on the ACIR has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator for children's health, development and wellbeing.<sup>3</sup>

Immunisation coverage goals for Australia, recommended by the National Health and Medical Research Council (NHMRC) in 1993, called for higher than 90% coverage of children at two years of age, and near 100% coverage of children at school entry age.<sup>53</sup> The coverage target for 2 year olds was achieved in 2003.

- 92–93% of 1 and 2 year olds on the ACIR were fully immunised in 2007, meeting the 90% national coverage target.
- Immunisation coverage has increased over the past decade, particularly among 2 year olds (almost a 50% increase since 1997).

#### Percentage of children fully immunised at 1 and 2 years of age



Note: Includes children who have received the scheduled doses of vaccines for diphtheria, tetanus and pertussis; poliomyelitis; hepatitis B; Hib; and measles—mumps—rubella. Excludes other scheduled vaccines for children aged up to 2 years (rotavirus, chicken pox, meningococcal C and pneumococcal conjugate).

Source: Australian Childhood Immunisation Register, unpublished data.

Percentage of children fully immunised at 1 and 2 years of age

- In 2005, coverage for Indigenous children (84%) was lower than for other children (90%) at 1 year of age, largely due to lower coverage of diphtheria-tetanus-pertussis and poliomyelitis vaccines.
- Among 2 year olds, immunisation rates were similar for Indigenous and other children, meeting the 90% target.



*Note:* Includes children who have received the scheduled doses of vaccines for diphtheria, tetanus and pertussis; poliomyelitis; hepatitis B; Hib; and measles—mumps—rubella. Excludes other scheduled vaccines for children aged up to 2 years (rotavirus, chicken pox, meningococcal C and pneumococcal conjugate). *Source:* NCIRS 2006.<sup>54</sup>

- Immunisation coverage of 1 and 2 year olds is the highest on record and meets the NHMRC 90% coverage target. However, coverage at 6 years (89%) is well below the target of nearly 100%.
- There is potential for further increases in immunisation coverage—Australia's average coverage for 1 and 2 year olds ranked 14th out of 20 selected countries in 2006.<sup>55</sup>



# $\triangleright\,$ Access to child care

# Measure: Number of 0–4 year olds who required formal child care or additional formal child care, and did not receive it because of accessibility barriers

Access to affordable, high-quality child care services is a major concern for both parents and governments. Child care services are increasingly being recognised as being of vital importance to society as they help parents participate in work or study, offer families an opportunity to be involved in the community, help create social networks and provide children with opportunities to develop their social and intellectual skills. Child care services also give parents respite from caring for children with behavioural difficulties, and provide early intervention for developmentally and socioeconomically disadvantaged children.<sup>56</sup>

In recent years there has been an expanding demand for child care services, reflecting trends in social factors such as family structure, employment patterns and population mobility.<sup>4</sup> Unmet demand for child care is an important indicator of accessibility, and this information is available from the ABS Child Care Surveys, where parents were asked whether their formal child care requirements were met.

COAG has committed to improving the quality and availability of child care.<sup>9</sup> This includes establishing children and family centres as part of a broader early childhood development agenda.<sup>10</sup> The Australian Government is also committed to improving child care affordability for Australian families by increasing the Child Care Tax Rebate from 30% to 50%, and improving accessibility by establishing new long day care centres.<sup>57</sup>

- 109,900 children aged 0–4 years had unmet demand for formal child care (including preschool) in 2005—has remained steady since 1999.
- Availability of places was the greatest single barrier (45% of unmet demand). Cost accounted for 15% of unmet demand.
- Lack of available places as the main barrier to formal child care has doubled, but unmet demand due to cost of child care has halved (1999–2005).

Main reason for not using required formal child care or preschool for 0–4 year olds in the past 4 weeks (number)



Note: Cost, no services in the area and no places available have been included in the figure as they account for two-thirds of the main reasons for unmet demand for childcare and are the most relevant for access. Source: AIHW analysis of 1999, 2002 and 2005 ABS Child Care Surveys.

Availability of places was a greater barrier in major cities than in other areas, while cost or availability of services was a greater barrier in areas outside major cities.



Main reason for not using required formal child care or preschool for 0-4 year olds, 2005 (per cent)

- Lack of available places (services booked out) was the main reason for unmet demand for child care in 2005, and reporting of this as a barrier to accessing child care has doubled since 1999.
- Children living outside major cities are more likely to have difficulty accessing formal child care or preschool due to cost or lack of services in the area (see also *Early childhood education*, p.20).

# ▷ Early childhood education

# Measure: Percentage of children aged 3 or 4 years attending preschool or long day care centres

Attendance at high-quality early educational programs before the first year of compulsory schooling is considered to have a number of benefits that can help prepare children for successful transition to school, achieve at school and participate in society as adults. These include improved intellectual development and social, language and cognitive skills. Quality Early Childhood Education programs are especially beneficial for children from disadvantaged backgrounds.<sup>58,59</sup>

It is difficult to estimate the actual number of children participating in quality early childhood education programs in the year before primary school, due to the varied nature of children's services throughout Australia and differences in data collection between states and territories. Early education programs may be delivered in preschool or long day care facilities; however, the proportion of children receiving high-quality programs through these settings is uncertain, in particular whether the program is delivered by a university-qualified teacher.

Participation in early childhood education programs is usually for children in the year before school (generally 4 year olds) although it is open to 3 year olds in some jurisdictions. Attendance at an early educational program in the 2 years before beginning primary school has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator for children's health, development and wellbeing.<sup>3</sup>

COAG has committed to providing universal access to 15 hours of early childhood education programs a week, for a minimum of 40 weeks a year, delivered by degree-qualified teachers. In particular, COAG has committed to providing access to a quality early childhood education program for all Indigenous 4 year olds in remote Indigenous communities within 5 years.<sup>60</sup>

- Two-thirds of 3–4 year olds attended preschool or long day care in 2005, attendance at either preschool or long day care was greater for 4 year olds (80%) than 3 year olds (56%).
- Attendance increased by around one-quarter in both settings for 4 year olds, whereas 3 year old attendance increased in long day care (40% increase) and decreased in preschool (14%) between 1999 and 2005.



1. The total does not add up to the sum of the components as children may attend both preschool and long day care centres. 2. Some long day care centres offer a preschool program delivered by a qualified early childhood teacher. Source: AIHW analysis of ABS 1999, 2002 and 2005 Child Care Surveys.

### Attendance at preschool increases with geographical remoteness for 4 year olds, but declines for 3 year olds. Long day care attendance for 3 year olds was also higher in capital cities than remote areas, while there was no clear pattern for 4 year olds.



Percentage of 3 or 4 year olds at preschool or long day care, 2005

- Australia's preschool attendance rate for 4 year olds ranked in the bottom third of OECD countries in 2005, the lower rate likely to be a considerable underestimate due to the large number of privately-operated child care facilities in Australia.<sup>61</sup>
- Attendance of 4 year olds at preschool and long day care centres is increasing.
- Attendance at preschool and long day care centres declines with increasing remoteness for 3 year olds, while it increases for 4 year olds in preschool (see also Access to child care, p.19).

# Childhood (5–12 years)

This section focuses on 'school age' childhood (5–12 year olds). For many children this is the first major transition in life from the family home and into other environments, such as full-time compulsory schooling. This brings about challenges and risks. Both their behaviour and the physical and social environment increase the risk of adverse events such as injuries, the development of chronic conditions, mental and behavioural problems, and risk factors that persist into adolescence and adulthood. This is a crucial time for learning, social and

emotional development and social participation, and the acquisition of literacy and numeracy skills. It is also a critical time for establishing good health and social behaviours.

The following table presents national data for each of the measures of the five indicator topics for health and key health risk factors, and for each of the indicators for education and crime. Where time series data has been referred to on an indicator page, the direction of the recent trend is shown in the table.

Indicator	Measure	Value	Trend
	Total hospitalisations due to injury and poisoning per 100,000 5–12 year olds	1,366	~
	Hospitalisations due to transport accidents per 100,000 5–12 year olds	232	~
Injury and	Hospitalisations due to falls per 100,000 5–12 year olds	652	~
poisoning	Hospitalisations due to burns and scalds per 100,000 5–12 year olds	16	×
	Hospitalisations due to accidental poisoning per 100,000 5–12 year olds	10	$\checkmark$
	Hospitalisations due to accidental drowning per 100,000 5–12 year olds	3	~
Chronic disease	Hospitalisations for asthma per 100,000 5–12 year olds	331	$\checkmark$
and mental	Hospitalisations for mental health and behavioural disorders per 100,000 5–12 year olds	178	~
heath	Hospitalisations for diabetes per 100,000 5–12 year olds	85	x
Dental health	Average number of decayed, missing or filled teeth in 6 year olds	2	x
Dental nealth	Average number of decayed, missing or filled teeth in 12 year olds	1	~
Physical activity/	Percentage of children aged 5–12 years who did not participate in any organised sport or dancing in 2 weeks	42	
screen time	Percentage of children aged 5–12 years with 40 hours or more 'screen time' in 2 weeks	16	
Overweight and	Percentage of 6–11 year olds who were obese	6	
obesity	Percentage of 6–11 year olds who were overweight but not obese	17	
Literacy and	Percentage of Year 5 children meeting national reading benchmarks	88	~
numeracy	Percentage of Year 5 children meeting national writing benchmarks	94	~
benchmarks	Percentage of Year 5 children meeting national numeracy benchmarks	90	~
	Children aged 0–9 years who were victims of robbery, per 100,000	2	
	Children aged 10–14 years who were victims of robbery, per 100,000	61	
Crime	Children aged 0–9 years who were victims of kidnapping or abduction, per 100,000	4	
	Children aged 10–14 years who were victims of kidnapping or abduction, per 100,000	11	
	Children aged 10–12 years under juvenile justice supervision, per 100,000	44	$\checkmark$

Key: 🖌 = favourable trend; 🗶 = unfavourable trend; ~ = no change or clear trend; . . = no trend data presented.

# $\triangleright$ Injury and poisoning

# Measure: Injury hospitalisations for 5–12 year olds due to selected causes, per 100,000 population

Injuries (including poisoning) are a major cause of acute care utilisation, long-term disability and mortality among children. They are the leading cause of death of children aged 1–14 years in every industrialised country, including Australia.62 Among 5–12 year olds injuries and poisoning accounted for one-third of all deaths in 2006 and almost 30,000 hospitalisations in 2006-07 (see also *Mortality*, p. 7). Injuries can also result in permanent disability. In 2003, more than 120,000 Australians had a disability where their main disabling condition was caused by an injury that occurred before the age of 20.63 Therefore injuries, which are largely preventable, are responsible for a great deal of personal suffering and cost to the health system and wider community.

Children are exposed to a range of settings where there is potential for injury or poisoning to occur, including school, sporting environments, streets and neighbourhoods. Injuries sustained among older children are increasingly influenced by behaviour in addition to their physical and social environment. The compulsory use of bicycle helmets and seat-belts, safe playgrounds, and reduced speed limits and traffic-calming devices in school zones are examples of injury prevention initiatives relating to individual behaviour and physical and social environments.

Injury prevention and control has been a National Health Priority Area since 1986. A key priority of the National Injury Prevention and Safety Promotion Plan 2004–2014 is to create a positive safety culture and a safe environment, particularly for children.<sup>90</sup>

- Almost 30,000 hospitalisations due to injury among 5–12 year olds in 2006–07 (1,366 per 100,000 population).
- Injury hospitalisation rates were 60% higher for boys than girls, and 30% higher for Indigenous than other children.
- Falls (650 per 100,000 or 48% of injury hospitalisations) and transport accidents (mostly motor vehicle accidents; 230 per 100,000 or 17%) were the leading causes of injury hospitalisation.

Hospitalisations for selected injuries among 5–12 year olds, 2006–07 (per 100,000 population)



Notes

1. Due to data quality issues with Indigenous data, this figure is based on hospitalisations in NSW, Vic, Qld, WA and SA, and public hospitals in NT. 2. See Berry & Harrison 2007<sup>64</sup> for details of injury classifications from hospital morbidity data.

Source: AIHW National Hospital Morbidity Database.

- Accidental poisoning rate has declined by almost one-third, but rate for burns and scalds has increased by one-fifth since 1998–99.
- No clear trend in hospitalisation rates for accidental drowning, or for falls or transport accidents.

#### Hospitalisations for selected injuries among 5–12 year olds (per 100,000 population)



Note: See Berry & Harrison 2007<sup>64</sup> for details of injury classifications from hospital morbidity data. Source: AIHW National Hospital Morbidity Database.

- Around 30,000 children aged 5–12 years are hospitalised for injuries each year—there has been little change in the rate over the past decade.
- Boys 60% more likely than girls to be hospitalised for injuries; Indigenous children 30% more likely than other children.
- Hospitalisation rate due to burns and scalds has increased by 20% in a decade.



# Dash Chronic disease and mental health

# Measure: Hospitalisations for 5–12 year olds for selected chronic health conditions, per 100,000 population

Despite substantial health gains due to reductions in rates of communicable disease and death, chronic disease remains a significant challenge to the health and wellbeing of Australian children. This section presents data on three chronic health conditions that are National Health Priority Areas. Asthma is the most common long-term health condition among children. Diabetes is less common but can have severe consequences in the short and long term, including diabetic coma, kidney failure, loss of limbs and premature death.<sup>65</sup> Mental and behavioural disorders are also included as many of these are chronic conditions and may have health and social consequences for affected children later in life (see also Mental *health*, p.31).

Broad measures of chronic conditions in children may be based on surveys (such as National Health Surveys), or diagnosed or treated populations (such as the National Diabetes Register). Hospitalisations due to specific conditions represent the extent to which chronic diseases require acute care and are presented here. Differences in hospitalisation rates between types of conditions or population groups, or over time, reflect a range of factors including prevalence, severity, access to and effectiveness of early intervention, and access to and effectiveness of management and treatment in the community.

Asthma, diabetes and mental health are all National Health Priority Areas. COAG has committed to establishing a Preventative Health Care Partnership, including addressing the major risk factors contributing to increasing rates of diabetes and poor mental health.<sup>9</sup> Australian Health Minsters have established a National Asthma Strategy 2006–2008, which provides a framework for a collaborative approach towards improving asthma care in Australia.<sup>66</sup> The Australian Government has also formulated a National Primary Health Care Strategy to improve management of chronic disease.<sup>67</sup>

- The hospitalisation rate due to diabetes has increased by two-thirds since 1998–99 (85 per 100,000 in 2006–07, or 1,900 hospitalisations for 5–12 year olds). Almost all hospitalisations (98%) were for Type 1 diabetes.
- Asthma hospitalisation rate decreased by one-third to 331 per 100,000 children between 1998-99 and 2006–07.
- There has been no real change in the hospitalisation rate for mental and behavioural disorders—178 per 100,000 (3,900 hospitalisations for 5–12 year olds) in 2006–07.





Source: AIHW National Hospital Morbidity Database.

- Hospitalisation rates were higher for boys than girls for asthma (1.5 times as high) and for mental and behavioural disorders (2.9 times).
- Rates for Indigenous children were 2–3 times as high as for other children for each selected chronic condition.





Note: Due to data quality issues with Indigenous data, rate ratios for Indigenous to other children were calculated based on hospital data from NSW, Vic, Qld, WA SA, and public hospitals in NT.

Source: AIHW National Hospital Morbidity Database.

- Children's hospitalisation rates have fallen considerably for asthma, but have risen for diabetes (mostly Type 1 diabetes).
- Boys and Indigenous children are at increased risk of hospitalisation due to asthma, and mental and behavioural disorders. Indigenous children are also more than twice as likely as other children to be hospitalised for diabetes.

# Dash Dental health

# Measure: Mean number of decayed, missing or filled teeth among 6 year olds and 12 year olds

Poor dental health adversely affects children's health and overall wellbeing. Untreated dental caries facilitate abscess formation, cellulitis and systemic disease. Oral disease can lead to failure to thrive and school absences, negatively affecting educational performance.<sup>68</sup> Poor nutrition or an unbalanced diet high in sugar may place children at an increased risk of developing dental health problems such as gum disease and dental caries.<sup>69</sup>

The number of teeth decayed, extracted due to decay, or teeth with fillings is an indicator of oral disease in the population. Good oral health in childhood contributes to better dental outcomes in adulthood—less decay and the loss of fewer natural teeth. It also enhances children's confidence, self-esteem, appearance, chewing ability and participation in social activities.<sup>70</sup>

The dental health of Australia's children has improved substantially since the mid-1970s.<sup>2</sup> This trend can be attributed to a number of factors, including increased access to fluoridated toothpaste and drinking water, improved dental hygiene, and provision of clinical preventive services and ongoing monitoring through the School Dental Scheme. However, since the mid-1990s the decline in dental decay has been arrested or reversed.

The mean number of decayed, missing or filled teeth among 12 year olds has been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator of children's health, development and wellbeing.<sup>3</sup>

COAG has committed to provide additional dental health services, delivering up to one million consultations and services over 3 years under the Commonwealth Dental Health Program, including 48,000 services over 4 years to Indigenous Australians.<sup>30</sup>

- Average number of decayed, missing or filled 'permanent teeth' among 12 year olds has been relatively stable at 1.0 since the mid-1990s.
- Dental decay among 6 year olds has increased since the mid-1990s, from 1.7 to 2.0 (1996–2002).



- On average, Indigenous children had more decayed, missing or filled teeth than other children in 2002 (2.5 and 1.8 times as many for 6 and 12 year olds respectively).
- Children living outside major cities (including those in regional areas) and in the most disadvantaged areas experienced worse dental health than average.

Mean number of decayed, missing or filled teeth, 2002



### Key messages

Australia compares favourably with other OECD countries, ranking 8th out of 30 countries in mean decay experience among 12 year olds in 2002.<sup>46</sup>

Indigenous children and children living outside major cities or in areas of high socioeconomic disadvantage are at increased risk of dental health problems, with the gap between population groups higher for 6 year olds than 12 year olds.



# Physical activity/screen time

Measure 1: Percentage of children aged 5–12 years who did not participate in any organised sport or dancing in a 2 week period

Measure 2: Percentage of children aged 5–12 years who spent 40 or more hours participating in screen activities over a 2 week period

Regular physical activity has many benefits to health and wellbeing of children and is an important factor in maintaining good health. It reduces the risk of being overweight or obese; having high blood pressure, Type 2 diabetes and cardiovascular disease; protects against some forms of cancer; and strengthens the musculoskeletal system.<sup>65,71</sup> Physical activity also has psychosocial benefits, reducing symptoms of depression, stress and anxiety, and improving self-confidence, self-esteem, energy levels, sleep quality and the ability to concentrate.<sup>72</sup>

Physical activity includes any activity that requires children to expend energy, including sports, domestic duties or simply playing. It is important to consider children's physical activity alongside information on the amount of screen time they engage in, as various studies have found a positive correlation between hours of television viewing and overweight.<sup>73</sup>

The National Physical Activity Guidelines for Australian children aged 5–18 years recommend at least 60 minutes of moderate to vigorous physical activity and no more than 2 hours of screen time (for example, watching television or using a computer) per day.<sup>74</sup>

- 42% of 5–12 year olds (880,000 children) did not participate in any organised sport or dancing over a fortnight in April 2006.
- Similar proportions of children spent 1–2, 3–4 and 5–9 hours in organised physical activities (15–16%), and 12% were involved for 10 or more hours over a 2-week period.

Participation in organised sport or dancing outside school hours by 5–12 year olds: hours spent over 2 weeks, April 2006 (per cent)



Source: ABS 2006 Survey of Children's Participation in Cultural and Leisure Activities, unpublished data.

- 16% of children spent 40 or more hours in a fortnight on screen activities, excluding internet activities. The rate was 60% higher among boys than girls.
- 49% of boys who spent 40 hours or more on screen activities participated in organised physical activities, compared with 58% of boys generally. The difference was less for girls.

Participation in screen activities<sup>(a)</sup> outside school hours by 5–12 year olds: hours spent over 2 weeks, April 2006 (per cent)



(a) Includes watching TV, videos, DVDs, and playing electronic or computer games. Does not include internet activities such as messaging, emailing, downloading music and surfing the Internet.

Source: ABS 2006 Survey of Children's Participation in Cultural and Leisure Activities, unpublished data.

#### Key messages

More than half of all 5–12 year olds were involved in organised sport or dancing outside school hours in 2006.

One in six children spent 40 hours or more on screen activities in a fortnight; the rate was higher for boys than girls.

# Overweight and obesity

# Measure: Percentage of 6–11 year olds who are overweight or obese

Children who are overweight or obese are at increased risk of developing physical and mental health problems. In the short to medium term they may experience serious conditions such as gallstones, hepatitis, sleep apnoea, asthma, cardiovascular conditions and Type 2 diabetes.75,76 In the long term, consequences of childhood weight problems include adult obesity, increased rates of coronary heart disease, diabetes, certain cancers, gall bladder disease, osteoarthritis and endocrine disorders.<sup>1</sup> In addition, overweight and obese children frequently experience discrimination, victimisation and teasing by their peers and are more likely to have mental health problems than children with other chronic health conditions.77

Many interacting factors lead to increased body weight. All children naturally gain body weight as they grow and develop; however, for excess weight gain to occur, an imbalance must exist between the amounts of energy children are consuming and the energy they expend over an extended period of time. While genetics plays a role, it is clear that cultural, environmental, economic, familial and individual behavioural factors also influence the likelihood of this imbalance occurring.

Rates of overweight and obesity among children have been endorsed by Health, Community and Disability Services Ministers as a Headline Indicator of children's health, development and wellbeing.<sup>3</sup>

Australian Health Ministers made obesity a National Health Priority Area in 2008.<sup>95</sup> The Australian Government has also established the Preventative Health Taskforce, aimed at reducing the burden of chronic disease caused by obesity, tobacco and the excessive consumption of alcohol.<sup>78</sup> This Taskforce is responsible for the development of a National Obesity Strategy.<sup>95</sup>

- 6% of children aged 6–11 years were obese in 2006, and an additional 17% were overweight but not obese.
- Obesity rates were higher for Indigenous boys than Anglo/Caucasian boys.



Notes 1. See Cole et al. 2000<sup>96</sup> for Body Mass Index (BMI) cut-offs for overweight and obese categories.

2. Other ethnicities were included in the study but are not presented here.

3. Based on measured height and weight.

Source: O'Dea 2008.<sup>79</sup>

- Students in the most disadvantaged schools had higher rates of overweight and obesity than students in the least disadvantaged schools.
- The social gradient was greater for obese children than for overweight (excluding obese) children.



1. Socioeconomic status (SES) of school was calculated based on a government survey of total family income.

2. See Cole et al. 2000<sup>96</sup> for body mass index (BMI) cut-offs for overweight and obese categories.

3. Based on measured height and weight.

#### Source: O'Dea 2008.79

- ▶ 6% of primary school-aged children (6–11 year olds) were obese, and 17% were overweight but not obese in 2006.
- Overweight and obesity rates in children increased with socioeconomic disadvantage.



# Literacy and numeracy

# Measure: Percentage of Year 5 students who achieve the national benchmarks for reading, writing and numeracy

The acquisition of literacy skills in the schooling years is the basis for further educational attainment, social development and employment. The concepts of literacy and numeracy encompass the skills required to identify, understand, interpret, create, communicate and compute using written and printed materials in various contexts, including information and communication technologies.<sup>80</sup>

People with limited literacy and numeracy tend to experience greater difficulty in finding employment. In terms of business and the economy, low levels of functional literacy and numeracy are a recognised major barrier to growth.<sup>81</sup> Educational outcomes measured through test scores during the school years, including literacy and numeracy scores, are predictive of social exclusion and there is a strong connection between health and socioeconomic gradients related to education, employment and income.<sup>6.82</sup>

Ministers for Health, Disability and Community Services have endorsed literacy and numeracy benchmarking results for Year 5 students as a Headline Indicator of children's health, development and wellbeing<sup>3</sup>.

COAG has committed to the development of a broad national strategy for early childhood development and reforms in schools.<sup>10</sup> COAG has also committed to the development and implementation of a national curriculum in key learning areas by 2010.<sup>9</sup> For Indigenous young people, COAG has committed to halve the gap in reading, writing and numeracy achievements within a decade.<sup>60</sup>

- Around 9 in 10 Year 5 students met the national benchmarks in 2007—89% for reading and numeracy, and 94% for writing.
- Fewer Indigenous students met the benchmarks in each area—66% for numeracy, 68% for reading, and 80% for writing. More Indigenous students met the reading benchmarks in 2007 than in 1999, but there has been no significant change in the writing and numeracy gaps.



- Students living in remote and very remote areas were less likely to meet the reading, writing and numeracy benchmarks than students in metropolitan areas.
- Indigenous students had lower than average rates of meeting the benchmarks within metropolitan, remote and very remote areas.
- Two-thirds of Indigenous students in very remote areas did not meet the reading and numeracy benchmarks, and more than half did not meet the writing benchmark.Percentage of Year 5 students achieving literacy and numeracy benchmarks



- Most Year 5 students met national literacy (reading and writing) and numeracy benchmarks.
- There is a significant gap between Indigenous students and the national average for literacy and numeracy. It is not limited to Indigenous students living in remote parts of Australia.
- Australian Year 4 students ranked 8th in science and 16th in mathematics out of 25 participating countries in an international benchmarking study in 2003.<sup>84,85</sup>

# ▷ Crime

Measure 1: Number of children aged 0–14 years who were victims of selected crimes, per 100,000 population

## Measure 2: Number of children aged 10–12 years who are under juvenile justice supervision, per 100,000 population

Being a victim of crime can be detrimental to a child's health, wellbeing, sense of security, safety and feelings about the future. For some children, being victimised may lead to diminished educational attainment and social participation in early adulthood, or result in physical injury, disability and even death. Experience of crime is central to issues of community safety in general, and even more so for children as the most vulnerable members of society. For many children, their personal experience of crime is as victims of child abuse and neglect (see also *Child abuse and neglect*, p. 11).

Some children are themselves perpetrators of crime, and children who have been victimised are at greater risk of later offending.<sup>4</sup> For most children engaged in criminal activities, the nature of the offence is relatively minor and the behaviour is short lived. However, for a small number of children this behaviour becomes more serious or persistent and results in contact with the juvenile justice system. Children whose first juvenile justice supervision order occurs before the age of 13 comprise less than 10% of all young people under supervision,<sup>86</sup> and represent a particularly disadvantaged and high-risk group of the Australian population.

The Australian Government has committed to developing a National Child Protection Framework which will focus on preventing abuse through early intervention and better integration of family services.<sup>87</sup> COAG has also committed to identify joint reforms and implementation timetables for basic protective security from violence for Indigenous parents and children.<sup>30</sup>

- There were 900 robbery victims aged under 15 years in 2007—95% were aged 10–14 years. The victimisation rate was 5 times as high for boys as for girls.
- There were 267 kidnapping/abductions of children aged under 15 years—60% were aged 10–14 years. The rate was almost twice as high for girls as boys.

#### Victims of selected crimes, 2007 (per 100,000 population)



Note: Rates for children being victims of murder and attempted murder are less than 1 per 100,000 for each age group shown. National data on rates of physical and sexual assault are not available. Source: ABS Recorded Crime—Victims, Australia 2007 (Cat. no. 4510.0).

- 360 children aged 10–12 years were under juvenile justice supervision in 2006–07; 70% were Aboriginal or Torres Strait Islander children.
- Juvenile justice supervision rate was 686 per 100,000 Indigenous children, compared with 14 per 100,000 for other children.
- Juvenile justice supervision rate rose by 11% for Indigenous children, but fell by 14% for other children (2000–01 to 2006–07).

Number of children aged 10–12 years under juvenile justice supervision (per 100,000 population)



Note: No data were available for the ACT from 2000–01 to 2002–03, therefore national rates across all years exclude the ACT. Source: AIHW Juvenile Justice National Minimum Data Set.

- Children aged 10–14 years are more likely to be victims of robbery or kidnapping/abduction than younger children (0–9 year-olds).
- Boys are 5 times as likely as girls to be victims of robbery, and 6 times as likely to be under juvenile justice supervision.
- Indigenous children are over-represented in juvenile justice supervision, 49 times as likely as other 10–12 year olds to be under supervision.

# Adolescence (13–19 years)

This section focuses on adolescents (13–19 year olds). Teenagers are in transition between childhood and adulthood, and their increasing independence brings about new challenges and risks. This results in marked differences in patterns of morbidity and mortality for adolescents compared with younger children. They are more likely to engage in risky behaviours (such as substance use, dangerous driving and unsafe sexual practices), leading to high rates of violence and injury among young people. Long-term health conditions and associated risk factors (such as mental health disorders, chronic and communicable diseases, and overweight and obesity) also emerge during this period and may persist into adulthood. Secondary and post-school education, a good transition from school to work, no or limited exposure to or participation in criminal activities, preparation for parenthood, and economic and social participation are key factors contributing to the wellbeing of young adults.

The following table presents national data for each of the measures of the four indicator topics relating to health and key health risk factors and for each of the three indicators related to wellbeing (including education). Where time series data has been referred to on an indicator page, the direction of the recent trend is shown in the table.

Indicator	Measure	Value	Trend
	Total hospitalisations due to injury and poisoning per 100,000 13–19 year olds	2,221	x
	Hospitalisations due to transport accidents, per 100,000 13–19 year olds	490	x
Injury and	Hospitalisations due to falls, per 100,000 13–19 year olds	386	~
poisoning	Hospitalisations due to intentional self-harm, per 100,000 13–19 year olds	197	x
	Hospitalisations due to assault, per 100,000 13–19 year olds	180	x
	Percentage of 13–19 year olds reporting mental or behavioural problems	10	
	Total hospital bed days, per 100,000 population for mental and behavioural problems	5,819	$\checkmark$
Mental	Hospital bed days, per 100,000 population for schizophrenia and related disorders	1,224	$\checkmark$
health	Hospital bed days, per 100,000 population for substance use-related disorders	515	$\checkmark$
	Hospital bed days, per 100,000 population for mood disorders	1,503	x
	Hospital bed days, per 100,000 population for behavioural syndromes	1,299	x
Overweight	Percentage of 15–19 year olds who were obese	5	x
and obesity	Percentage of 15–19 year olds who were overweight but not obese	18	x
	Percentage of 14–19 year olds who are current smokers	10	$\checkmark$
	Percentage of 14–19 year olds at risk of long-term harm to their health from alcohol	9	$\checkmark$
	Percentage of 14–19 year olds at risk of short-term harm to their health from alcohol	26	$\checkmark$
Substance	Percentage of 14–19 year olds who had used illicit drugs in the past 12 months	17	$\checkmark$
use	Percentage of 14–19 year olds who had been the victim of alcohol-related verbal abuse in the past 12 months	28	
	Percentage of 14–19 year olds who had been the victim of alcohol-related physical abuse in the past 12 months	7	
	Percentage of 14–19 year olds who had been the victim of other drug-related verbal abuse in the past 12 months	10	
	Percentage of 14–19 year olds who had been the victim of other drug-related physical abuse in the past 12 months	3	
Year 12	Apparent retention rate to Year 12 (%)	74	~
retention & completion	Percentage of 19 year olds who have completed Year 12	74	
	Percentage of 15–19 year olds who are not engaged in education or employment	7	~
Youth	Percentage of 15–19 year olds in the labour force who were unemployed	13	$\checkmark$
participation	Percentage of 15–19 year olds in the labour force who were underemployed	10	$\checkmark$
	Persons aged 15–19 years who were victims of robbery, per 100,000 population	270	
Crime	Persons aged 15–19 years who were victims of kidnapping or abduction, per 100,000 population	10	
	Percentage of young people aged 13–19 years under juvenile justice supervision	0.6	$\checkmark$

Key: 🖌 = favourable trend; 🗶 = unfavourable trend; ~ = no change or clear trend; . . = no trend data presented.

# $\triangleright$ Injury and poisoning

# Measure: Injury hospitalisations for 13–19 year olds due to selected causes, per 100,000 population

Increasing responsibility for decision making in adolescence creates more opportunities to engage in risky behaviours. This independence occurs simultaneously with exposure to alcohol and other drugs, and the development of new skills, such as driving and job skills, at a time when peer acceptance is important. Young people may experiment with illicit substances and alcohol, which can make them more prone to certain types of injuries, such as falls, transport accidents, accidental poisoning and assault.<sup>88</sup>

Injury (including poisoning) accounts for 18% of the burden of disease among 15–24 year olds—the second highest contributor after mental disorders<sup>89</sup>. It is the leading cause of death (see also *Mortality*, p.7) and the third leading cause of hospitalisation in this age group<sup>88</sup> and can result in significant disability. In 2003, more than 120,000 Australians had a disability where their main disabling condition was caused by an injury that occurred before the age of 20.<sup>63</sup> Reducing the number and severity of injuries among adolescents and young adults is therefore key to preventive health initiatives.

Injuries may be caused by a diverse range of factors, including transport accidents, falls from heights or during sport, assault and intentional self-harm. Consequently, injury prevention strategies intersect with initiatives in the areas of community safety, violence reduction and mental health care.

Injury prevention and control has been a National Health Priority Area since 1986. A key priority of the National Injury Prevention and Safety Promotion Plan 2004–2014 is to create a positive safety culture and a safe environment, particularly for children and youth.<sup>90</sup>

- 45,000 injury hospitalisations for teenagers in 2006–07 (2,221 per 100,000 population, 7% increase since 1998–99). Around one in five were caused by transport accidents (mostly motor vehicle accidents) and one in six by falls.
- Hospitalisation rates have increased for assault (by 18%) and intentional self-harm (27% increase increase much greater for females (33%) than males (9%)) since 1998–99.
- Transport accident hospitalisation rate fell by 10% (1998–99 to 2002–03), but has since increased.

#### Hospitalisations of 13–19 year olds for selected injuries, per 100,000 population



Note: See Berry & Harrison 2007<sup>64</sup> for details of injury classifications from hospital morbidity data. Source: AIHW National Hospital Morbidity Database.

- Young males were 3–4 times as likely as young females to be hospitalised for transport accidents, falls and assault, while females were 3 times as likely to be hospitalised for intentional self-harm.
- Overall hospitalisation rate for Indigenous teenagers was 30% higher than for other teenagers, largely due to the assault hospitalisation rate being 5 times as high among Indigenous teenagers.





 Due to data quality issues with Indigenous data, this figure is based on hospitalisations in NSW, Vic, Qld, WA and SA, and public hospitals in NT.
See Berry & Harrison 2007<sup>64</sup> for details of injury classifications from hospital morbidity data. Source: AIHW National Hospital Morbidity Database.

- Males had higher rates of hospitalisations than females due to transport accidents, falls and assault, while females had higher rates of hospitalisations due to intentional self-harm.
- Hospitalisation rates are increasing for assault and intentional self-harm.
- Injury hospitalisation rates are higher for Indigenous youth, young people living in remote or very remote areas and those living in areas of the greatest socioeconomic disadvantage, particularly for assault and intentional self-harm.<sup>88</sup>



# Dash Mental health

Measure 1: Percentage of 15–19 year olds who report having a mental or behavioural problem

## Measure 2: Hospital bed days per 100,000 population for mental and behavioural disorders among 13–19 year olds

Mental health disorders are the leading cause of disability among young Australians aged 15–24 years and account for almost 50% of the burden of disease in this age group. More specifically, anxiety and depression contribute 17% of the male disease burden and 32% of the female disease burden.<sup>89</sup>

Young people with a mental health disorder are more likely to have lower educational attainment, experience joblessness and have poor physical health.<sup>91</sup> It is not possible to determine causality from these associations, and experiencing adverse situations, especially during youth, may in fact contribute to the development of a mental disorder. The reasons why some people develop mental disorders are complex, but a range of possible influences include individual attributes, family and social factors, school context, life events and situations, and community and cultural factors.

Many people living with mental health problems are undiagnosed or do not access specialist services; others manage their condition largely through primary health care. Measures of the extent to which people with mental disorders receive treatment as hospital inpatients and the duration of their hospital stay (bed days) therefore represent the acute care-treated prevalence of mental illness.

Mental health is a National Health Priority Area. The COAG National Action Plan on Mental Health 2006–2011 aims to reduce the prevalence and severity of mental illness and its risk factors.<sup>92</sup>

- Mental and behavioural problems were reported by 11% of males (100,000 people) and 9% of females (80,000 people) aged 15–19 years in 2004–05.
- Mood disorders were the most common problem for females, while problems of psychological development were most common among males.
- The prevalence of mental and behavioural problems was 40% higher among Indigenous teenagers than non-Indigenous teenagers.

#### Percentage of 15–19 year olds reporting selected mental and behavioural problems, 2004–05



Source: AIHW analysis of ABS 2004–05 National Health Survey and National Aboriginal and Torres Strait Islander Health Survey, unpublished data.

- There were 19,400 hospitalisations for mental and behavioural disorders for 13–19 year olds in 2006–07 (973 per 100,000), with a bed day rate<sup>1</sup> of 5,800 per 100,000 population. The female bed day rate was twice the male rate.
- Female bed day rate was higher for mood disorders and behavioural syndromes such as eating disorders; male rate higher for schizophrenia-type disorders and disorders due to psychoactive substance use.
- Bed day rate for substance use-related and schizophrenic disorders fell by more than one-third, but rose by 20% for behavioural syndromes (1989–99 to 2006–07). Mood disorder bed day rate for females also increased over this period by 26%.

Hospital bed days for mental and behavioural disorders 13–19 year olds (per 100,000 population)



(a) The selected conditions account for more than three-quarters of bed days due to mental and behavioural disorders among 13–19 year olds. *Note:* Excludes 'long stay' patients (length of stay more than 84 days). *Source:* AIHW National Hospital Morbidity Database.

1 Bed day rate defined as number of days the patient was admitted to hospital for an episode of care, expressed per 100,000 population.

- 1 in 10 Australians aged 15–19 years reported a mental or behavioural problem.
- Reported prevalence and hospital bed day rate for mental and behavioural problems are each 40% higher among Indigenous than non-Indigenous teenagers.
- Male hospital bed day rate for mental and behavioural disorders fell by 28%, but female rate rose by 7% between 1998–99 and 2006–07.

# Overweight and obesity

### Measure: Percentage of adolescents aged 15–19 years who were overweight or obese

Overweight and obesity in young people are linked to a range of immediate and long-term health problems. In the short term, overweight and obesity affects young people's psychological wellbeing and increases their risk of developing cardiovascular conditions, asthma and Type 2 diabetes. Long-term consequences include adult obesity, increased risk of coronary heart disease, diabetes, some cancers, gall bladder disease, osteoarthritis and endocrine disorders.<sup>1</sup> Negative social consequences of teenage obesity include social isolation and lower educational and income attainment throughout life.93,94

Risk factors associated with obesity in childhood and adolescence include genetic makeup, ethnicity, television viewing, extent and types of physical activity, dietary intake and eating patterns, artificial feeding as infants, and presence of other health conditions.73

While overweight and obesity accounted for less than 1% of the burden of disease in youth, it contributed 7.5% to the total disease burden in 2003.<sup>89</sup> Young people who are overweight or obese are more likely to be obese as adults, therefore reducing youth overweight and obesity is key to early intervention and prevention of chronic disease.

The overweight and obesity data in this section is based on self-reported height and weight, which is less accurate than measured height and weight. For younger children, the overweight and obesity data presented in this report is based on measured height and weight (see p.26), and hence it is not accurate to compare the prevalence of overweight and obesity between these different age groups.

Australian Health Ministers made obesity a National Health Priority Area in 2008.<sup>95</sup> The Australian Government has also established the Preventative Health Taskforce, aimed at reducing the burden of chronic disease caused by obesity, tobacco and the excessive consumption of alcohol.<sup>78</sup> This Taskforce is responsible for the development of a National Obesity Strategy.95

- 5% of 15–19 year olds (almost 55,000 teenagers) were obese in 2004–05; 18% (200,000 teenagers) were overweight but not obese and the rate was higher among males than females.
- Rates of overweight and obesity have increased significantly since 1995.

Percentage of 15–19 yearolds who were overweight or obese



Notes

1. For BMI cut-offs for overweight and obese categories, see Cole et al. 2000% (15–17 year olds) and WHO 2000<sup>97</sup> (18–19 year olds). 2. Data based on self-reported height and weight. Source: ABS 1995, 2001 and 2004–05 National Health Surveys, unpublished data.

- Indigenous teenagers were 2.6 times as likely to be obese as non-Indigenous teenagers.
- Similar proportions of Indigenous and non-Indigenous teenagers were overweight but not obese.



Percentage of 15–19 year olds who were overweight or obese, 2004–05

Notes 1. For BMI cut-offs for overweight and obese categories, see Cole et al. 2000% (15–17 year olds) and WHO 200097 (18–19 year olds). Data based on self-reported height and weight.
Source: AIHW analysis of ABS 2004–05 National Health Survey and National Aboriginal and Torres Strait Islander Health Survey, unpublished data.

- 1 in 20 Australians aged 15–19 years were obese in 2004–05.
- 18% of 15–19 years olds were overweight but not obese, up from 15% in 1995.
- Indigenous teenagers were more than twice as likely to be obese as non-Indigenous teenagers in 2004–05.



# > Substance use

Measure 1: Percentage of 14–19 year olds who consume alcohol at risky or high risk levels for short and long term harm, who smoke tobacco, and who have used an illicit drug recently

# Measure 2: Percentage of 14–19 year olds who have been the victim of an alcohol or other drug-related incident

Misuse of alcohol and use of other drugs (including tobacco) by young people can cause immediate and long-term health and social problems. In the short term, it may result in hospitalisations due to acute intoxication and related injuries, dependence, withdrawal symptoms, psychotic disorders and amnesia. In the long term, alcohol and other drug use can lead to depression, infections with blood-borne diseases, damage to the liver, heart and brain, and increased risk of cancers and other serious health conditions.<sup>98,99</sup> Drug abuse has also been associated with family and relationship conflict, and legal and financial problems.<sup>100</sup>

Many factors can put young people at risk of problematic drug use. Some of these occur before they reach adolescence, such as maternal drug use during pregnancy, early behavioural and emotional problems and early exposure to drugs.<sup>99,100</sup> Other factors include peer antisocial behaviour, poor parental control and supervision, poor family bonding, drug use among family members, low self-esteem, academic failure, leaving school early and poor connection with family, school and community.<sup>100</sup>

COAG has identified reducing alcohol and substance abuse and its impact on families, safety and community wellbeing as a priority area for the 2008 forward work-plan.<sup>9</sup> COAG has also acknowledged the importance of tackling alcohol misuse and binge drinking among young people and commissioned the Ministerial Council on Drug Strategy to investigate options to reduce binge drinking.<sup>30</sup>

- Teenage smoking rates have halved (2001–2007) to around 1 in 10 persons for 14–19 year olds; risky alcohol intake and illicit drug use have also reduced.
- In 2007, one-quarter of teenagers risked short-term harm to their health from alcohol intake and one in ten were at risk of long-term harm. One in six had used an illicit drug recently.



Alcohol and other drug use by 14–19 year olds (per cent)

(a) Persons who drink alcohol at risky or high-risk levels for short-term harm at least monthly.

(b) Persons who drink alcohol in a pattern that is risky or high risk to their health in the long term.

(c) Persons who smoke daily, weekly or less than weekly, but have not quit. (d) Persons who have used any illicit drug in the past 12 months.

Source: National Drug Strategy Household Surveys, 2001, 2004 and 2007.

- More than one-quarter of 14–19 year olds had been the victim of alcohol-related verbal abuse in a 12-month period, and 7% had experienced alcohol-related physical abuse.
- Being the victim of alcohol-related incidents was more common than incidents related to other drugs.
- Males were more likely than females to have experienced alcohol and other drugrelated verbal or physical abuse, but females were more likely to have been put in fear from alcohol and drug use of others.

Percentage of 14–19 year olds who had been victims of alcohol or other drug-related incidents in the past 12 months, 2007



- Adolescent smoking rates have halved and risky alcohol intake and illicit drug use have also declined since 2001.
- One in four teenagers regularly risk short-term harm to their health from alcohol consumption; 1 in 10 are at risk of long-term harm.
- Almost 300,000 teenagers have felt or experienced threats to their safety through the alcohol use of others.

# Adolescence (13–19 years)

# Year 12 retention and completion

Measure 1: Number of full-time students who continued to Year 12 as a percentage of those who commenced secondary schooling (apparent retention rate)

### Measure 2: Percentage of 19 year olds who have completed Year 12 (completion rate)

As the number of low-skilled jobs in the employment market decreases, the importance of educational qualifications increases. Early school leavers often have trouble finding stable, full-time employment and tend to work in a narrow range of jobs.<sup>101</sup>

In Australia, individuals with higher levels of education report fewer illnesses and have better mental health than those with lower levels of education.<sup>102</sup> Educational attainment may directly affect health by providing young people with greater knowledge and understanding about health, particularly awareness of health risk and protective factors, or indirectly through its association with typically safe, secure and generally better paid and rewarding employment. These benefits positively influence health-related factors such as stress level, injury risk, diet and ability to acquire medical care.

While the apparent retention rate provides information about the proportion of young people who stay in school, it is not a measure of successful completion of Year 12. Young people who did not finish high school have fewer post-school education, training and employment options, and are more likely to experience unemployment than those who completed Year 12 (see also *Youth participation*, p.35).<sup>103</sup>

COAG has requested Commonwealth and State implementation plans for lifting the Year 12 or the equivalent retention rate to 90 per cent by 2020.<sup>9</sup> For Indigenous youth, COAG has committed to at least halve the gap for Year 12 attainment or equivalent attainment rates by 2020.<sup>60</sup>

- Overall retention rate more than doubled throughout the 1980s, but has remained steady at 74–75% for the past 5 years.
- Retention to Year 12 is consistently higher for females than for males (80% compared with 69% in 2007).
- Indigenous students are almost half as likely to stay in school until Year 12 (43% retention rate), but the gap is closing.





- Year 12 completion rates among 19 year olds were half as high for Indigenous than non-Indigenous youth (37% compared with 74%) in 2006.
- Indigenous 19 year olds were less likely than non-Indigenous youth to have completed Year 12, regardless of whether they lived in remote, regional or metropolitan Australia.
- Year 12 completion rates were also lower for non-Indigenous 19 year olds in regional and remote areas than in major cities.



Percentage of 19 year olds who had completed Year 12

- Australia ranked 18th out of 29 OECD countries in high school completion rates for 25–34 year olds in 2006.<sup>105</sup>
- Retention rate to Year 12 is much lower for Indigenous students, but the gap has narrowed over the past decade.
- Year 12 completion rates are lower for 19 year olds in regional and remote areas, and Indigenous young people throughout Australia.

*Note:* Excludes people who are still attending school. *Source:* ABS 2008.<sup>104</sup>



# $\triangleright$ Youth participation

# Measure 1: Percentage of 15–19 year olds not engaged in education or employment

# Measure 2: Unemployment and underemployment rates for 15–19 year olds

Young people not involved in school or employment may have decreased opportunities to fully participate in society and are considered at risk of social exclusion. Youth inactivity is linked to dependency on parents or social welfare, family problems, substance abuse, physical and sexual abuse, violence and crime.<sup>106,107</sup>

Secure and satisfactory employment offers young people not only financial independence but also a sense of self-control, self-confidence and social contact. In contrast, unemployment, insecure employment and unfavourable working conditions have all been associated with low self-esteem and poor physical and mental health.<sup>108,109</sup> Young people in the labour force are often also participating in education, and while students who are unemployed are not considered to be inactive, many rely on work as a source of income and so face significant financial pressures as a result of unemployment or underemployment.

Underemployed workers, or those with inadequate wages or insufficient number of working hours, may also be at risk of low self-esteem, alcohol abuse and depression.<sup>110</sup> Underemployment is also a concern from social and economic perspectives, as it can have a significant detrimental effect on the financial, personal and social lives of young people.

COAG has requested Commonwealth and State implementation plans for improving and expanding vocational and technical education, creating an additional 450,000 training places over the next four years.<sup>9</sup> A further 50,000 vocational education and training places for national priority health occupations will be available through the COAG Productivity Places Program.<sup>10</sup> COAG has also committed to lifting the Year 12 or equivalent retention rates (see *Year 12 retention and completion*, p.34) and halving the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade.<sup>60</sup>

- 7% of 15–19 year olds were neither working nor studying (96,500 adolescents) in 2007. This proportion has not changed significantly since 2001.
- One in three had more than a full-time load, either full-time study with additional work or full-time work with additional study.

#### Participation in education and employment by 15–19 year olds (per cent)



Source: ABS 2001 and 2007 Education and work (Cat. no. 6227.0).

- In September 2007, the unemployment rate of 15–19 year olds was 13.3%—3 times that of all people aged 15 years and over (4.2%).
- The youth underemployment rate (10.0%) was more than twice that for the overall labour force (4.7%).
- **•** Youth unemployment and underemployment rates have fallen by a quarter since 2001.

Unemployment and underemployment rates (per cent of the labour force)



1. Data are original series (unadjusted) at September each year.

2. The underemployment rate is the number of employed persons who want, and are available for, more hours of work than they currently have, as a percentage of the labour force.

Source: Australian Labour Market Statistics July 2008 (ABS Cat. no. 6105.0).

- Australia ranked 16th (out of 25 OECD countries) in the percentage of 15–19 year olds not engaged in education or employment in 2006, and 12th (out of 30 OECD countries) in the unemployment rate for 15–19 year olds in 2007.<sup>105,111</sup>
- 7% of 15–19 year olds are neither working nor studying, while a third have more than a full-time load.
- 15–19 year olds in the labour force are 3 times as likely to be unemployed and twice as likely to be underemployed as the overall labour force population.
- The unemployment rate for Indigenous youth aged 15–24 years was more than twice as high as for other young people in 2006 (22.4% compared to 9.9%).

# ▷ Crime

Measure 1: Number of persons aged 15–19 years who were victims of selected crimes, per 100,000 persons aged 15–19 years

## Measure 2: Percentage of persons aged 13–19 years who were under juvenile justice supervision

Young people are vulnerable to becoming victims of crime and becoming involved in criminal activities, and adolescence is the peak period for both being victimised and offending (see also *Crime* in the Childhood section, p.28). Of major concern is that children and young people who are victimised are at greater risk of later victimising others.<sup>114</sup> Being victimised can lead to diminished educational attainment and have wide-ranging effects on socioeconomic attainment in early adulthood, suicidal ideation and behaviour, and depression.<sup>4</sup>

International approaches to crime prevention are increasingly recognising the strong links between youth victimisation and offending. Young people in the criminal justice system represent a particularly disadvantaged population, characterised by high levels of socioeconomic stress, significant physical and mental health needs, and a history of physical abuse and childhood neglect. <sup>115,116,117</sup> Childhood neglect is considered one of the strongest predictors of later youth offending.

Early intervention for young people at risk and effective rehabilitation of those in the juvenile justice system has significant benefits for community safety at large. Research indicates that serious and persistent adult offenders are likely to have been in juvenile detention.<sup>118</sup>

The Australian Government has committed to developing a National Child Protection Framework which will focus on preventing abuse through early intervention and better integration of family services.<sup>87</sup> COAG has also committed to identify joint reforms and implementation timetables for basic protective security from violence for Indigenous parents and children.<sup>30</sup>

- 3,900 15–19 year olds were victims of robbery in 2007, representing one-quarter of all robbery victims.
- The rate for teenage males being robbery victims was 4 times as high as males generally; for teenage females it was 3 times as high.
- The rate of kidnapping/abduction was 3 times as high for young females (15 per 100,000) as young males (6 per 100,000).

Victims of selected crimes per 100,000 population, 2007



Source: ABS Recorded Crime—Victims, Australia 2007 (Cat. no. 4510.0).

- 11,900 teenagers (13–19 years) were under juvenile justice supervision in 2006–07 (0.6% of all teenagers).
- The supervision rate for Indigenous teenagers was 13 times that of other teenagers.
- No change in the Indigenous supervision rate in 6 years, but the rate for other Australian youth fell by 20%.

Percentage of 13–19 year olds under juvenile justice supervision



1. No data were available for the ACT from 2000–01 to 2002–03, therefore national rates across all years exclude the ACT. 2. Legislation governing the age of persons under the jurisdiction of the juvenile justice system varies between states and territories. *Source*: AIHW Juvenile Justice National Minimum Data Set.

- > Teenagers, particularly males, experience high rates of being victims of robbery.
- No national data are available on rates of physical or sexual assault for young people.
- Indigenous teenagers are over-represented in juvenile justice supervision, and there has been no change in the Indigenous supervision rate as observed for other Australian teenagers in recent years.



# Appendix A: Mapping the indicators to Government priorities and reform

The following high-level objectives, set by government, underpin current reforms that will impact on the health and wellbeing of children and adolescents, as well as the broader society. While COAG has established seven Working Groups to drive the reform work program, only four of these relate directly to children and youth, and have been described below.

To improve health outcomes for all Australians and the sustainability of the Australian health system —COAG Working Group on Health and Ageing

To pursue substantial reform in the areas of education, skills and early childhood development, to deliver significant improvements in human capital outcomes for all Australians. To strengthen Australia's economic and social foundations through this reform workplan

—COAG Working Group on the Productivity Agenda (Education, Skills, Training & Early Childhood Development)

To develop service delivery improvements to reduce homelessness (one of the 5 objectives of this Working Group) —COAG Housing Working Group To close the gap on Indigenous disadvantage and in particular close the life expectancy gap within a generation; halve the gap in mortality rates for Indigenous children under 5 within a decade; and halve the gap in reading, writing and numeracy achievements within a decade—in partnership between all levels of government and Indigenous communities. The pathway to closing the gap is inextricably linked to economic development and improved education outcomes —COAG Working Group on Indigenous Reform

All Australians need to be able to play a full role in all aspects of Australian life.

-The Social Inclusion Agenda

The following table shows how the indicators presented in this report relate to each of these high level objectives. A number of indicators are of relevance to more than one area of reform.

_		COAG Working	Groups		
Indicators	Health & Ageing	The Productivity Agenda	Housing	Indigenous Reform	Social inclusion
Mortality	$\checkmark$			$\checkmark$	
Disability	$\checkmark$				$\checkmark$
Jobless families				$\checkmark$	$\checkmark$
Family economic situation					$\checkmark$
Child abuse & neglect				$\checkmark$	$\checkmark$
Homelessness			$\checkmark$		$\checkmark$
Teenage births	$\checkmark$			$\checkmark$	
Birthweight	$\checkmark$			$\checkmark$	
Breastfeeding	$\checkmark$				
Childhood immunisation	$\checkmark$				
Access to child care		$\checkmark$			
Early childhood education		$\checkmark$			
Injury and poisoning	$\checkmark$			$\checkmark$	
Chronic disease	$\checkmark$			$\checkmark$	
Mental health	$\checkmark$			$\checkmark$	$\checkmark$
Dental health	$\checkmark$			$\checkmark$	
Physical activity	$\checkmark$				
Overweight & obesity	$\checkmark$			$\checkmark$	
Literacy & numeracy		$\checkmark$		$\checkmark$	
Crime				$\checkmark$	$\checkmark$
Substance use	$\checkmark$			$\checkmark$	
Year 12 retention & completion		$\checkmark$		$\checkmark$	
Youth participation		$\checkmark$			

# **Appendix B: About the data**

The data and analysis included in this report builds on previous work that the AIHW has undertaken in the areas of child and youth health, development and wellbeing. Over the last decade the AIHW has produced six comprehensive national statistical reports on patterns and trends in child and youth health, development and wellbeing.<sup>1,2,119</sup> The indicators included in these reports cover a broad range of areas including health and health risk factors, learning and development, family and community environments, and safety and security (further information on these reports can be found at www.aihw.gov.au/publications/index.cfm). This report builds on the work of these detailed reference documents by drawing together key summary statistics on selected indicators integral to child and youth health and wellbeing.

# **Data sources**

Various data sources were used to compile this report, including administrative data (for example, hospital and mortality data), survey data, longitudinal data and published data. In all cases, the data used in this report have been the most recently available at the time of writing. For many of the selected indicators more than one data source was available to report on the specific indicator, and the data source chosen for a particular indicator was dependent on the availability of data for the selected age groups and for the subpopulations examined in this report.

Table 1 provides information on the data sources used, in terms of data availability and where further information can be found for each of these data sources.

# **Data analysis**

Various statistical methods have been used in the analysis and presentation of data in this report. The majority of the rates presented are age-specific or crude rates, either presented as a percentage or as a rate indexed to 1,000 or 100,000 (see the AIHW report *Australia's health 2008* for definitions of these methods).

The ABS estimated resident population (ERP) data were used to calculate most rates presented in this report, except for rates by Indigenous status. The ABS experimental projections, based on the 2001 Census, were the most recent available population data for the Aboriginal and Torres Strait Islander population.

Measures presented by geographical remoteness (such as major cities versus remote and very remote areas) use the Accessibility-Remoteness Index of Australia Plus (ARIA+), except for breastfeeding data, which was based on the classification of area health services in NSW, and literacy and numeracy data which uses the MCEETYA Schools Geographic Location Classification Scale.

Trend data has been presented where available, and has been calculated by examining the percentage change between the two time-periods.

The mortality classification for coding causes of death used in Australia, and in this report, is the International Statistical Classification of Diseases and Related Health Problems (ICD-10). This international classification has been modified for morbidity coding in health services in Australia, and the ICD-10-AM has been used as the classification for hospital data in the National Hospital Morbidity Database. Specific ICD and ICD-AM codes used throughout the report can be supplied on request.



Data source	Data availability	Further information
AIHW and collaborating units data sources		
AIHW Child Protection Database	Annual from 1991 onwards	www.aihw.gov.au/childyouth/childwelfare/childprotection/index. cfm
AIHW National Drug Strategy Household Survey (NSDHS)	1985, 1988, 1991, 1993, 1995, 1998, 2001, 2004 and 2007	www.aihw.gov.au/drugs/ndshs07.cfm
AIHW National Hospital Morbidity Database (NHMD)	Annual from 1993–94 onwards	www.aihw.gov.au/hospitals/nhmdatabase.cfm
AIHW National Mortality Database	Annual from 1964 onwards	www.aihw.gov.au/mortality/index.cfm
Child Dental Health Survey	Annual from 1990	AIHW DSRU: Armfield et al. 2007
Juvenile Justice National Minimum Data Set (JJ NMDS)	Annual from 2000–01	www.aihw.gov.au/childyouth/juvenilejustice/index.cfm
National Diabetes Register (NDR)	Annual from 1999 onwards	www.aihw.gov.au/diabetes/ndr.cfm
National Perinatal Data Collection (NPDC)	Annual from 1991 onwards	www.npsu.unsw.edu.au/NPSUweb.nsf/page/NPDC
Supported Accommodation Assistance Program (SAAP) National Data Collection	Annual from 1996–97	www.aihw.gov.au/housing/sacs/saap/index.cfm
ABS data sources		
ABS Census of Population and Housing	Five-yearly from 1981	www.abs.gov.au/WEBSITEDBS/D3310114.nsf/Home/census
ABS Child Care Survey	Three-yearly from 1993	www.abs.gov.au/ausstats/abs@.nsf/mf/4402.0
ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)	2001, 2004–05	www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0
ABS National Health Survey (NHS)	1995, 2001, 2004–05	www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0
ABS Recorded Crime—Victims	Annual from 1993	www.abs.gov.au/ausstats/abs@.nsf/mf/4510.0
ABS Schools, Australia	Annual from 1960	www.abs.gov.au/ausstats/abs@.nsf/mf/4221.0
ABS Survey of Children's Participation in Cultural and Leisure Activities	Three-yearly from 2000	www.abs.gov.au/ausstats/abs@.nsf/mf/4901.0
ABS Survey of Disability, Ageing and Carers (SDAC)	1981, 1988, 1998 and 2003	www.abs.gov.au/ausstats/abs@.nsf/mf/4430.0
ABS Survey of Education and Work (previously Transition from Education to Work)	Annual from 1994 (except 1995)	www.abs.gov.au/ausstats/abs@.nsf/mf/6227.0
ABS Survey of Income and Housing (SIH)	Annual from 1994–95 to 2003–04 (except 1998–99 and 2001–02), 2005–06	www.abs.gov.au/AUSSTATS/abs@.nsf/DOSSbyTopic/F0CDB39ECC092 711CA256BD00026C3D5?OpenDocument
Other data sources		
Australian Childhood Immunisation Register	Quarterly from March 1998 onwards	www.medicareaustralia.gov.au/provider/patients/acir/statistics.jsp
OECD Education Database	Varies by indicator	www.oecd.org/education/database
OECD Family Database	Varies by indicator	www.oecd.org/els/social/family/database
OECD Health Data	Selected indicators from 1960 onwards	www.oecd.org/health/healthdata

# Table 1: National and international data sources used in this report for child and youth indicators

# **Abbreviations**

ABS	Australian Bureau of Statistics
ACER	Australian Council for Educational Research
ACIR	Australian Childhood Immunisation Register
AESOC	Australian Education Systems Officials Committee
AHMAC	Australian Health Ministers' Advisory Council
AHMC	Australian Health Ministers' Conference
AIFS	Australian Institute of Family Studies
AIHW	Australian Institute of Health and Welfare
CDSMAC	Community and Disability Services Ministers' Advisory Council
CDSMC	Community and Disability Services Ministers' Conference
COAG	Council of Australian Governments
DoHA	Australian Government Department of Health and Ageing
FaHCSIA	Australian Government Department of Families, Housing, Community Services and Indigenous Affairs
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
NHMRC	National Health and Medical Research Council
OECD	Organisation for Economic Co-operation and Development
SAAP	Supported Accommodation Assistance Program
SES	socioeconomic status
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
WH0	World Health Organization

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# Making progress: the health, development and wellbeing of Australia's children and young people

Ensuring that children get the best possible start in life is a key priority for the Australian Government. This report delivers the latest and most reliable information on how, as a nation, we are faring according to key statistical indicators of child and youth health, development and wellbeing.

The report covers children and young people aged 0-19 years, and includes indicators for the entire 0-19 year age range as well as indicators for three different stages of development:

- 1. infancy and early childhood;
- 2. school age childhood; and
- 3. adolescence.

Information is presented on important issues such as mental health, disability, risk factors for chronic disease, mortality, education, homelessness, crime, jobless families and family economic situation. Particular attention is given to Aboriginal and Torres Strait Islander children and youth, and to how Australia compares internationally.

This is an essential resource for policy makers, researchers, practitioners and anyone interested in the progress of Australia's children and youth.