



# The Child Dental Health Survey New South Wales 1999

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AIHW Dental Statistics and Research Unit  
Adelaide University

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in collaboration with  
The Oral Health Branch, NSW Health

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The AIHW Dental Statistics and Research Unit (DSRU) is a collaborative unit of the AIHW established in 1988 at The University of Adelaide. The DSRU aims to improve the oral health of Australians through the collection, analysis and reporting of dental statistics and research on dental health status, dental practices and the use of dental services, and the dental labour force.

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## Abbreviations

d – deciduous decayed teeth

m – deciduous missing teeth

f – deciduous filled teeth

dmft – deciduous decayed, missing and filled teeth

D – permanent decayed teeth

M – permanent missing teeth

F – permanent filled teeth

DMFT – permanent decayed, missing and filled teeth

dift – deciduous decayed, indicated for extraction and filled teeth

SD – standard deviation

## **Purpose of this report**

This report is part of the annual series providing descriptive statistics concerning child dental health in New South Wales. Information listed in the tables includes: the demographic characteristics of children in the sample, their deciduous and permanent caries experience, frequency of fissure sealants, immediate treatment needs and deciduous and permanent caries experience by geographical regions.

In addition, there is a simple, summary statement highlighting differences between the 1999 and 1998 findings. However, no formal hypothesis tests have been undertaken and descriptions of difference between years are intended as a guide to the reader rather than an evaluation of trends.

## **Survey methods**

The following data were collected during the 1999 calendar year from patients of the NSW Dental Service by dental therapists. The targeted children were in Kindergarten and Years 2, 4, 6 and 8.

In contrast to previous years where a random sampling procedure was used to select approximately 1 in 16 children from those receiving assessments in the Save Our Kids Smiles (SOKS) program, all children were used for analyses for 1999. This approach was adopted due to noticeable variations in disease indices between sampling approaches and due to the small numbers of children in some age groups who were being sampled in some Area Health Service regions.

## **Data analysis**

The data were cleaned prior to analysis to remove duplicates. In addition, cases with ages more than 4 standard deviations from the mean age for a given grade were removed from the analysis or corrected where this could be determined. It is likely that the majority of these cases represented data input errors.

Indices were calculated from data collected over a 12-month period. Where children received more than one examination during this period the information derived from examinations other than the first was excluded. Age-specific indices denoted with an asterisk (\*) are those in which the relative standard error exceeds 40% and population estimates of these indices may be considered to be statistically unreliable. Due to the very small numbers of 15-year-olds sampled, this age group is excluded from most discussions of results (although results for this age group are still presented in the relevant tables).

## **Adjustments for the under-reporting of decay**

In 1996, the New South Wales Health Department implemented the SOKS program, a major change accompanying the program being the move from clinic-based examinations to oral assessments in the field as the primary environment for data collection. In the clinic, better lighting and the availability of other facilities such as compressed air optimise conditions for assessing oral health.

In 1999 NSW Health commenced a wide-ranging review of SOKS, with one aspect being a quality assurance project aimed at assessing the reliability and validity of data collected under SOKS assessment conditions. The technical report (NSW Health Department, 2001) found that while there were no statistically significant differences in the reporting of missing and filled teeth between a field SOKS-style assessment and a clinical examination, there was a persistent and statistically significant under-reporting of the number of decayed teeth under field compared to clinic conditions. In deciduous teeth, the mean decay score for the SOKS assessment was 36% lower than that collected in the clinic, while the mean decay score for permanent teeth was 41% lower. Such an underestimation of decay also resulted in a significant underestimation in the dmft and DMFT indices.

As a result of these findings, the current report has included in Appendix A (Tables A1–A2, p. 12) figures adjusted for the under-estimation of decay in NSW. For children in NSW an additional weight of 1.56 was given for calculations of deciduous decay and 1.68 for calculations of permanent decay. Although it is believed that these adjusted figures may represent a more accurate estimation of caries experience in NSW, for the purpose of consistency with previous reports the data obtained via the SOKS assessments are retained for calculations in the body of this report.

## Demographic composition of the sample

As shown in Table 1, the majority of the children in the sample were aged between 5 and 13 (95.4%). Consistent with the selection process used for SOKS, the most common ages of sampled children were 5, 7, 9, 11 and 13 (representing 71.2% of the sample). Only approximately one-third the number in these age groups was represented in the age groups of 6, 8, 10, 12 and 14. Children aged less than 4 years old or greater than

**Table 1: Demographic composition of the sample**

Age (years)	Number of children in sample			
	Males	Females	Unknown	Persons
3	29	35	0	64
4	1,558	2,168	0	3,726
5	23,367	28,016	8	51,383
6	9,658	10,137	1	19,795
7	23,151	26,719	6	49,870
8	9,975	9,892	3	19,867
9	21,200	25,453	4	46,653
10	9,121	9,352	1	18,473
11	18,257	22,584	1	40,841
12	7,895	8,530	1	16,425
13	12,647	16,335	1	28,982
14	4,380	4,967	3	9,347
15	163	144	0	307
<b>Total</b>	<b>141,401</b>	<b>164,332</b>	<b>29</b>	<b>305,733</b>



14 years old were represented in small numbers, which resulted in low reliability for some computed statistics. Furthermore, these children are likely to be less representative of the respective population age groups than is the case for the majority of the sample aged 5 to 13.

The gender distribution within the sample was skewed, with 22,931 more females than males being sampled, a female to male ratio of 1.16:1.

### Changes since 1998

As a result of the changes to sampling between 1998 and 1999, demographic composition and the number of children included in the study cannot be directly compared across these years.

### Region of birth and Indigenous status

The large majority of children (94.1%) were born in Australia (see Table 2). Of those children born outside of Australia the most common region was Asia (2.8%). Children of Indigenous descent comprised 1.7% of the sample (see Table 3).

**Table 2: Region of birth**

	Number	%
Australia	287,764	94.1
New Zealand and Other Oceania (e.g. Fiji, Papua New Guinea)	2,880	0.9
North-West Europe (e.g. Germany, Sweden, United Kingdom)	1,611	0.5
Southern and Eastern Europe (e.g. Croatia, Russian Federation, Spain)	1,597	0.5
North Africa and Middle East (e.g. Egypt, Morocco, Turkey)	1,761	0.6
South-East Asia (e.g. Cambodia, Indonesia, Viet Nam)	3,098	1.0
North-East Asia (e.g. China, Hong Kong, Japan)	3,532	1.2
Southern and Central Asia (e.g. India, Nepal, Uzbekistan)	1,744	0.6
Northern America (e.g. Bermuda, Canada, USA)	555	0.2
Other Americas (e.g. Argentina, Barbados, Mexico)	471	0.2
Sub-Saharan Africa (e.g. Gambia, Madagascar, South Africa)	714	0.2
Not known	22	0.0

**Table 3: Indigenous status**

	Number	%
Non-Indigenous	300,597	98.3
Indigenous	5,165	1.7

## Changes since 1998

Classification of country of birth has changed for 1999, bringing categories in line with the Australian Bureau of Statistic's Standard Classification of Countries (SACC) (1998). There was a slight increase in the percentage of Australian-born children in 1999 compared to 1998.

## Deciduous teeth: age-specific caries experience

The mean number of decayed (d) teeth among those children aged from under 5 years to children aged 10 years old decreased from 0.94 to 0.34 (see Table 4). This decline can be largely explained by the exfoliation of deciduous teeth with increasing age and should not be seen as reflecting a reduction in the percentage of teeth with decay in older age groups. The mean number of teeth recorded as missing due to caries was small for all ages. The mean number of filled deciduous teeth increased from 0.12 for the youngest children to 0.48 for 8–9-year-olds before declining across successive age groups. The same pattern was evidenced in mean dmft, increasing to 1.11 in the 8-year-old age group and then declining to 0.19 for 12-year-olds, consistent with the relatively rapid exfoliation of deciduous teeth from the age of 10 onwards. The mean dmft for 6-year-olds was 0.99.

The percentage of caries experience due to decay (d/dmft) showed an age-associated decline, almost halving from 88.2% among those aged less than 5 years old to 46.6% among 10-year-olds. By comparison, the percentage of caries-free children (% dmft = 0) in this age range showed considerably less variation, ranging from 69.8% among 5-year-olds to 62.8% among 8-year-olds. The high percentages of children aged 10 years and over with dmft = 0 is a result of children having increasingly exfoliated all their deciduous teeth at these ages.

**Table 4: Deciduous dentition – decayed, missing and filled teeth by age**

Age	Children <i>n</i>	Decayed (d)		Missing (m)		Filled (f)		dmft	
		mean	SD	mean	SD	mean	SD	mean	SD
≤4	3,790	0.94	1.99	0.03	0.42	0.12	0.67	1.10	2.19
5	51,391	0.72	1.65	0.04	0.47	0.18	0.78	0.94	1.98
6	19,796	0.66	1.51	0.05	0.47	0.29	0.98	0.99	1.99
7	49,876	0.63	1.35	0.05	0.40	0.41	1.13	1.09	1.93
8	19,870	0.58	1.24	0.05	0.40	0.48	1.20	1.11	1.90
9	46,657	0.47	1.07	0.04	0.31	0.48	1.15	0.99	1.69
10	18,474	0.34	0.88	0.03	0.26	0.41	1.03	0.78	1.47
11	40,842	0.14	0.55	0.01	0.13	0.20	0.69	0.35	0.95
12	16,426	0.07	0.37	0.00	0.10	0.11	0.49	0.19	0.67

**Table 5: Deciduous teeth – d/dmft and dmft = 0 by age**

Age	d/dmft		dmft = 0	
	<i>n</i>	%	<i>n</i>	%
≤4	1,235	88.2	3,790	67.4
5	15,517	80.6	51,391	69.8
6	6,346	71.4	19,796	67.9
7	17,993	62.9	49,876	63.9
8	7,389	56.5	19,870	62.8
9	17,256	50.4	46,657	63.0
10	5,835	46.6	18,474	68.4
11	7,049	42.2	40,842	82.7
12	1,681	41.4	16,426	89.9

### Changes since 1998

The mean number of detectable decayed teeth showed an increase for several age groups (children aged ≤4, 5, 6, 9 and 10) in 1999 compared to 1998. Changes in mean dmft between 1998 and 1999 were similar with increases for the same age groups (except 10-year-olds). One of the largest changes occurred for 6-year-olds where between 1998 and 1999 mean decay increased from 0.56 to 0.66, reversing the change from 1997 to 1998 where mean decay declined from 0.67 to 0.56.

The d/dmft ratio remained unchanged for most age groups between 1998 and 1999, increasing only for children aged 4 years or less and those aged 10 and 11. There was also little difference in the percentages of children with dmft = 0 across age groups from 1998 to 1999.

### Permanent teeth: age-specific caries experience

Detectable decay in the permanent dentition increased fairly consistently across the age range of 5–14 years, from 0.01 to 0.38 teeth. The mean number of filled teeth, which increased at each successive age group to 0.40 at age 14, showed a similar pattern. The mean DMFT also increased quite consistently across age groups, from 0.01 for 5-year-olds to 0.80 for children aged 14 years old. The age-related increase in D, F and DMFT scores reflects the increase in permanent teeth that occurs with age as well as the progressive nature of disease accumulation measured by these indices. The mean DMFT for 12-year-olds was 0.55.

The percentage of DMFT due to decay (D/DMFT) declined across age groups, ranging from 87.6% for 5-year-olds to 49.4% for 14-year-olds (see Table 7). The percentage of caries-free children (DMFT = 0) also decreased with age, from 99.6% for 5-year-olds to 69.9% for children aged 14.

**Table 6: Permanent dentition – decayed, missing and filled teeth by age**

Age	Children <i>n</i>	Decayed (D)		Missing (M)		Filled (F)		DMFT	
		mean	SD	mean	SD	mean	SD	mean	SD
5	51,391	0.01	0.10	0.00	0.02*	0.00	0.03	0.01	0.11
6	19,796	0.03	0.25	0.00	0.01*	0.01	0.11	0.04	0.28
7	49,876	0.10	0.42	0.00	0.03	0.02	0.22	0.12	0.47
8	19,870	0.13	0.48	0.00	0.04	0.05	0.31	0.17	0.58
9	46,657	0.16	0.55	0.00	0.09	0.10	0.46	0.27	0.73
10	48,474	0.18	0.58	0.01	0.13	0.14	0.53	0.32	0.82
11	40,842	0.22	0.68	0.01	0.14	0.20	0.66	0.43	0.99
12	16,426	0.28	0.81	0.01	0.17	0.26	0.67	0.55	1.20
13	28,983	0.33	0.93	0.02	0.22	0.31	0.90	0.67	1.39
14	9,350	0.38	1.07	0.02	0.25	0.40	1.10	0.80	1.67
15	307	1.16	2.49	0.10	0.54	0.69	1.71	1.95	3.32

\* relative standard error  $\geq$  40%

**Table 7: Permanent dentition – D/DMFT and DMFT = 0 by age**

Age	D/DMFT		DMFT = 0	
	<i>n</i>	%	<i>n</i>	%
5	228	87.6	51,391	99.6
6	535	86.3	19,796	97.3
7	3,739	83.6	49,876	92.5
8	2,131	75.8	19,870	89.3
9	7,208	62.6	46,657	84.6
10	3,308	58.6	18,474	82.1
11	9,137	52.8	40,842	77.6
12	4,155	51.6	16,426	74.7
13	8,276	51.4	28,983	71.4
14	2,817	49.4	9,350	69.9
15	141	60.8	307	54.1

### Changes since 1998

There were few consistent changes between 1998 and 1999. The most noticeable change was in the percentage D/DMFT, which increased for the youngest children and for those aged between 10 and 13 inclusive.

## All teeth: age-specific caries experience

Untreated detectable decay in the combined deciduous and permanent dentitions ( $d+D \geq 1$ ) existed for between 18.5% and 30.8% of children aged up to 14 (see Table 8). The greatest likelihood of detectable untreated decay existed for 7-year-olds. However, the most extensive levels of untreated decay occurred in the younger age groups with the percentage  $d+D = 4+$  generally declining with increasing age.

More than 96% of children in each age group had no deciduous or permanent teeth missing due to caries. However, smaller percentages of children avoided fillings, with between 11.9% and 24.6% of 6- to 14-year-olds having at least one filling present. The percentage of children without fillings declined to ages 9 and 10 before increasing slightly for older age groups. There was a similar pattern in the percentage of children with no caries experience in either their deciduous or permanent dentition ( $dmft+DMFT = 0$ ), decreasing to 56.8% at age 9 before increasing to the high 60% mark among 12- to 14-year-olds.

### Changes since 1998

Changes in combined-dentition caries experience were minimal between 1998 and 1999.

**Table 8: All teeth – age-specific caries experience**

Age	Children <i>n</i>	d+D =						m+M = 0	f+F = 0	dmft+ DMFT = 0
		0	1	2	3	4	5+			
		%	%	%	%	%	%	%	%	%
≤4	3,790	69.8	9.6	6.5	4.5	3.1	6.4	98.8	95.0	67.4
5	51,391	73.3	9.9	6.6	3.4	2.6	4.2	98.5	92.4	69.7
6	19,796	72.5	11.3	6.7	3.5	2.4	3.6	98.0	88.1	66.9
7	49,876	69.2	13.0	8.0	3.9	2.5	3.4	97.2	82.6	61.0
8	19,870	69.4	13.0	8.1	4.0	2.4	3.2	96.9	78.9	58.7
9	46,657	70.8	13.6	7.4	3.6	2.2	2.4	97.4	75.4	56.8
10	18,474	74.0	12.8	6.9	3.0	1.7	1.6	97.6	75.7	59.4
11	40,842	80.1	10.9	4.9	2.1	1.1	0.8	98.7	80.0	66.5
12	16,426	81.3	10.0	4.8	2.1	0.9	0.9	98.8	81.2	68.5
13	28,983	81.5	9.7	4.7	2.0	1.1	0.9	98.7	83.1	70.0
14	9,350	81.2	9.6	4.5	2.0	1.3	1.4	98.6	81.7	69.0
15	307	64.5	14.7	7.2	2.3	2.6	8.8	93.8	75.6	53.7

## Fissure sealants: age-specific experience

The mean number of fissure sealants generally increased with increasing age, although children aged 10–12 had the highest mean number of sealants and there was a reduction in the mean number of sealants into the older age groups (see Table 9).

There is consistent evidence of preferential use of fissure sealants among children with some caries experience (DMFT  $\geq 1$ ) in comparison to those with no caries experience (DMFT = 0). Among 12 year-olds, for example, 29.6% with DMFT  $\geq 1$  had at least one fissure sealant compared to 16.0% with DMFT = 0, an increase of 85%.

### Changes since 1998

There were increases in the mean number of sealants reported for children aged 9, 11, 12 and 13 between 1998 and 1999. This follows from increases for most age groups between 1997 and 1998. However, very little change was evident in the percentages of children with at least one fissure sealant, irrespective of caries experience.

**Table 9: Fissure sealants – age-specific experience**

Age	Children <i>n</i>	Sealants mean SD		Students with sealants			
				DMFT = 0		DMFT $\geq 1$	
				<i>n</i>	%	<i>n</i>	%
6	19,796	0.03	0.30	19,261	0.9	535	5.4
7	49,876	0.16	0.73	46,137	4.9	3,739	10.6
8	19,870	0.31	0.99	17,739	9.3	2,131	17.5
9	46,657	0.56	1.28	39,449	16.3	7,208	27.2
10	18,474	0.63	1.35	15,166	18.4	3,308	28.7
11	40,842	0.62	1.36	31,705	17.2	9,137	30.8
12	16,426	0.63	1.43	12,271	16.6	4,155	29.4
13	28,983	0.57	1.51	20,707	11.8	8,276	28.9
14	9,350	0.55	1.52	6,533	11.5	2,817	26.0
15	307	0.42	1.34	166	8.4	141	20.6

### Immediate treatment needs

Immediate treatment needs were indicated when children were judged to be requiring immediate care (within a 24–48 hour period) due to the existence of pain, a dental condition likely to cause pain within the foreseeable future, the presence of a carious lesion or lesions in the permanent anterior teeth, or oral infection. Between 3.6% and 5.9% of children up to the age of 14 were deemed to be requiring immediate care (see Table 10). These children had greater caries experience than the overall sample (see Tables 4 and 6). In particular, a high percentage of these children had  $d+D \geq 4$ . Immediate treatment needs appear to be predominantly driven by deciduous caries experience in children aged up to 10 and by caries experience in the permanent dentition in older age groups.

## Changes since 1998

The percentage of children with immediate treatment needs was relatively unchanged between 1999 and 1998, and remained low in terms of overall percentage. Changes in the percentage of children needing immediate care and with  $d+D \geq 4$  showed considerable variation between 1998 and 1999, increasing for some age groups while decreasing for other age groups.

**Table 10: Immediate treatment needs: age-specific distribution**

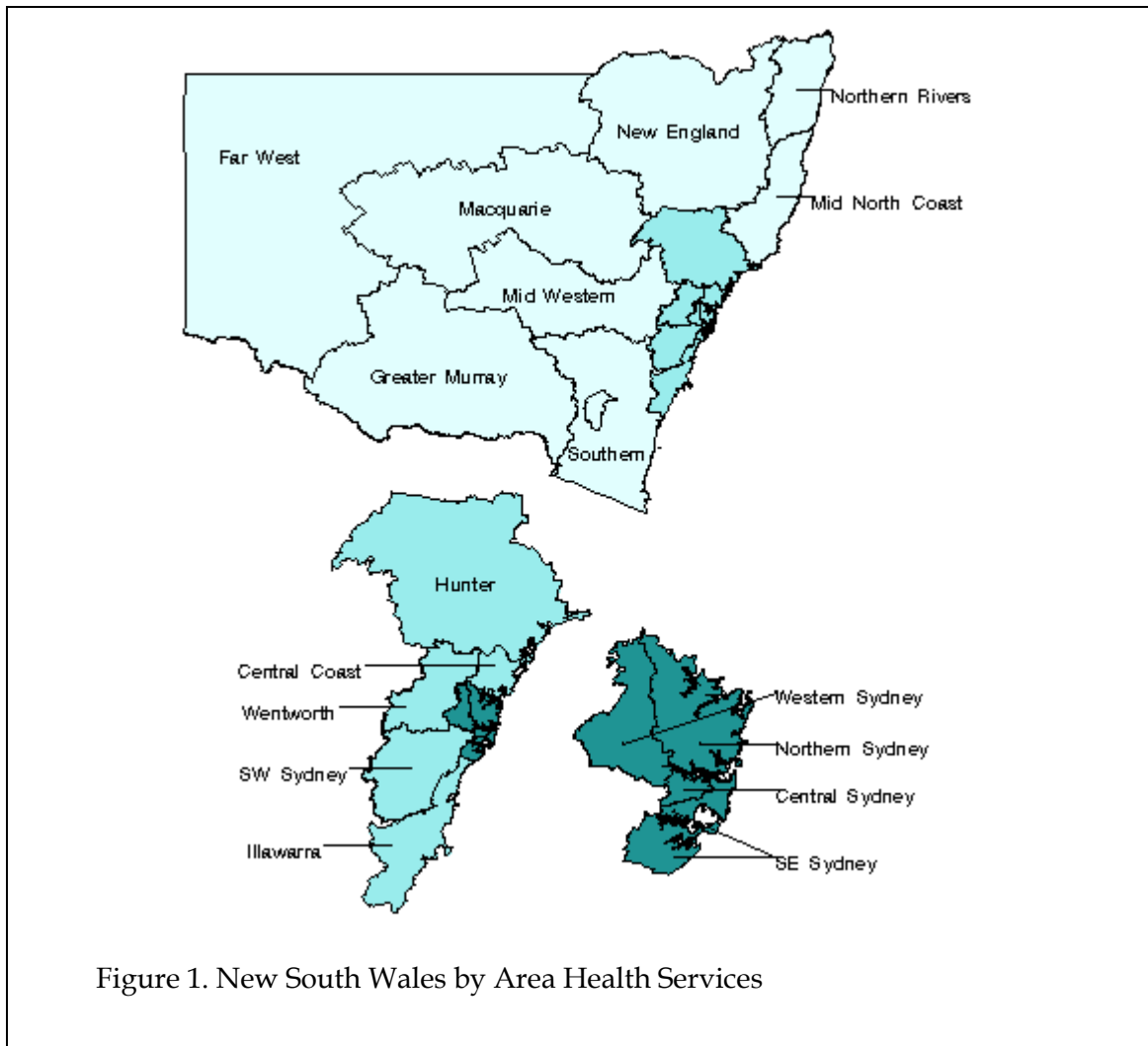
Age	Children		dmft		DMFT		d+D =				
							0	1	2	3	4+
	<i>n</i>	%	mean	SD	mean	SD	%	%	%	%	%
≤4	222	5.9	5.32	3.35	0.01*	0.13*	2.3*	9.5	10.8	12.6	64.9
5	2,421	4.7	4.91	3.30	0.05	0.31	2.5	12.7	15.6	12.7	56.5
6	870	4.4	4.56	3.30	0.27	0.71	4.1	15.3	17.0	12.6	50.9
7	2,726	5.5	3.91	2.76	0.62	1.02	3.9	17.2	19.8	16.3	42.8
8	1,041	5.2	3.70	2.53	0.77	1.13	5.0	17.2	19.7	15.0	43.1
9	2,261	4.8	3.03	2.35	1.06	1.33	4.6	23.1	20.0	16.1	36.2
10	807	4.4	2.38	2.16	1.37	1.46	5.6	26.6	22.9	14.5	30.4
11	1,500	3.7	1.10	1.62	2.04	1.85	7.7	31.0	22.3	15.8	23.1
12	653	4.0	0.54	1.17	2.69	2.28	8.1	29.2	23.7	16.1	22.8
13	1,131	3.9	0.17	0.66	3.15	2.52	7.4	28.1	22.5	16.6	25.3
14	338	3.6	0.08	0.36	4.15	3.18	5.9	20.4	18.9	18.3	36.4
15	32	10.4	0.19*	0.59*	7.38	4.48	0.0	12.5*	12.5*	3.1*	71.9

\* relative standard error  $\geq 40\%$

## Deciduous caries experience by geographical region

New South Wales is serviced by a number of Area Health Services (AHSs), shown in Figure 1. Analyses of geographical differences in children's caries experience make use of these regional divisions.

Table 11 presents deciduous caries experience data for each of the AHS regions used in this report. Considerable variation can be seen in caries experience for the selected 5–6-year-old age group across geographical areas. Among these children, mean decay scores in the deciduous dentition ranged from 0.44 in Northern Sydney to 1.22 in the Far West region. The mean number of teeth missing due to caries was highest in the Northern Rivers region, although means were generally low for all regions. The mean number of filled teeth was highest in the New England and Northern Rivers regions and lowest in the Far West and South Western Sydney. Mean dmft scores were highest in the Far West and Northern Rivers regions and lowest in Northern Sydney and South Eastern Sydney. Consistent with these findings, the highest percentage of 5–6-year-olds with no recorded caries experience was in Northern Sydney while the lowest was in the Mid North Coast and Northern Rivers regions.



### Changes since 1998

There were increases in mean decay for 12 of the 17 Area Health Service regions between 1998 and 1999, with large increases in the Far West, Greater Murray, Macquarie and Mid North Coast regions (showing increases of 43.5, 30.7, 56.4 and 80.9% respectively). Similarly, many of the non-metropolitan regions showed increases in the mean number of filled teeth and this, combined with increases in new clinically-detectable decay, resulted in large increases in mean dmft for several regions.



**Table 11: Deciduous caries experience for 5–6-year-old children by region**

	Children	Decayed (d)		Missing (m)		Filled (f)		dmft		dmft=0
	<i>n</i>	mean	SD	mean	SD	mean	SD	mean	SD	%
Far West	361	1.22	2.33	0.17	0.95	0.13	0.71	1.52	2.71	63.4
Greater Murray	3,448	0.85	1.77	0.07	0.60	0.34	1.09	1.25	2.27	62.9
Macquarie	1,609	0.86	1.64	0.04	0.40	0.29	0.97	1.19	2.03	61.5
Mid North Coast	1,140	1.14	2.10	0.08	0.55	0.29	0.93	1.51	2.46	58.4
Mid West	2,283	0.70	1.57	0.08	0.68	0.33	1.08	1.11	2.13	65.3
New England	2,329	0.70	1.59	0.09	0.67	0.37	1.13	1.16	2.20	65.9
Northern Rivers	3,273	1.01	2.02	0.12	0.79	0.36	1.13	1.49	2.63	60.6
Southern	1,998	0.71	1.56	0.06	0.65	0.32	1.03	1.09	2.05	65.7
Central Coast	3,866	0.74	1.68	0.02	0.24	0.16	0.67	0.93	1.90	69.2
Central Sydney	4,077	0.81	1.82	0.04	0.47	0.25	1.00	1.10	2.20	67.9
Hunter	6,241	0.61	1.36	0.04	0.40	0.23	0.87	0.88	1.78	68.5
Illawarra	4,460	0.58	1.34	0.03	0.36	0.16	0.67	0.77	1.64	71.6
Northern Sydney	6,518	0.44	1.21	0.01	0.14	0.16	0.76	0.61	1.54	77.9
S. Eastern Sydney	6,491	0.50	1.37	0.01	0.21	0.17	0.78	0.68	1.66	75.9
S. Western Sydney	10,412	0.78	1.70	0.05	0.53	0.13	0.63	0.96	1.98	69.0
Wentworth	4,401	0.55	1.26	0.03	0.35	0.16	0.66	0.73	1.56	72.0
Western Sydney	8,280	0.81	1.84	0.04	0.46	0.18	0.77	1.03	2.16	68.6

## Permanent caries experience by geographical region

The mean number of clinically detectable decayed permanent teeth in 11–12-year-olds (see Table 12) was highest in the Northern Rivers, Far West and Mid North Coast regions. However, contrary to trends in the deciduous dentition, mean scores were lowest in the Mid West and New England regions. The mean number of filled teeth was highest in Northern Rivers (mean = 0.32) and lowest in the Far West region. Mean DMFT scores were highest in the Northern Rivers region and again lowest in the New England and Mid West regions. Approximately 82% of 12-year-olds in the New England region had no history of caries experience in their permanent dentition, while only 69.6% of 12-year-old children in the Mid North Coast region had a DMFT score of zero.

### Changes since 1998

Increases in mean decay occurred for the majority of regions, although changes were not as large as those in the deciduous dentition and no increases occurred for the Far West, Greater Murray and Macquarie regions, where some of the largest increases in deciduous decay were demonstrated between 1998 and 1999. Changes in the mean number of filled teeth were variable between 1998 and 1999 with increases shown for some regions and decreases for others. In the Sydney metropolitan regions, little change in mean filled teeth was apparent. However, mean DMFT increased for 12 regions, decreasing only for the Greater Murray and Macquarie regions.

**Table 12: Permanent caries experience for 11–12-year-old children by region**

	Children	Decayed (D)		Missing (M)		Filled (F)		DMFT		DMFT=0
	<i>n</i>	mean	SD	mean	SD	mean	SD	mean	SD	%
Far West	298	0.33	0.86	0.02	0.20	0.11	0.46	0.46	1.02	78.2
Greater Murray	2,765	0.17	0.59	0.01	0.12	0.23	0.68	0.41	0.96	78.1
Macquarie	1,311	0.22	0.63	0.01	0.17	0.20	0.59	0.44	0.92	75.2
Mid North Coast	1,074	0.34	0.87	0.03	0.26	0.27	0.73	0.64	1.22	69.6
Mid West	2,038	0.15	0.54	0.00	0.10	0.20	0.62	0.36	0.88	79.9
New England	1,886	0.13	0.50	0.01	0.14	0.21	0.66	0.35	0.88	82.1
Northern Rivers	2,781	0.31	0.90	0.02	0.25	0.32	0.86	0.65	1.33	72.7
Southern	1,652	0.19	0.63	0.01	0.15	0.19	0.63	0.40	0.98	80.0
Central Coast	2,996	0.29	0.76	0.01	0.13	0.19	0.62	0.49	1.03	75.2
Central Sydney	2,958	0.26	0.76	0.01	0.10	0.25	0.78	0.52	1.14	75.0
Hunter	5,288	0.21	0.59	0.01	0.13	0.21	0.64	0.44	0.91	75.1
Illawarra	3,444	0.29	0.83	0.01	0.12	0.29	0.80	0.59	1.18	72.5
Northern Sydney	4,620	0.20	0.67	0.01	0.11	0.22	0.72	0.43	1.06	79.5
S. Eastern Sydney	5,150	0.23	0.76	0.01	0.10	0.20	0.67	0.43	1.06	79.9
S. Western Sydney	9,160	0.22	0.69	0.02	0.17	0.20	0.66	0.44	1.01	77.9
Wentworth	3,470	0.24	0.66	0.01	0.12	0.21	0.64	0.45	0.98	76.2
Western Sydney	6,377	0.29	0.85	0.01	0.16	0.20	0.69	0.50	1.15	75.6

## Appendix A

The following tables present results with adjustments for the estimated under-reporting of decay in New South Wales (see pp 1–2). For calculations of deciduous decay, a weight of 1.56 was applied while for calculations of permanent decay a weight of 1.68 was applied.

**Table A1: Deciduous dentition adjusted caries experience**

Age (years)	Children	Decayed (d)		dmft		d/dmft
	<i>n</i>	mean	SD	mean	SD	%
≤4	3,790	1.47	3.10	1.62	3.25	89.1
5	51,391	1.12	2.57	1.34	2.82	82.0
6	19,796	1.02	2.35	1.36	2.72	73.4
7	49,876	0.98	2.11	1.44	2.56	65.3
8	19,870	0.90	1.93	1.43	2.45	59.2
9	46,657	0.73	1.67	1.25	2.15	52.9
10	18,474	0.53	1.37	0.97	1.84	48.9
11	40,842	0.22	0.85	0.43	1.18	44.0
12	16,426	0.11	0.58	0.23	0.82	42.8

**Table A2: Permanent dentition adjusted caries experience**

Age (years)	Children	Decayed (D)		DMFT		D/DMFT
	<i>n</i>	mean	SD	mean	SD	%
5	51,391	0.01	0.17	0.01	0.17	87.6
6	19,796	0.06	0.42	0.06	0.44	86.7
7	49,876	0.16	0.70	0.18	0.74	84.0
8	19,870	0.21	0.80	0.26	0.87	76.5
9	46,657	0.27	0.93	0.38	1.05	63.6
10	18,474	0.30	0.97	0.44	1.14	59.9
11	40,842	0.37	1.14	0.58	1.37	54.3
12	16,426	0.46	1.35	0.74	1.65	53.6
13	28,983	0.56	1.56	0.89	1.90	53.5
14	9,350	0.63	1.80	1.06	2.26	51.8
15+	307	1.95	4.19	2.74	4.79	64.2