

Australian Institute of Health and Welfare

AIHW Dental Statistics and Research Unit Research Report No. 44

Oral health impacts among children by dental visiting and treatment needs



This report provides information on the oral health impacts experienced by Australian children during the period 2004-06. It investigates differences in parent-reported toothache, eating difficulties and poor oral health perception between children with different dental visiting patterns and treatment needs.

Main findings

- Only a minority of Australian children (<12%) regularly experienced toothache or the need to avoid eating certain foods because of problems with their teeth or mouth.
- More than 90% of parents considered their child's oral health to be good, very good or excellent.
- Oral health impacts varied by children's age, sex and state of residence.
- Children with more oral health impacts were more likely to visit the dentist regularly.
- Reduced dental visiting was associated with poorer oral health.
- Greater treatment need was strongly associated with more oral health impacts.

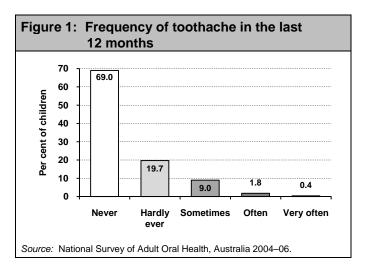
Oral health impacts

Health impacts are important measures of well-being because they reflect an individual's perception of their condition, which may not always be aligned with the clinical presence of disease. The impacts of poor oral health often occupy several domains and may include difficulty with eating or talking, pain, reduced self-esteem, bad breath and a poor perception of dental appearance.

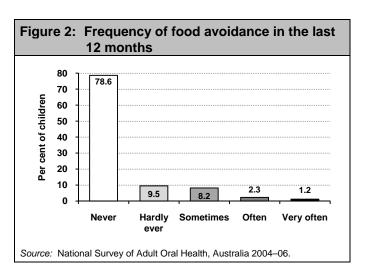
This study used parents' ratings of their child's oral health. Parents were asked the frequency that their child suffered from toothache, how often their child had to avoid eating some foods because of problems with their teeth or mouth, and their rating of their child's oral health.

Frequency of oral health impacts among children

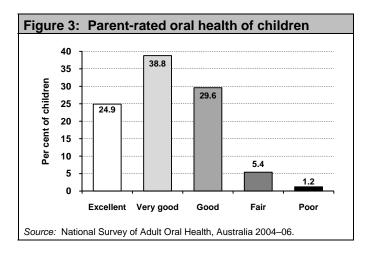
Approximately 30% of children had some experience of toothache in the preceding 12-month period (Figure 1). However, only 11.2% of children experienced toothache sometimes, often or very often.



More than 1 in 5 children had avoided food in the previous 12 months because of problems with their teeth or mouth (Figure 2). Almost 12% of children were reported to have avoided food sometimes, often or very often.



Most parents rated their child's oral health as being good to excellent (Figure 3), with only 6.6% of parents regarding their child's oral health as fair or poor (regarded as 'poor oral health').

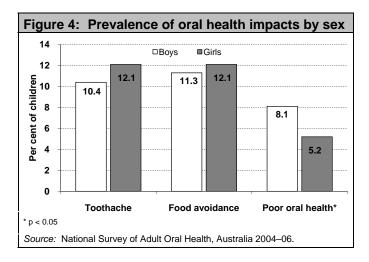


Distribution of oral health impacts

The distribution of oral health impacts ('Sometimes' to 'Very often') was examined by the age, sex and state of residence of children.

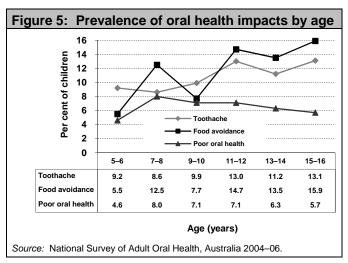
Differences by sex

While there was no significant difference between boys and girls in terms of either the experience of toothache or food avoidance, a significantly higher percentage of boys were reported as having poor oral health (Figure 4).



Differences by age

There was a tendency for a higher percentage of older children to experience oral health impacts; however, this was only statistically significant in relation to food avoidance (Figure 5). Parent-rated child oral health varied little across the age groups.



Differences by state of residence

Toothache experience varied considerably by state or territory of residence, being highest for children from New South Wales, Victoria and the Northern Territory (Table 1). There were no significant differences by residence for food avoidance or parent-rated child oral health.

Table 1: Prevalence of oral health impacts by state or territory of residence							
State/ Territory	Toothache (%)	Food avoidance (%)	Poor oral health (%)				
NSW	15.3	13.0	8.0				
Vic	12.2	13.6	4.8				
Qld	5.6	8.3	6.8				
SA	6.9	11.8	8.2				
WA	9.8	10.3	4.3				
Tas	10.3	11.8	8.2				
ACT	10.3	7.1	10.8				
NT	16.0	14.1	8.7				

Dental visiting

Dental visiting was measured by the child's time since their last visit, their usual frequency of visiting (i.e. how often) and their usual reason for visiting ('Check-up' vs 'Problem').

Time since last visit

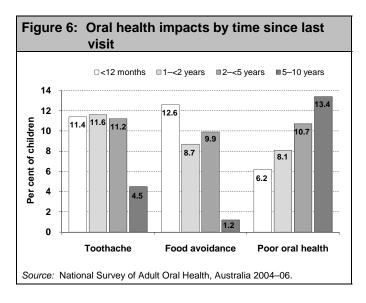
In relation to both toothache and food avoidance, there was a tendency for children with more recent dental visits to have more oral health impacts (Figure 6). This most likely reflects that children with oral health problems were visiting the dentist to address their concerns. In contrast, greater time since last dental visit was associated with increasingly poorer parent-rated oral health. However, none of these effects were statistically significant.

■Problem

4.7

Poor oral health

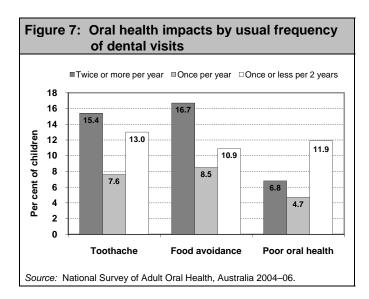
14.9



Per cent of children 10 10.0 5 0 Toothache Food avoidance Source: National Survey of Adult Oral Health, Australia 2004-06.

Frequency of visits

There were statistically significant associations between usual frequency of dental visits and all oral health impacts (Figure 7). Children visiting twice or more per year had greater experience of toothache and food avoidance, while children visiting less often (once or less every 2 years) had poorer parent-rated oral health.



Usual reason for dental visit

associations were strong children's usual reason for visiting a dentist and the experience of oral health impacts (Figure 8). Children who usually visited the dentist for a problem rather than for a check-up were more than twice as likely to experience toothache and more than four times as likely to be regarded as having poor oral health. However, the association between reason for visit and food avoidance was not statistically significant.

Dental needs

25

20

15

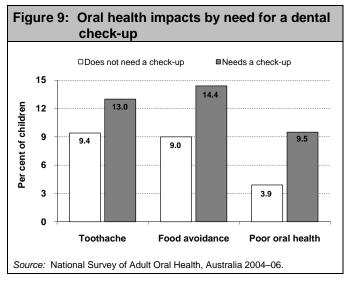
Parents were asked whether or not they believed their child needed to have a check-up, a filling or an extraction.

Figure 8: Oral health impacts by usual reason for

□Check-up

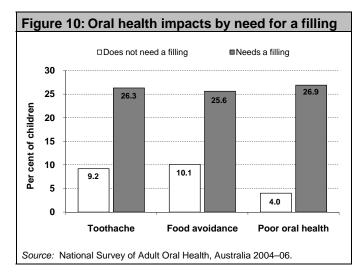
Perceived need for a check-up

A higher percentage of children perceived to be in need of a dental check-up experienced toothache and food avoidance, although these differences were not statistically significant (Figure 9). Poorer parent-rated oral health was significantly associated with the perceived need for a check-up.



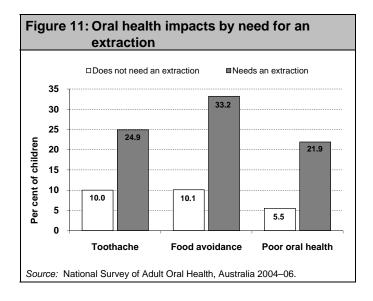
Perceived need for a filling

A higher percentage of children who were perceived to require a filling to treat dental decay were suffering from toothache, avoided foods due to problems with their teeth or mouth, and were judged to have significantly poorer oral health (Figure 10).



Perceived need for an extraction

There were large and statistically significant differences between oral health impacts experienced by children perceived to be in need of a tooth extraction compared to children who did not (Figure 11). Of those children deemed to need an extraction, 1 in 4 had been suffering toothache, 1 in 3 had avoided eating some foods, and just over 1 in 5 were judged to have poor oral health.



Data collection

Findings presented in this publication are based on data collected as part of the *National Survey of Adult Oral Health 2004–06* (Slade et al. 2007). The study collected telephone interview data from a random sample of Australian children and adults, with the collection coordinated by staff of the Australian Research Centre for Population Oral Health (ARCPOH).

Data are reported for all children aged between 5 and 17 years in the survey. Proxy interviews, mostly using parents, were adopted for children

aged up to 15 years, while older children answered all questions themselves.

The distribution of children from metropolitan and non-metropolitan areas by state and territory is presented in Table 2.

Table 2: Number and percentage of children by state/territory and residential location (unweighted)

State/ territory	Metropolitan		Non-metropolitan			All
	n	%	n	%	n	%
NSW	249	23.6	189	26.9	438	24.9
Vic	253	23.9	97	13.8	350	19.9
Qld	143	13.5	138	19.6	281	16.0
SA	81	7.7	37	5.3	118	6.7
WA	95	9.0	73	10.4	168	9.5
Tas	55	5.2	89	12.7	144	8.2
ACT	119	11.3	0	0.0	119	6.8
NT	62	5.9	80	11.4	142	8.1
All	1,057	100.0	703	100.0	1,760	100.0

The findings presented here are based on data that have been weighted by metropolitan and non-metropolitan strata in each state and territory and by the age and sex distribution of children within each strata.

Statistical differences were evaluated using chi-squared tests for categorical data with the criterion alpha set at p < 0.05.

References

Slade GD, Spencer AJ, Roberts-Thomson KF (eds) 2007. Australia's dental generations: the National Survey of Adult Oral Health 2004–06. Cat. no. DEN 165. Canberra: Australian Institute of Health and Welfare (Dental statistics and research series No. 34)

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The AIHW Dental Statistics and Research Unit (DSRU) is a collaborating unit of the Australian Institute of Health and Welfare, established in 1988 at The University of Adelaide and located in the Australian Research Centre for Population Oral Health (ARCPOH), School of Dentistry, The University of Adelaide. DSRU aims to improve the oral health of Australians through the collection, analysis and reporting of information on oral health and access to dental care, the practice of dentistry and the dental labour force in Australia.

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