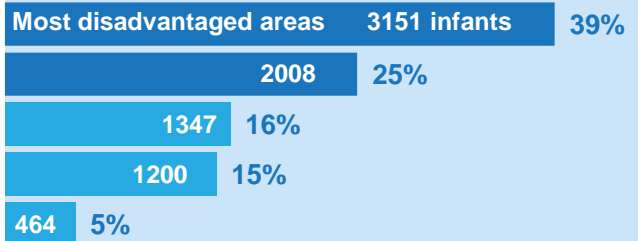


## key facts

# Health disparities in Queensland children

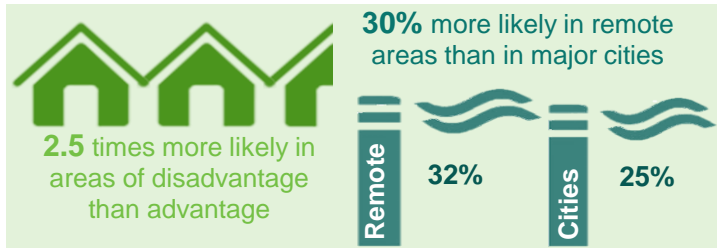
### Maternal smoking during pregnancy

**2 in 3 women** who smoke during pregnancy are from areas of **greater disadvantage**, placing their infants (**5000+**) at longer term health risk (2014)



### Children living in a household with a smoker

**1 in 4 children** (~200,000) is living in a household with a **current smoker**, with **greater disparities** among children living in **disadvantaged and/or remote areas** (2015–16)



### Childhood dental decay

**4 in 10 children** are starting school with **tooth decay**, with **twice as many** from **disadvantaged areas** having decay experience as those in advantaged areas (2014–15)

#### Decay experience (4–6 year olds)



### Becoming obese in childhood

**1 in 14 children** is **obese** (2016), compared with about 1 in 50 some 30 years ago. On current rates, **by 2026** there will be **250,000 overweight and obese children**

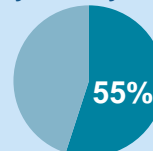
#### Trend analysis: obesity and overweight



### Inactivity on most days a week

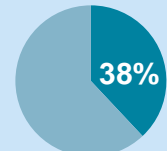
**1 in 4 children** is **inactive** on more days of the week than they are **active**, increasing their risk of chronic disease, unhealthy weight gain and likelihood of becoming sedentary adults (2016)

#### Not meeting recommended daily activity levels\*



\*minimum of one hour every day

#### Exceeding recommended maximum screen time^



^maximum of two hours every day

### Exposure to the hidden harms of alcohol and family violence

**1 in 5 children** is affected by others' drinking – these impacts are often described as the 'hidden harms' of alcohol. **Alcohol use**, at **high and frequent** levels, is a **significant contributor to violence** (2008)

51%

Of those adults who experienced current partner violence, **51%** had children in their care at the time of the violence and for **over half** of these, children **saw or heard the violence**.

**What happens during the early years, starting in the womb, has lifelong effects on a range of health and wellbeing outcomes including obesity, heart disease, mental health, educational attainment and economic status (Michael Marmot).**



In Queensland, most children are in good health and have a healthy start in life, but not all. Those who do not are more likely to be from socioeconomically disadvantaged backgrounds or born to Indigenous Queenslander mothers or teenage mothers. This factsheet reports on key health information and health disparities for infants and children published in the 2016 report of the Queensland Chief Health Officer, where data sources are cited.

## Maternal and infant health

*A good start to life is influenced by the mother's health and wellbeing even before conception, regular antenatal care during pregnancy, safe delivery at full term, breastfeeding to 12 months or longer, a nutritious diet during the early years and a nurturing, secure environment.*

## Maternal weight

- In 2014, about 1 in 2 mothers giving birth was overweight or obese (typical of all women in the reproductive age range):
  - 16,792 or 27% were overweight
  - 14,016 or 22% were obese.
- In 2008, obese women at conception were:
  - 30% more likely to have post-partum haemorrhage than healthy weight women
  - 2.9 times more likely to develop gestational hypertension
  - 2.6 times more likely to have gestational diabetes.

## Birth weight

- In 2014, of all infants:
  - 4450 or 7% were low birth weight (<2500gm)
  - 7507 or 12% were high birth weight (≥4000gm).
- For Indigenous Queenslander infants, in 2014:
  - 433 or 11% were low birth weight
  - 396 or 10% were high birth weight.
- In Queensland in 2014, under UK recommendations, about 500 live born infants, of at least 32 weeks gestation, were overweight at birth.

## Teenage mothers

- In 2014, 4.3% (2702) of all mothers were under 20 years of age at delivery.
- Indigenous Queenslander mothers were more than 5 times as likely to be under 20 years of age as non-Indigenous mothers (17% compared with 3.5% respectively in 2014).

## Older mothers

- In 2014, 19% of mothers giving birth were aged 35 years or older (12,026 women).
- The proportion of older mothers varied considerably from 24% in Metro South and other south-east Queensland HHSs to 11% in North West.
- Older mothers were 90% more likely to have diabetes and twice as likely to have placenta praevia as younger mothers. Older maternal age is associated with higher risk of chromosomal congenital anomalies.

## Smoking in pregnancy

- In 2014, 13% (8207) of all mothers smoked at some time during their pregnancy.
- Of those who smoked at all during pregnancy:
  - 1 in 7 or 16% smoked >10 cigarettes per day
  - 87% were provided with advice about quitting.
- Maternal smoking rates were four times higher for Indigenous Queenslander mothers (45% or 1758) than non-Indigenous (11% or 6449).
- The rate of maternal smoking was 5.6 times higher in socioeconomically disadvantaged areas than advantaged areas (24% compared with 4.3%).
- Two-thirds of women who smoked during pregnancy (about 5200 women) were from areas of greater disadvantage.
- Between 2010 and 2014, there was a 27% decrease in prevalence of smoking during pregnancy for non-Indigenous women, and a 14% decrease for Indigenous Queenslander women.

## Antenatal care

- In 2014, 5.4% (3424) of women made fewer than five antenatal visits during their pregnancy and of these, 599 were Indigenous Queenslander mothers (15% compared with 5% of non-Indigenous).
- About two-thirds of women (67%) made their first visit in the first trimester, about one-third (30%) in the second trimester and a small number (1072 or 2%) in the third trimester.
- 155 (0.3%) had no antenatal visits.

## Breastfeeding and starting solid food

- In the 24 hours prior to discharge in 2014:
  - 93% of infants received some breast milk (78% had breast milk exclusively)
  - 8% received infant formula only
  - 15% received both
- Infants of teenage mothers were twice as likely to have only received infant formula (14%) compared with mothers aged 20 years and older (7%).
- In 2014, during the first two years:
  - 96% of infants had ever been breastfed
  - 29% were exclusively breastfed to four months and 5% to six months
  - 64% received some breast milk at 6 months and 32% at 12 months
- In 2014, about 1 in 3 (36%) of infants had been introduced to solid food at four months of age with 22% consuming daily.
- About 7% of infants were consuming cow's milk at 10 months.
- Exclusive breastfeeding to four months did not change between 2008 and 2014. However the proportion receiving some breast milk at each month in the first year increased from:
  - 33% in 2003 to 48% in 2014, at nine months of age
  - 17% in 2003 to 32% in 2014, at 12 months
- Rates were reflected by a decrease in the proportion of children receiving formula at each month over the first year.
- Between 2003 and 2014, there was a decrease in the proportion of infants consuming:
  - solid food daily at four months, from 29% to 22%.
  - cow's milk at 10 months, from 35% to 7%.

## Immunisation

- In 2015, coverage rates for fully immunised children were as follows:

**Table 1: Immunisation coverage, 2015**

Fully vaccinated	Queensland	Australia	
at 1 year	Indigenous	87.3	88.7
	Non-Indigenous	92.9	92.5
	<b>All children</b>	<b>92.4</b>	<b>92.3</b>
at 2 years	Indigenous	85.8	86.2
	Non-Indigenous	90.6	89.5
	<b>All children</b>	<b>90.2</b>	<b>89.3</b>
at 5 years	Indigenous	93.6	93.9
	Non-Indigenous	92.4	92.5
	<b>All children</b>	<b>92.4</b>	<b>92.6</b>

- Key statistics on Queensland vaccination coverage indicate that in 2015, about:
  - 58,000 one-year olds were fully immunised,
  - 4700 were not.
  - 56,500 two-year olds were fully immunised,
  - 6200 were not.
  - 60,500 five-year olds were fully immunised,
  - 4900 were not.
- In 2015, variation in childhood immunisation rates among HHSs indicated that coverage rates were:
  - highest in Central West (96.5% at one year, 92.5% at two years, 96.2% at five years)
  - lowest in Sunshine Coast (89.1% at one-year, 86.8% at two years, 89.3% at five years).
- Coverage for child aged one and five years has remained steady at 92% since 2010.
- In the latter half of 2015, among pregnant woman:
  - 36% (10,900) reported being vaccinated for whooping cough
  - 26% (7900) reported being vaccinated for influenza.

## Childhood and adolescence

*The foundation for future health, development and wellbeing is established in the early years of a child's life. Their health and wellbeing is influenced by what happens to them as individuals, as part of a family and as a member of their community. A good start in life helps children reach their full potential, while a poor start increases the likelihood of adverse outcomes.*

## Overweight and obesity

- For children (5–17 years), in 2016, based on 2014–15 measured prevalence, an estimated:
  - 7% or 59,000 were obese
  - 19% or 158,000 were overweight.
- In 2016, based on proxy reporting, the prevalence of obesity in children did not differ by sex or vary by age, socioeconomic status or remoteness.
- Childhood obesity rates did not differ between HHSs in 2015–16 and although the prevalence of overweight and obesity combined varied markedly, none of the HHSs differed significantly from the state average.
- In 2012–13, 30% of Indigenous Queensland children aged 5–17 years were overweight or obese by measurement
  - 17% were overweight
  - 13% were obese.
- Overweight and obesity prevalence for Indigenous Queensland children did not differ from non-

Indigenous Queensland children, nor from Australian Indigenous children.

- Childhood obesity or overweight prevalence (by measurement) has shown no change between 2007–08 and 2014–15, this is consistent with national trends.
- In 2014–15, by measurement, obesity or overweight in Queensland children did not differ from national prevalence. Queensland was fourth highest for obesity among the jurisdictions (also for overweight), whereas for overweight and obesity combined, Queensland was fifth highest.
- In 2013, using recent estimates of overweight and obesity for 33 OECD countries:
  - Australian girls were ranked equal 10th highest, 9% higher than the OECD average.
  - Australian boys were ranked equal 19th highest, 9% lower than the OECD average.
- Even though childhood obesity trends are encouraging, for one-quarter of children being overweight or obese can lead to immediate obesity-related co-morbidities such as obstructive sleep apnoea, pre-diabetes, orthopaedic complications and psychosocial impact. Overweight and obesity can also predispose children to chronic disease in later life or reduce life expectancy.

## Food and nutrition

### Fruit and vegetable consumption:

- In 2016, of children aged 5–17 years:
  - 790,000 or 96% were not meeting recommendations for vegetable consumption
  - 250,000 or 30% were not meeting recommendations for fruit consumption.
- Fruit and vegetable consumption for Indigenous Queensland children did not differ from non-Indigenous children or Australian Indigenous children.
- For children in 2016, recommended fruit and vegetable consumption did not differ by socioeconomic status, remoteness or between HHSs.

### Discretionary foods and takeaway:

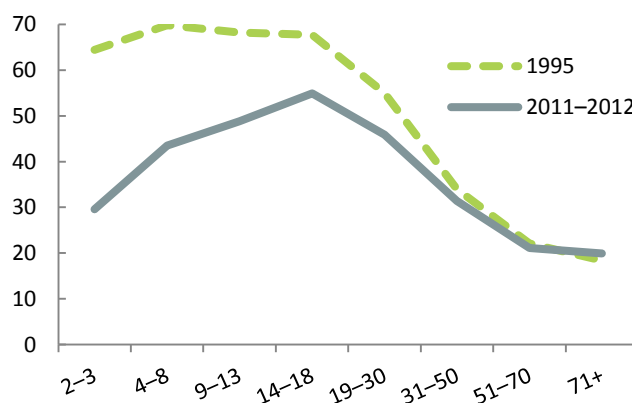
- In 2016 of children aged 5–17 years:
  - 15% ate savoury biscuits daily (65% weekly)
  - 7% ate salty snacks daily (63% weekly)
  - 20% ate sweet biscuits, cakes, muffins and similar food daily (73% weekly)
  - 5% ate confectionary, including chocolate and lollies daily (63% weekly).
- Two-thirds (61%) of children were consuming one or more 'discretionary' foods daily and 97% weekly.
- In 2011–12, 41% of total energy intake of children aged 2–18 years was from discretionary foods.

- In 2016, 48% of children were consuming takeaway foods on a weekly basis.
- Teenagers (16–17 years) were 33% more likely to consume takeaway foods weekly than were younger children (5–7 years).

### Sugar sweetened drinks:

- About 1 in 2 children (51%) aged 2–18 years consumed sugar sweetened drinks daily in 2011–12.
- Daily consumption of sugar sweetened drinks decreased nationally between 1995 and 2011–12, from 43% to 34% for persons aged  $\geq 2$  years (Fig 1).
- Overall, the greatest decrease in consumption of sugar sweetened drinks was among very young children with the prevalence in 2–3 year olds more than halving over the 16 years, from 64% to 30% (Fig 1).

**Figure 1: Daily consumption of sugar sweetened drinks by age, Australia, 1995 and 2011–12**



## Physical activity

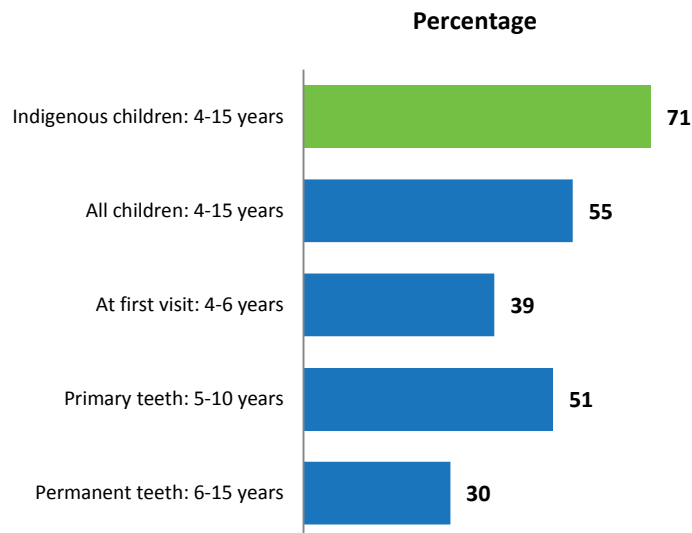
- In 2016, 55% or 460,000 children (aged 5–17 years) did not meet the recommendation of being active every day and of these 220,000 were inactive on four or more days per week.
- In 2016, 45% of children were active for the recommended minimum of one hour every day:
  - 27% were active on  $\leq 3$  days a week
  - 23% were active on four or five days a week
  - 50% were active on six or seven days a week
- The prevalence of being active every day was 17% higher than the state average among children at the Sunshine Coast HHS but did not differ for any other HHS.
- In 2012–13, prevalence of being active for the recommended minimum of one hour per day in the previous three days did not differ significantly between Indigenous Queensland children (49%) and non-Indigenous children (38%).

- In 2016, children living in socioeconomically advantaged areas were 33% more likely to engage in organised sports in the previous 12 months than those living in disadvantaged areas (84% and 64% respectively).
- For Queensland children aged 2–17 years in 2011–12, prevalence of being active at least one hour every day was 18% higher than Australia and third highest of the jurisdictions.
- In 2015, 38% (310,000) of children exceeded the recommended maximum of two hours per day of screen based entertainment, of which:
  - more boys than girls exceeded recommendations (41% compared with 34%).
  - older children (16–17 years) were 2.3 times more likely to exceed recommendations than 5–7 year olds.
- During the teenage years, there is a pattern emerging of diminishing activity and increasing sedentariness, with only about 1 in 5 meeting the guidelines by the time they reach 16–17 years.

## Oral Health

- Of the 157,000 children aged 4 to 15 years who attended the Queensland Health oral health services in 2015 (Fig 2):
  - 86,500 or 55% had decay experience, including 27% with  $\geq 4$  teeth affected and of these 11,400 were Indigenous Queensland children.
  - 55,100 or 51% aged 5–10 years had decay experience in their primary teeth. On average, these children had 4.0 teeth affected.
  - 40,400 or 30% aged 6–15 years had decay experience in their permanent teeth. On average, these children had 2.8 teeth affected.
  - 16,900 or 39% aged 4–6 years had decay experience at their first visit, including 17% with  $\geq 4$  teeth affected.

**Figure 2: Prevalence of decay experience, children attending Queensland Health oral health services, 2014–2015**



- In 2014–15, of children attending Queensland Health oral health services:
  - 63% (4–15 years) from socioeconomically disadvantaged areas had decay experience, compared with 49% from advantaged areas.
  - 47% of 4–6 years olds from disadvantaged areas had decay experience at their first visit, twice as many as those in advantaged areas (25%).
  - 71% of Indigenous Queensland children had decay experience, 41% with  $\geq 4$  teeth affected.
  - Mean number of untreated decayed teeth (4–15 years) was greater than state average in Wide Bay, Darling Downs and Metro South HHSs and lower in Metro North and Sunshine Coast.
- Young children were more commonly hospitalised for dental caries than any other age group – 57% were aged 0–9 years (3223 hospitalisations in 2013–14).

## Smoking in the home

- In 2015–16, 27% or 200,000 children were living in a household with a current smoker.
- Children living in socioeconomically disadvantaged areas were 2.5 times more likely to be living in a household with a smoker than those in advantaged areas (40% compared with 16% in 2015–16).
- Children in remote areas were 30% more likely to be living in a household with a smoker than those in cities (32% compared with 25% in 2015–16).
- Children growing up in home with a smoker were 4 times more likely to become a daily smoker by 18–24 years than those who did not.

## Social risks

- In 2012, based on adult self-reported experience of partner violence, children were often exposed:
  - current partner violence: 54% of women (44% of males) had children in their care at the time of the

violence and 58% of these children saw or heard the violence (41% for male partners)

- previous partner violence: 61% of women (49% of males) had children in their care at the time of the violence – 78% of these children saw or heard the violence (69% for male partners).

- The most frequently cited perpetrator of domestic assault for children aged 0–15 years was a parent (70%).
- In 2008, 1 in 5 children (22%) was reported to have been affected by the drinking of others.

*For a more in-depth coverage of the facts and figures presented throughout this factsheet please refer to the Report of the Chief Health Officer Queensland <https://www.health.qld.gov.au/research-reports/reports/public-health/cho-report/2016>*