

2.1 Children summary

The health of children and young people has been identified as a target health improvement area in the *Smart State: Health 2020 Directions statement* strategic vision for Queensland Health. Children aged 0-14 years represent 21% of the Queensland population.

The health of children is the result of a complex interplay of genetic, social, environmental, economic and cultural factors. The impact of these factors in childhood also affects health in adult life. There is growing evidence that maternal health in the antenatal period, effective nurturing in the early years, early brain development through infancy and toddler-hood, and the psychosocial transitions to young adulthood, have significant effects on health and wellbeing throughout the life course.

The health status of children in Queensland is relatively high compared with other age groups, and by international comparison. However, some key issues remain:

- poorer health of Indigenous children
- asthma
- mental health problems and disorders
- injury
- inappropriate nutrition
- overweight and obesity
- physical inactivity.

For the first time in Queensland, *Health Determinants Queensland 2004* combines indicators of the major behavioural, social, economic and environmental determinants of health for children. This report describes the relationship between health determinants and health outcomes. In doing so, it provides: evidence for investment in population health, both in the health sector and across government; priority areas for investment; and interventions which can most improve the health of children in Queensland.

What is the health status of children in Queensland?

- The life expectancy of Queensland children born in 1999-2001 was 76.9 years for males and 82.5 years for females, similar to that of Australia. Australia has one of the highest life expectancies in the world.
- On average, Indigenous women in the State give birth at a younger age than non-Indigenous women. Almost two thirds of Queensland's total Indigenous population is under 25 years of age, hence the health of Indigenous children and young people is critical to the health of Indigenous peoples in this State.
- Asthma is the biggest cause of burden of disease and injury in Australian children. The level of asthma in Australia is among the highest in the world. After years of increasing steadily, the prevalence in children may have reached a plateau or may even be declining. Asthma is one of the most frequent reasons Australian children are admitted to hospital. Over the past ten years in Queensland, boys were more likely to be hospitalised for asthma than girls.
- Injury is the biggest cause of death in children. In 1996-98 in Queensland, injury and poisoning caused one third of all deaths in children. Half of these children were younger than five years. Boys are more likely than girls to be hospitalised for injury. In Australia, children living in remote areas are more likely to be hospitalised than those living in rural areas. They are in turn more likely to be hospitalised than children living in urban areas. Indigenous children are more likely to be hospitalised than non-Indigenous children.
- In Queensland in 2000/01, the incidence rates for Type 1 diabetes in children aged 0-14 years were 21.5 per 100,000 for boys and 18.7 for girls, similar to that of Australia. The incidence rate of Type 1 diabetes in Australian children is increasing. The number of children in Queensland or Australia who have Type 2 diabetes is unknown. However, it is expected to increase, since Type 2 diabetes is linked to lifestyle factors such as obesity and insufficient physical activity, which are rapidly increasing.
- Tooth decay is the single most common chronic childhood disease. Queensland children are more likely to experience tooth decay than Australian children as a whole. Infants and children are less likely to have tooth decay if they have access to fluoridated water and if frequent exposure to foods and drinks containing added sugars are avoided.
- About three-quarters of the cases of invasive meningococcal disease are aged less than 25 years; those less than five years make up 36% of cases. Similarly, for invasive pneumococcal disease, children aged 0-4 years make up the largest single age group (40%).

- In recent years, many cases of pertussis (25%) have occurred in young adolescents aged 10-14 whose immunity has waned. Booster doses are recommended at 15 years of age.

Key population groups

Infants and young children

- The infant death rate in Queensland in 2000 was 6.2 deaths per 1,000 live births, higher than Australia at 5.2 deaths per 1,000 live births.
- In Queensland in 2000, there were 48,524 births. Seven percent of infants had low birth weight, similar to that of Australia. One in twelve children was born premature.
- Asthma is the biggest cause of burden of disease and injury in Australian children aged 0-4 years, followed by health problems associated with low birth weight.
- Low speed run-over (usually a car reversing over a child) is the third most frequent cause of injury death in Queensland children aged 1-4 years. Boys are more likely to be hospitalised due to road transport injury than girls.

Older children

- For Australian children aged 5-14 years, the biggest cause of disease burden is asthma, accounting for about one third of the burden. Mental health conditions such as depression, attention-deficit hyperactivity disorder and separation anxiety disorder, collectively account for 22% of the disease burden.
- Of all injuries, falls are the most common reason Australian children are hospitalised. In Queensland, boys are more likely to be hospitalised than girls.
- Girls are more likely to be hospitalised due to intentional self-harm than boys. Over the past 10 years, rates of hospitalisation for intentional self-harm have increased for boys and girls.
- In Australia, boys are more likely to have attention-deficit hyperactivity disorder than girls. Girls are more likely to have eating disorders than boys.
- For children aged 5-14 years in the State, 11% have a disability, and half of these children have a profound or severe limitation to core life activities. These figures were similar to Australia.

What are the health determinants impacting on Queensland children?

Health determinants can be broadly divided into:

- ‘upstream’ (education, employment, income, living and working conditions);
- ‘midstream’ (health behaviours and psychosocial factors); and
- ‘downstream’ (physiological and biological factors).

In this report, the upstream determinants of health for children are addressed in sections on environmental factors and socioeconomic factors, and midstream determinants in sections on community capacity and health behaviours. The downstream effects are addressed in the health behaviour section.

Environmental factors

- Many childhood injuries occur in the home. Households in Queensland with young children are more likely to have smoke alarms/detectors installed, and an adjustable hot water thermostat, than households without young children. The rate of hospitalisation for fire, burns and scalds in children has increased during the last decade. Boys are more likely to be hospitalised than girls. About one third of all hospitalisations for these injuries are for children aged 0-4 years.
- Nearly a quarter of households with young children have a swimming pool. Of these, 82% have child resistant fencing or self-locking gates. In the last 15 years, there has been an overall reduction in drowning rates in Queensland children aged 0-4 years.
- In Queensland in 2003, just over half of households with children, kept household cleaners and poisons locked away or out of reach. About 88% of such households kept paracetamol products, and 85% kept other medicines and vitamins, locked away or out of reach.
- In 1995, 40% of Queensland children aged 0-14 years lived in a household with at least one smoker, similar to that of Australia. In 1999-2001, environmental tobacco smoking caused 21 deaths each year in children aged 0-4 years. Low birth weight, followed by respiratory illness, was the leading cause of hospitalisations in children aged 0-4 years due to tobacco smoking.

Socioeconomic factors

- In Queensland in 2001, the weekly income of a quarter of Queensland families was less than \$500 per week. Of these low income families, 27% were one parent families and 30% were couple families with children. Children from low income families are more likely to suffer from chronic illness than those from high income families.
- Children with poor literacy and numeracy skills are more likely to be unemployed as adults. In Queensland in 2003, 92.6% of children in Year 3 reached the national reading benchmark, and 91.4% reached the numeracy benchmark, similar to that of Australia.
- In 2002, 20.5% of Queensland children aged 0-14 years did not have an employed parent, compared to 17.9% nationally.

Community capacity

- In Queensland in 2001, 59% of the population were living in couple families with children and 14% of the Queensland population were in one parent households. In 1996, 19.8% of Queensland children lived in one parent families, and by 2021, this is expected to increase up to one in three children.
- In 2001, 10% of homeless people in Australia were estimated to be children aged 0-11 years.
- One quarter of Queensland parents have participated in a parenting program.
- Based on parents' reports, the behaviour of almost 9% of children aged 2-12 years was assessed as disruptive or antisocial. Five percent of parents reported their child's behaviour as very or extremely difficult to manage. One quarter of parents who considered their child to have emotional or behavioural problems had consulted a professional for advice.
- In 2000, Queensland children aged less than three years spent a median of 16 hours per week in child care, compared to 13 hours per week for all Australian children.
- In Queensland, the rates of substantiated child abuse and neglect have been increasing, as in other states and territories of Australia.
- In Australia in 2000, 59% of children aged 5-14 years participated in organised sport (mainly boys) and about 29% of children participated in organised cultural activities (mainly girls). The most common leisure activity was watching television or videos (97%), followed by playing electronic or computer games (69%).

Health behaviours

- In Australia in 1995, one in six boys and girls aged 2-18 years were overweight, and a further 5% of boys and girls were obese. In 2002 in South Australia, about 20% of four year old children were overweight or obese, an increase of 60% since 1995. No recent Queensland statistics are available on growth and overweight and obesity levels in children.
- In Queensland in 1999-01 for children aged 0-4 years, hazardous and harmful alcohol consumption caused two deaths per year and illicit drugs caused three deaths. Of these deaths, newborn drug toxicity was the leading cause.
- In the State in 2000, 83.2% of infants were exclusively breastfed at discharge from hospital. Exclusive breastfeeding for the first six months of an infant's life is recommended.
- Australian children aged 5-12 years watch an average of 23 hours per week of television, including four hours of advertisements. Much of this is food advertising, where most is for foods of poor nutritional value.
- Data on the regularity of children's participation in physical activity is not available. Of Queensland children aged 5-14 years, 56% participate in organised sport, which is lower than for Australia.
- In Queensland in 2003, the majority of parents said it was not difficult to prevent their child from becoming sunburnt. However, 19% of parents reported one episode of painful sunburn in their child in the preceding summer, and 5% reported between two and ten episodes.
- In Queensland in 2003, 92.1% of children were fully vaccinated at 12 months of age, 90% were fully vaccinated at two years of age, and 94.5% had received their first dose of measles/mumps/rubella vaccine. These rates were similar to those of Australia.

Evidence based strategies which address the determinants of health have the potential to reduce the burden of ill health and premature death in the lives of Queensland children, particularly those who are most disadvantaged.