





The Child Dental Health Survey, Australian Capital Territory 2002

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Dental Statistics & Research Unit AUSTRALIAN RESEARCH CENTRE FOR POPULATION ORAL HEALTH

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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

SD standard deviation

Purpose of this report

This report is part of the annual series providing descriptive statistics concerning child dental health in the Australian Capital Territory (ACT). The report contains tables and figures. Information listed in the tables and figures includes: the age and sex of children in the sample, their deciduous and permanent caries experience, frequency of fissure sealants and their history of School Dental Service examinations.

The report also provides 5-year trends, highlighting differences across the period 1998 to 2002. However, no formal hypothesis tests have been undertaken and differences across years are intended as merely a guide to the reader.

Sampling and data analysis

Data were collected during the 2002 calendar year from patients of the ACT School Dental Service (SDS) by dental therapists and dentists. A random sampling procedure was used to select approximately one in two (1:2.5) patients. This was achieved by selecting those children whose birthday was between the 1st and 12th (inclusive) of any month. Provision was made for inclusion and numerical weighting of data from children whose date of birth was unknown. A total of 7 children with birth dates outside of the desired sampling frame were also sampled. These children were included in the analyses with appropriate adjustments being made to statistical weights. Records from children with a known date of birth were weighted up, while records from children for whom age only was known or who were not sampled according to the desired sampling frame were weighted down. The sum of the weighted records is equivalent to the number of children sampled for the survey. The number of cases has been rounded to the nearest integer.

Data were weighted by location of the child (see Figure 1) and time since last dental examination. Figure 2 shows the percentage of children sampled from ACT regions in comparison to the 5–14-year-ol d child population in each area as determined by the Australian Bureau of Statistics. The purpose of the weighting protocol was to produce estimates that are representative of those of the population covered by the ACT SDS for 2002. However, the estimates in this report cannot be applied to children who are not enrolled in the ACT SDS. Consequently, the results in this report do not represent the complete ACT child population, but only that portion of the population that is enrolled in the ACT SDS. In the ACT, approximately 26% of primary school children were enrolled in the School SDS in 2003 so estimates in this report may differ from estimates that would be obtained if all children in the State were surveyed.

All 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 has been excluded. However, analyses of children's history of School Dental Service examinations (Tables 10 and 11) use information from all examinations. 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 and should be interpreted with due care.

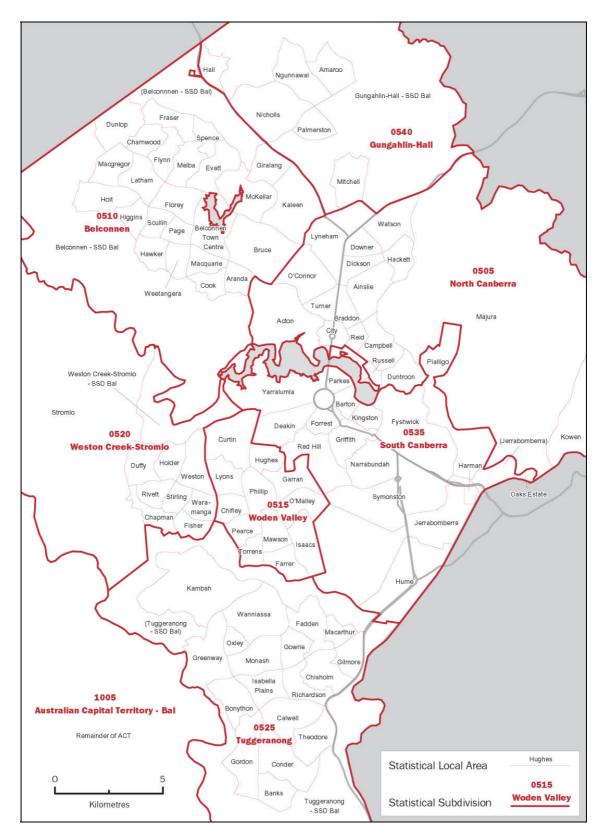


Figure 1. Statistical Subdivisions of the Australian Capital Territory

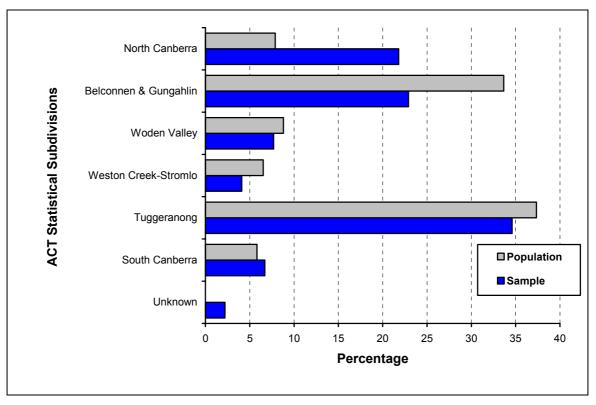


Figure 2: Percentage of children in sample and Australian Capital Territory population by Statistical Subdivision

Demographic composition of the sample

The great majority of children in the sample (89.5%) were aged between 5 and 12 years inclusive (see Table 1). Twelve-year-olds were approximately two-thirds as likely as those aged between 6 and 11 years to be in the sample, while children aged 4 years or less and those aged 13 years or older were represented in smaller numbers. Males and females were sampled in approximately equal numbers without major variations in proportions across age groups.

The distribution of the sample is closely related to the main target groups of children served by the School Dental Service in the ACT and emphasises that the sample is representative of primary school aged children served by the School Dental Service, rather than all children in the ACT. The small numbers of children aged either younger than 5 years or 13 years and older are likely to be less representative of ACT children in general, and their small numbers contribute to imprecision in some age-specific statistics contained in the remaining tables. As a result of the small number of children aged less than 5, these age groups are not reported on in the following analyses. Children aged 15–17 were combined for subsequent analyses, however it should be noted that 97% of these children are aged 15 or 16.

Table 1: Demographic composition of the sample

| _ | Children in | n sample (unweig | hted) | Children | in sample (weigh | ted) |
|-------|-------------|------------------|---------|----------|------------------|---------|
| Age | Males | Females | Persons | Males | Females | Persons |
| | n | n | n | n | n | n |
| 3 | 0 | 2 | 2 | 0 | 2 | 2 |
| 4 | 7 | 6 | 13 | 6 | 5 | 11 |
| 5 | 63 | 67 | 130 | 59 | 64 | 123 |
| 6 | 93 | 114 | 207 | 94 | 112 | 206 |
| 7 | 145 | 120 | 265 | 139 | 122 | 261 |
| 8 | 120 | 108 | 228 | 113 | 118 | 231 |
| 9 | 112 | 132 | 244 | 110 | 129 | 239 |
| 10 | 122 | 103 | 225 | 124 | 112 | 236 |
| 11 | 96 | 111 | 207 | 99 | 105 | 204 |
| 12 | 80 | 71 | 151 | 78 | 74 | 152 |
| 13 | 34 | 35 | 69 | 35 | 38 | 72 |
| 14 | 18 | 28 | 46 | 15 | 28 | 43 |
| 15 | 16 | 21 | 37 | 18 | 20 | 38 |
| 16 | 13 | 9 | 22 | 18 | 9 | 27 |
| 17 | 0 | 2 | 2 | 0 | 2 | 2 |
| Total | 919 | 929 | 1848 | 908 | 941 | 1849 |

Deciduous teeth

The mean number of clinically detectable decayed (d) teeth among children aged 5 to 12 years ranged from 0.97 for 5-year-olds to 0.39 for 10-year-old children (Table 2). The reduction in the decay score with age can be explained by the exfoliation of deciduous teeth (as seen by the decrease in the mean number of deciduous teeth, shown in Table 2) and does not necessarily reflect a reduction in the percentage of teeth with decay with increasing age. Across all age groups almost no children presented with teeth missing due to caries. The mean number of teeth with fillings peaked at 1.38 for 9-year-olds before declining. The mean dmft showed a bipolar distribution, peaking for children aged 7 and 9, before declining.

The ratio of untreated decayed teeth to the total count of decayed, missing, and filled teeth serves as an indicator of how well a child's dental needs are being met. This is presented in Table 3 as the mean of individual children's d/dmft index. The percentage of caries experience due to decay (mean d/dmft index) showed an age-associated decline, reducing from 60.6% for 5-year-olds to 31.9% for 9-year-olds, before increasing to 56.2% for 12-year-olds. By comparison, the percentage of children with no recorded decay experience in the deciduous dentition (% dmft = 0) reduced from 55.5% among 5-year-olds to 38.6% among 9-year-olds before increasing to 60.4% for 12-year-olds.

The surface-level caries experience (see Table 4) shows approximately 60–83% higher caries experience (dmf) for 5–10-year-olds than when using tooth-level statistics. There were approximately 55–87% more clinically decayed surfaces across this age range than there were teeth with clinically detectable decay. General trends are similar to those indicated previously for analyses at the tooth level.

The ratio of untreated decayed teeth to the total count of decayed, missing, and filled teeth can also be expressed as the ratio of total decay in the population to total decayed, missing or filled teeth in the population (d/dmft ratio), and this is presented in Figure 3. Unlike the mean d/dmft index, the d/dmft ratio refers to the proportion of teeth with caries in the population. Thus, the ratio for 6-year-olds indicates that, among 100 teeth with caries experience among 6-year-olds, 49.0% had untreated decay. The d/dmft ratio shows a similar pattern to that of the mean dmft index, with the percentage d/dmft reducing across increasingly older age groups, declining from 58.0% for the 5-year-old children to 27.0% among 9-year-olds, before increasing for the older children. The percentage of dmft accounted for by filled teeth shows the opposite trend, increasing from 42.0% for children aged 5 years old to 73.0% for 9-year-olds.

Table 2: Deciduous dentition – decayed, missing and filled teeth by age

| Age | Children | Teeth | Decayed (d) | | Missing (m) | | Filled (f) | | dmft | |
|-----|----------|-------|-------------|------|-------------|-------|------------|------|------|------|
| | n | mean | mean | SD | mean | SD | mean | SD | mean | SD |
| 5 | 123 | 19.6 | 0.97 | 1.88 | _ | _ | 0.71 | 1.59 | 1.68 | 2.78 |
| 6 | 207 | 17.2 | 0.94 | 1.66 | _ | _ | 0.98 | 1.93 | 1.91 | 2.58 |
| 7 | 259 | 14.3 | 0.75 | 1.39 | 0.00 | 0.07* | 1.24 | 2.01 | 2.00 | 2.54 |
| 8 | 231 | 12.4 | 0.52 | 1.17 | _ | _ | 1.02 | 1.85 | 1.54 | 2.30 |
| 9 | 238 | 10.9 | 0.51 | 0.82 | _ | _ | 1.38 | 1.82 | 1.88 | 2.14 |
| 10 | 220 | 8.4 | 0.39 | 0.74 | _ | _ | 0.89 | 1.54 | 1.28 | 1.79 |
| 11 | 151 | 6.7 | 0.49 | 1.00 | _ | _ | 0.91 | 1.59 | 1.40 | 1.94 |
| 12 | 80 | 4.7 | 0.52 | 1.14 | _ | _ | 0.31 | 0.78 | 0.83 | 1.47 |

^{*} relative standard error ≥ 40%

Table 3: Deciduous teeth – caries experience indices by age

| Age | Teeth mean | Mean d/dr | mft index | dmft = 0 | | |
|-----|---------------|-----------|-----------|----------|------|--|
| | | n | % | n | % | |
| 5 | 19.6 | 55 | 60.6 | 123 | 55.5 | |
| 6 | 17.2 | 108 | 55.7 | 207 | 47.8 | |
| 7 | 14.3 | 145 | 42.8 | 259 | 43.9 | |
| 8 | 12.4 | 102 | 38.8 | 231 | 55.7 | |
| 9 | 10.9 | 146 | 31.9 | 238 | 38.6 | |
| 10 | 8.4 | 111 | 33.1 | 220 | 49.5 | |
| 11 | 6.7 | 77 | 34.2 | 151 | 49.2 | |
| 12 | 4.7 | 31 | 56.2 | 80 | 60.4 | |

^{*} relative standard error ≥ 40%

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

| Age | Children | Surfaces | Decayed (d) | | Missing (m) | | Filled (f) | | dmfs | |
|-----|----------|----------|-------------|------|-------------|-------|------------|------|------|------|
| | n | mean | mean | SD | mean | SD | mean | SD | mean | SD |
| 5 | 123 | 89.4 | 1.63 | 3.52 | _ | _ | 1.06 | 2.67 | 2.69 | 5.09 |
| 6 | 207 | 78.2 | 1.57 | 3.27 | _ | _ | 1.61 | 3.29 | 3.17 | 4.78 |
| 7 | 259 | 65.1 | 1.35 | 2.80 | 0.02* | 0.33* | 2.03 | 3.52 | 3.40 | 4.71 |
| 8 | 231 | 57.7 | 0.97 | 3.05 | _ | _ | 1.84 | 3.49 | 2.81 | 4.76 |
| 9 | 238 | 51.0 | 0.79 | 1.47 | _ | _ | 2.40 | 3.56 | 3.18 | 4.14 |
| 10 | 220 | 39.6 | 0.73 | 1.49 | _ | _ | 1.54 | 2.75 | 2.27 | 3.23 |
| 11 | 151 | 31.8 | 0.81 | 1.72 | _ | _ | 1.60 | 2.88 | 2.42 | 3.49 |
| 12 | 80 | 22.2 | 1.02 | 2.52 | - | _ | 0.59 | 1.49 | 1.61 | 3.12 |

^{*} relative standard error ≥ 40%

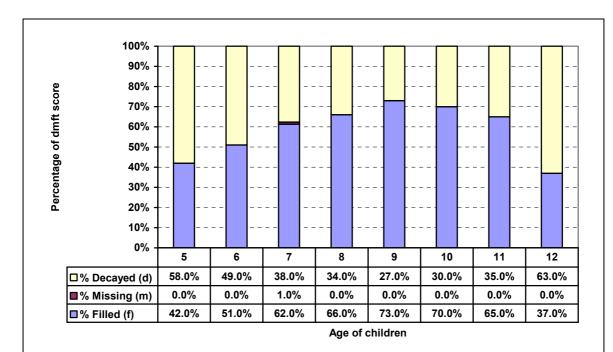


Figure 3: Percentage of dmft score represented by decayed, missing and filled components

Permanent teeth

Clinically detectable decay in the permanent dentition increased from a mean of 0.09 for 6-year-olds to a mean of 0.83 for children aged 15 years and over (Table 5). The mean DMFT also increased across age groups, from 0.11 for 6-year-olds to 2.50 for children aged 15 years and over. To some extent, the age-related increases in both decay and the DMFT index reflect the increase in numbers of permanent teeth with age, from 3.3 for 5-year-olds to over 27 on average for the oldest children. The mean DMFT for 12-year-olds was 1.27.

The percentage of DMFT due to decay (mean D/DMFT index) and the percentage of children with no clinically detectable decay (DMFT = 0) generally declined across age groups, although a low-point can be seen for D/DMFT for children aged 10, after which D/DMFT begins to increase (Table 6).

The D/DMFT ratio, which refers to the proportion of teeth with caries experience having untreated decay, showed a similar trend to the mean D/DMFT index, declining from 82.0% for 6-year-olds to 32.0% for children aged 11 years old before increasing again for the older age groups (Figure 4).

Table 5: Permanent dentition – decayed, missing and filled teeth by age

| Age | Children | Teeth | Decay | ed (D) | Missir | ng (M) | Fille | d (F) | DN | IFT |
|-----|----------|-------|-------|--------|--------|--------|-------|-------|-------|-------|
| | n | mean | mean | SD | mean | SD | mean | SD | mean | SD |
| 5 | 37 | 3.3 | _ | _ | _ | _ | 0.06* | 0.24* | 0.06* | 0.24* |
| 6 | 178 | 5.9 | 0.09 | 0.34 | _ | _ | 0.02* | 0.13* | 0.11 | 0.39 |
| 7 | 257 | 9.0 | 0.14 | 0.41 | _ | _ | 80.0 | 0.33 | 0.22 | 0.57 |
| 8 | 231 | 11.2 | 0.23 | 0.63 | _ | _ | 0.15 | 0.54 | 0.38 | 0.82 |
| 9 | 239 | 12.9 | 0.23 | 0.56 | 0.00 | 0.06* | 0.34 | 0.78 | 0.57 | 0.99 |
| 10 | 236 | 16.3 | 0.24 | 0.66 | 0.06 | 0.37 | 0.37 | 0.75 | 0.67 | 1.03 |
| 11 | 204 | 19.9 | 0.30 | 0.68 | 0.02* | 0.18* | 0.61 | 1.10 | 0.93 | 1.38 |
| 12 | 152 | 24.0 | 0.62 | 1.83 | 0.02* | 0.29* | 0.63 | 1.74 | 1.27 | 2.59 |
| 13 | 72 | 26.0 | 0.57 | 1.21 | 0.01* | 0.10* | 0.54 | 1.06 | 1.11 | 1.64 |
| 14 | 43 | 27.2 | 0.68 | 1.18 | 0.04* | 0.36* | 1.01 | 1.19 | 1.73 | 1.64 |
| ≥15 | 67 | 27.8 | 0.83 | 1.11 | 0.11* | 0.56* | 1.57 | 2.39 | 2.50 | 2.67 |

^{*} relative standard error $\geq 40\%$

Table 6: Permanent dentition – caries experience indices by age

| Age | Teeth | Mean D/D | MFT index | DMF | Γ = 0 |
|-----|-------|----------|-----------|-----|-------|
| | mean | n | % | n | % |
| 5 | 3.3 | 2 | 0.0 | 37 | 94.1 |
| 6 | 5.9 | 15 | 84.6 | 178 | 91.5 |
| 7 | 9.0 | 40 | 66.1 | 257 | 84.4 |
| 8 | 11.2 | 48 | 64.3 | 231 | 79.2 |
| 9 | 12.9 | 81 | 43.5 | 239 | 66.1 |
| 10 | 16.3 | 89 | 33.2 | 236 | 62.4 |
| 11 | 19.9 | 96 | 37.3 | 204 | 53.1 |
| 12 | 24.0 | 75 | 48.7 | 152 | 51.1 |
| 13 | 26.0 | 32 | 45.1 | 72 | 56.2 |
| 14 | 27.2 | 32 | 35.0 | 43 | 26.8 |
| ≥15 | 27.8 | 47 | 45.5 | 67 | 29.5 |

^{*} relative standard error $\geq 40\%$

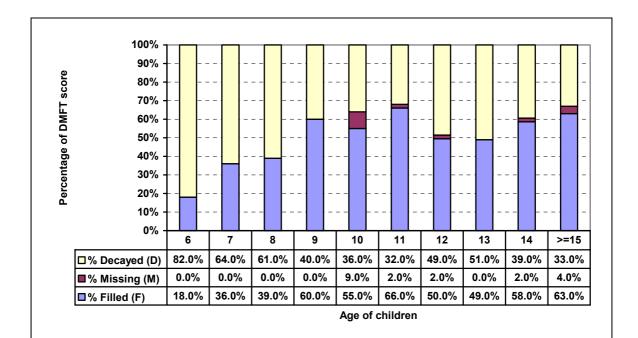


Figure 4: Percentage of DMFT score represented by decayed, missing and filled components

The surface-level decay experience in the permanent dentition was higher than the respective mean number of decayed teeth, ranging from 7.0% among 13-year-olds to 63.2% among 14-year-olds (see Table 7). Mean 12-year-old DMFS was 1.79.

Table 7: Permanent dentition - decayed, missing and filled surfaces by age

| Age | Children | Surfaces | Decayed (D) | | Missing (M) | | Filled (F) | | DMFS | |
|-----|----------|----------|-------------|------|-------------|-------|------------|-------|-------|-------|
| | n | mean | mean | SD | mean | SD | mean | SD | mean | SD |
| 5 | 37 | 15.4 | _ | _ | _ | _ | 0.06* | 0.24* | 0.06* | 0.24* |
| 6 | 178 | 26.5 | 0.11 | 0.42 | _ | _ | 0.02* | 0.13* | 0.13 | 0.46 |
| 7 | 257 | 39.8 | 0.16 | 0.54 | _ | _ | 0.10 | 0.41 | 0.26 | 0.72 |
| 8 | 231 | 48.7 | 0.30 | 0.93 | _ | _ | 0.19 | 0.76 | 0.49 | 1.19 |
| 9 | 239 | 56.1 | 0.28 | 0.73 | 0.02* | 0.28* | 0.49 | 1.32 | 0.79 | 1.64 |
| 10 | 236 | 71.7 | 0.27 | 0.82 | 0.28 | 1.69 | 0.46 | 1.02 | 1.01 | 2.08 |
| 11 | 204 | 89.1 | 0.34 | 0.76 | 0.08* | 0.90* | 0.80 | 1.61 | 1.22 | 2.20 |
| 12 | 152 | 108.6 | 0.84 | 2.91 | 0.11* | 1.43* | 0.84 | 2.63 | 1.79 | 4.28 |
| 13 | 72 | 118.5 | 0.61 | 1.34 | 0.04* | 0.41* | 0.70 | 1.44 | 1.36 | 1.98 |
| 14 | 43 | 124.1 | 1.11 | 2.42 | 0.19* | 1.82* | 1.52 | 1.75 | 2.82 | 3.42 |
| ≥15 | 67 | 126.4 | 1.23 | 1.85 | 0.51* | 2.75* | 2.51 | 3.76 | 4.26 | 4.99 |

^{*} relative standard error ≥ 40%

All teeth

The prevalence of untreated caries in the combined deciduous and permanent dentitions ($d+D \ge 1$) ranged between 24.6% and 51.2% of children in the age range 5 to 15+ years (Table 8). The greatest likelihood of detectable untreated decay was seen for children aged 15 years and older. However, the most extensive levels of untreated decay (d+D = 4 or more) generally occurred in the younger age groups with the percentage $d+D \ge 4$ being lowest for children aged 9–11-years-old.

More than 96% of children in the age range of 5–14 had no deciduous or permanent teeth missing due to caries, with little variation across age categories. However, smaller percentages avoided fillings. The percentage of children without fillings declined to age 9 (42.3%), before increasing again. There was a similar pattern in the percentage of children with no caries experience in either deciduous or permanent dentition (dmft+DMFT = 0), declining from 55.5% at age 5 to 28.0% at age 9, and then increasing to 53.1% at age 13.

Table 8: All teeth – age-specific caries experience

| | _ | | | d + | D = | | | | | dmft+ |
|-----|----------|------|------|------|------|------|------|---------|---------|----------|
| Age | Children | 0 | 1 | 2 | 3 | 4 | 5+ | m+M = 0 | f+F = 0 | DMFT = 0 |
| | n | % | % | % | % | % | % | % | % | % |
| 5 | 123 | 66.2 | 14.2 | 6.4 | 0.8* | 5.4 | 7.1 | 100.0 | 76.6 | 55.5 |
| 6 | 207 | 59.2 | 16.2 | 8.6 | 7.1 | 3.9 | 4.9 | 100.0 | 68.9 | 46.7 |
| 7 | 261 | 59.1 | 18.5 | 12.1 | 4.3 | 3.3 | 2.8 | 99.6 | 58.1 | 39.9 |
| 8 | 231 | 66.9 | 15.5 | 7.5 | 4.0 | 3.1 | 3.0 | 100.0 | 62.4 | 46.5 |
| 9 | 239 | 59.8 | 18.0 | 12.3 | 9.4 | 0.1* | 0.4* | 99.7 | 42.3 | 28.0 |
| 10 | 236 | 65.2 | 18.6 | 11.2 | 2.0 | 2.7 | 0.3* | 96.2 | 50.4 | 36.9 |
| 11 | 204 | 65.1 | 18.2 | 7.3 | 5.8 | 2.8 | 0.7* | 99.2 | 51.2 | 37.1 |
| 12 | 152 | 60.3 | 21.6 | 9.1 | 4.0 | 0.0 | 5.0 | 99.3 | 65.2 | 40.7 |
| 13 | 72 | 75.4 | 8.7 | 6.3 | 2.7* | 5.8 | 1.1* | 98.9 | 65.5 | 53.1 |
| 14 | 43 | 65.5 | 18.5 | 3.8* | 6.8* | 5.5* | 0.0 | 98.6 | 36.3 | 25.1 |
| ≥15 | 67 | 48.8 | 35.2 | 7.1 | 2.3* | 6.6 | 0.0 | 94.8 | 49.3 | 29.5 |

^{*} relative standard error ≥ 40%

Fissure sealants

The mean number of fissure sealants generally increased across older age groups (Table 9). At age 12, children had just over 1 fissure sealant, on average, per child. There is evidence of preferential use of fissure sealants among those with caries experience: the prevalence of fissure sealants among children with some caries experience (DMFT = 1+) was generally greater than among those with no caries experience (DMFT = 0). This difference was most pronounced among children aged 13 years and over.

Table 9: Fissure sealants - age-specific experience

| | | | | Students with sealants | | | | | | |
|-----|----------|------|----------|------------------------|-------|----------|------|--|--|--|
| Age | Children | Sea | Sealants | | T = 0 | DMFT ≥ 1 | | | | |
| | n | mean | SD | n | % | n | % | | | |
| 6 | 207 | 0.16 | 0.70 | 192 | 6.0 | 15 | 7.4 | | | |
| 7 | 261 | 0.49 | 1.19 | 221 | 13.9 | 40 | 32.5 | | | |
| 8 | 231 | 0.81 | 1.50 | 183 | 26.7 | 48 | 16.8 | | | |
| 9 | 239 | 1.13 | 1.62 | 158 | 32.2 | 81 | 48.8 | | | |
| 10 | 236 | 0.94 | 1.54 | 147 | 36.5 | 89 | 21.8 | | | |
| 11 | 204 | 0.91 | 1.54 | 108 | 34.2 | 96 | 32.2 | | | |
| 12 | 152 | 1.05 | 1.69 | 78 | 33.0 | 75 | 42.4 | | | |
| 13 | 72 | 1.05 | 1.79 | 41 | 23.0 | 32 | 49.6 | | | |
| 14 | 43 | 1.60 | 1.91 | 12 | 18.5 | 32 | 58.1 | | | |
| ≥15 | 67 | 1.71 | 2.10 | 20 | 28.8 | 47 | 53.6 | | | |

School Dental Service examinations

Table 10 describes the percentage of examinations in 2002 recorded as the first examination for a child in the ACT School Dental Service. As expected, the figure is highest for the youngest ages (6 years or less) with few children aged 7 years or more having had no previous examination. This pattern is expected and indicates that most patients are enrolled during their early school years.

Table 11 includes only children with previous examinations and indicates their distribution according to time since last dental examination. The majority of examinations for all children occurred within 12 months of their previous examination. Between 20% and 30% of examinations occurred 13 to 18 months previously. Approximately 5–20% of examinations occurred more than 2 years since the previous examination across all age groups, however for children up to the age of 12 years no more than 10% had had their last examination more than 2 years previously.

Time since last examination was least for the youngest ages and highest among the older children. This can be seen from the mean time since last visit, which increased from 12.2 months for 5-year-olds to 15.0 months for 10-year-olds to 17.7 months for the oldest children in the sample.

Table 10: School Dental Service examinations – age-specific distribution

| | | Previous examination in School Dental Service | | | | | | | |
|-----|--------------|---|------|---------|--|--|--|--|--|
| Age | Examinations | No | Yes | Unknown | | | | | |
| | n | % | % | % | | | | | |
| 5 | 130 | 25.1 | 58.1 | 16.8 | | | | | |
| 6 | 224 | 13.3 | 75.1 | 11.7 | | | | | |
| 7 | 268 | 12.2 | 79.7 | 8.2 | | | | | |
| 8 | 241 | 5.4 | 83.0 | 11.6 | | | | | |
| 9 | 241 | 2.2 | 91.7 | 6.1 | | | | | |
| 10 | 226 | 2.4 | 86.3 | 11.3 | | | | | |
| 11 | 205 | 2.6 | 89.5 | 7.8 | | | | | |
| 12 | 148 | 3.7 | 85.5 | 10.8 | | | | | |
| 13 | 62 | 2.3* | 91.8 | 5.9 | | | | | |
| 14 | 42 | 0.0 | 87.1 | 12.9 | | | | | |
| 15 | 57 | 5.1* | 90.6 | 4.3* | | | | | |

^{*} relative standard error $\geq 40\%$

Table 11: School Dental Service examinations - time since last visit

| Age | | Months since last visit | | | | | | | | | |
|-----|----------|-------------------------|------|-------|-------|------|-------|-------|--|--|--|
| | Children | 0–6 | 7–12 | 13–18 | 19–24 | 25+ | mean | SD | | | |
| | n | % | % | % | % | % | | | | | |
| 5 | 130 | 19.5 | 31.1 | 31.1 | 14.8 | 3.5* | 12.20 | 6.92 | | | |
| 6 | 224 | 12.3 | 49.8 | 24.4 | 7.9 | 5.6 | 12.26 | 6.15 | | | |
| 7 | 268 | 12.9 | 42.1 | 25.7 | 10.7 | 8.5 | 13.54 | 7.63 | | | |
| 8 | 241 | 11.3 | 50.3 | 23.2 | 7.8 | 7.4 | 13.02 | 7.78 | | | |
| 9 | 241 | 12.0 | 47.7 | 19.7 | 9.2 | 11.4 | 13.86 | 9.43 | | | |
| 10 | 226 | 8.2 | 46.6 | 21.8 | 9.3 | 14.1 | 15.01 | 10.08 | | | |
| 11 | 205 | 8.2 | 44.2 | 29.0 | 10.3 | 8.4 | 14.35 | 8.36 | | | |
| 12 | 148 | 6.7 | 51.1 | 20.3 | 9.0 | 12.9 | 14.94 | 10.27 | | | |
| 13 | 62 | 9.1 | 34.6 | 24.5 | 12.1 | 19.7 | 17.73 | 11.84 | | | |
| 14 | 42 | 8.6* | 38.9 | 30.6 | 4.9* | 17.1 | 15.32 | 8.56 | | | |
| ≥15 | 57 | 11.1 | 26.8 | 30.5 | 12.2 | 19.3 | 17.68 | 12.22 | | | |

^{*} relative standard error ≥ 40%

Caries experience by geographical location

Tables 12 and 13 present caries experience data for each of the Statistical Subdivisions used in this report (as well as for Jervis Bay Territory, serviced by the ACT SDS, but not included in the ACT statistics). Despite the homogeneity and small population of Canberra in comparison to some of the other Australian capital cities, variation can be seen in caries experience for both selected age groups across geographical areas. Among 5- and 6-year-old children, the mean number of decayed teeth in the deciduous dentition ranged from 0.21 in Woden Valley to 1.26 in South Canberra (Table 12). The mean number of filled teeth was lowest in Weston Creek-Stromlo (0.47) and highest in South Canberra (1.52). Mean dmft scores were also highest in South Canberra (3.25) and Belconnen/Gungahlin (55.6%) and lowest in Weston Creek-Stromlo (1.31). The percentage of children with dmft = 0 was highest in South Canberra (56.5%) and lowest in Woden Valley (21.1%).

Among 11–12-year-old children (Table 13), South Canberra had the lowest mean number of decayed teeth (0.08) while children in Belconnen/Gungahlin had the highest mean number of decayed teeth (0.57). For filled teeth, the highest mean number was again in Belconnen/Gungahlin (mean = 1.07) with the lowest mean number in Woden Valley (0.23). Belconnen/Gungahlin also had the highest mean DMFT (1.64) while the lowest mean DMFT among 11–12-year-olds was in South Canberra (mean = 0.50). Tuggeranong, North Canberra and Belconnen/Gungahlin had the highest percentage of children with DMFT = 0 (52.0%, 51.2%) and (50.0%) respectively).

Table 12: Deciduous caries experience for 5-6-year-old children by region

| | Child. | Decayed (d) | | Missing (m) | | Filled (f) | | dmft | | dmft = 0 | |
|----------------------|--------|-------------|------|-------------|------|------------|------|------|------|----------|--|
| | n | mean | SD | mean | SD | mean | SD | mean | SD | % | |
| North Canberra | 55 | 0.96 | 1.88 | 0.00 | 0.00 | 1.18 | 2.34 | 2.15 | 3.01 | 49.1 | |
| Belconnen/Gungahlin | 81 | 1.12 | 1.93 | 0.00 | 0.00 | 1.09 | 2.01 | 2.21 | 2.89 | 55.6 | |
| Woden Valley | 19 | 0.21 | 0.54 | 0.00 | 0.00 | 0.63 | 1.80 | 0.84 | 2.06 | 21.1 | |
| West. Creek-Stromlo | 15 | 0.53 | 0.99 | 0.00 | 0.00 | 0.47 | 0.83 | 1.00 | 1.31 | 46.7 | |
| Tuggeranong | 131 | 0.96 | 1.63 | 0.00 | 0.00 | 0.90 | 0.89 | 1.86 | 2.67 | 51.9 | |
| South Canberra | 23 | 1.26 | 1.81 | 0.00 | 0.00 | 1.52 | 1.90 | 2.78 | 3.25 | 56.5 | |
| Jervis Bay Territory | 8 | 1.75 | 1.98 | 0.00 | 0.00 | 1.25 | 1.83 | 3.00 | 3.25 | 87.5 | |

Table 13: Permanent caries experience for 11–12-year-old children by region

| | Child. | Decayed (D) | | Missing (M) | | Filled (F) | | DMFT | | DMFT = 0 |
|----------------------|--------|-------------|------|-------------|------|------------|------|------|------|----------|
| | n | mean | SD | mean | SD | mean | SD | mean | SD | % |
| North Canberra | 82 | 0.40 | 0.78 | 0.04 | 0.25 | 0.61 | 1.04 | 1.05 | 1.30 | 51.2 |
| Belconnen/Gungahlin | 74 | 0.57 | 2.07 | 0.00 | 0.00 | 1.07 | 2.41 | 1.64 | 3.30 | 50.0 |
| Woden Valley | 30 | 0.27 | 0.78 | 0.07 | 0.37 | 0.23 | 0.73 | 0.57 | 1.22 | 23.3 |
| West. Creek-Stromlo | 14 | 0.14 | 0.36 | 0.00 | 0.00 | 0.43 | 0.76 | 0.57 | 0.85 | 35.7 |
| Tuggeranong | 125 | 0.34 | 0.79 | 0.03 | 0.36 | 0.61 | 0.93 | 0.98 | 1.22 | 52.0 |
| South Canberra | 24 | 0.08 | 0.28 | 0.00 | 0.00 | 0.42 | 0.72 | 0.50 | 0.88 | 29.2 |
| Jervis Bay Territory | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.70 | 1.16 | 0.70 | 1.16 | 30.0 |

Selected trends, 1998–2002

Presented below is a table and a series of figures of selected 5-year trends across the period 1998–2002. Trends are provided for sample size, deciduous and permanent caries experience, fissure sealants and time since last visit. It should be noted that due to the small sample sizes across 2000–2002 the results across years might not be directly comparable. Care should be taken in interpreting trends.

There appears to be an increase in deciduous caries experience across the 5-year period, 1998–2002. Both the mean number of decayed and filled teeth is higher for children aged 5–7 years old in 2002 than in 1998 (Figures 5 and 6). The deciduous dmft of 5–7-year-olds and 9-year-olds is higher in 2002 than in 1998 (Figure 7). There does not appear to be any trend for children aged between 8 and 10 years. The percentage of children with no decayed, missing or filled deciduous teeth follows the same trend as deciduous dmft, being lowest for 5–7-year-olds and 9-year-olds in 2002 compared to 1998 (Figure 8).

Due to the often small number of children aged 12 years and older sampled in the ACT, caries trends in the permanent dentition are hard to interpret. However, it looks that across the period 1998–2002 increases have occurred in the mean number of decayed teeth (Figure 9) and the mean number of filled teeth (Figure 10). These increases are reflected in the mean DMFT index across the 5-year period (Figure 11), and also in the percentage of children in each age group with DMFT = 0 (Figure 12).

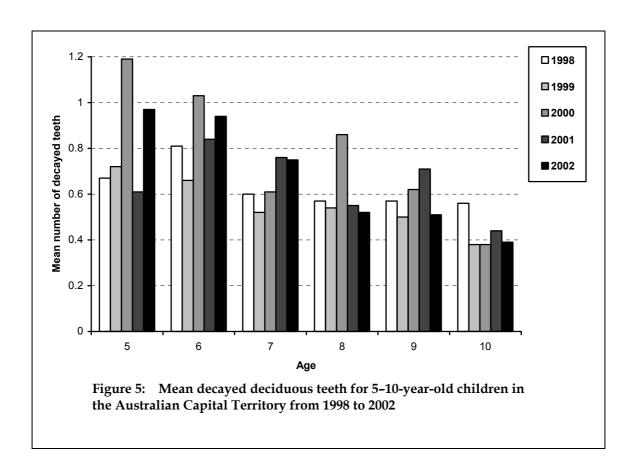
The percentage of children with no decayed teeth in either dentition at the time of examination has reduced for most age groups between 1998 and 2002, reflecting increased prevalence of decay (Figure 13). However, and due again to reasonably small numbers of children sampled, it is difficult to interpret changes in the percentage d+D≥4 across time (Figure 14). The percentages of children with f+F=0 and dmft+DMFT=0 also appeared to decline across 1998–2002 (Figures 15 and 16).

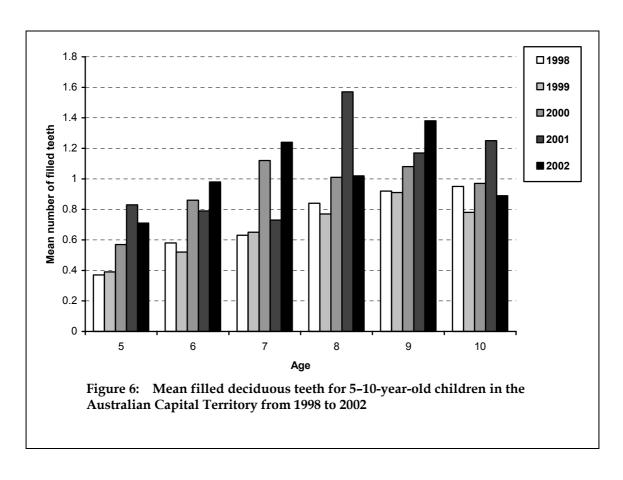
The mean number of fissure sealed teeth did not vary appreciably between 1998 and 2002 (Figure 17).

Changes in time since last visit across the 5-year period have not been substantial (Figure 18).

Table 14: Sample size and percentage of total sample by region, 1998-2002

| Region | 19 | 1998 | | 1999 | | 2000 | | 2001 | | 2002 | |
|-----------------------|------|-------|------|-------|------|-------|-----|-------|------|-------|--|
| | n | % | n | % | n | % | n | % | n | % | |
| North Canberra | 529 | 13.2 | 499 | 16.8 | 341 | 23.5 | 209 | 24.6 | 403 | 21.8 | |
| Belconnen/Gungahlin | 1021 | 25.4 | 722 | 24.2 | 310 | 21.4 | 156 | 18.4 | 423 | 22.9 | |
| Woden Valley | 399 | 10.0 | 373 | 12.5 | 153 | 10.5 | 52 | 6.1 | 143 | 7.7 | |
| Western Creek/Stromlo | 310 | 7.7 | 222 | 7.5 | 141 | 9.7 | 37 | 4.3 | 76 | 4.1 | |
| Tuggeranong | 1288 | 32.2 | 888 | 29.9 | 266 | 18.3 | 272 | 32.0 | 640 | 34.6 | |
| South Canberra | 336 | 8.4 | 231 | 7.8 | 115 | 7.9 | 50 | 5.9 | 124 | 6.7 | |
| Unknown | 121 | 3.0 | 39 | 1.3 | 125 | 8.6 | 75 | 8.8 | 40 | 2.2 | |
| Total | 4004 | 100.0 | 2974 | 100.0 | 1451 | 100.0 | 851 | 100.0 | 1854 | 100.0 | |





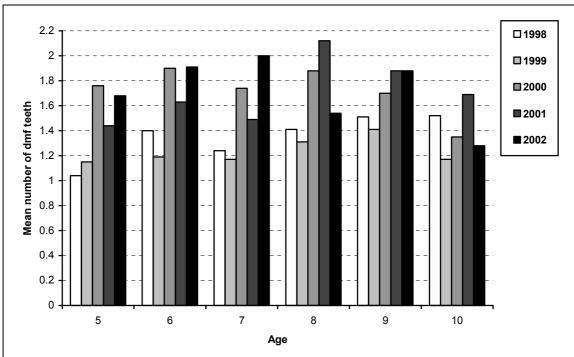
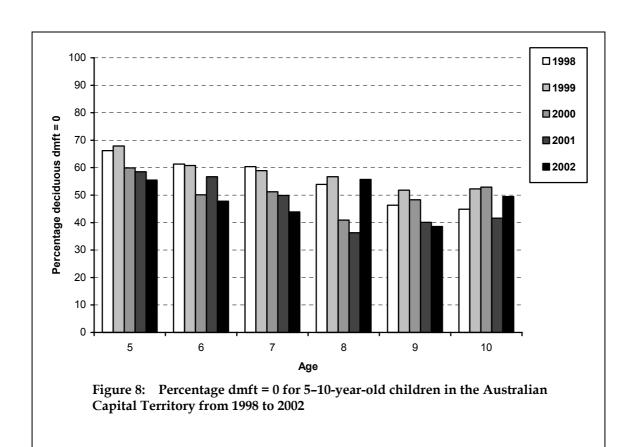
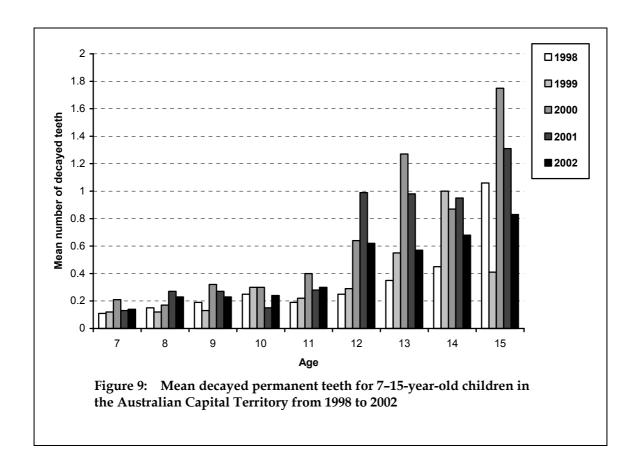
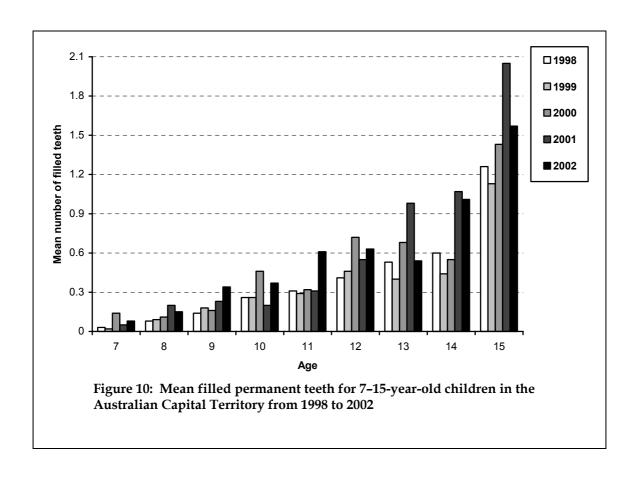


Figure 7: Mean decayed, missing and filled deciduous teeth for 5–10-year-old children in the Australian Capital Territory from 1998 to 2002







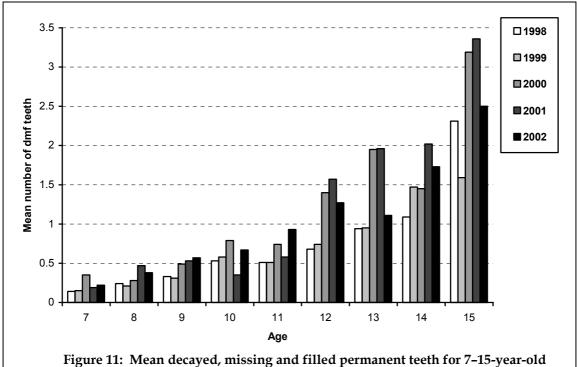
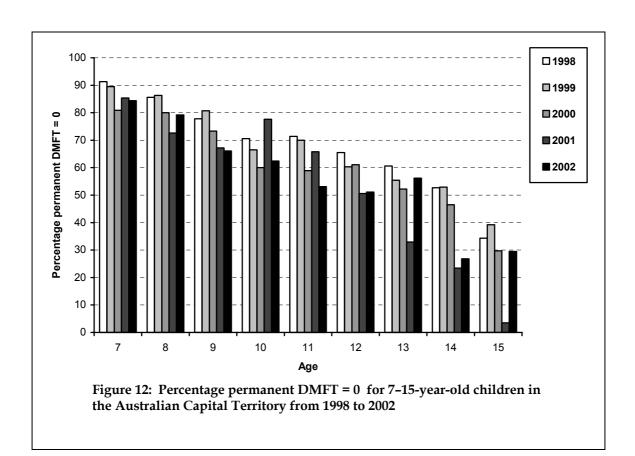
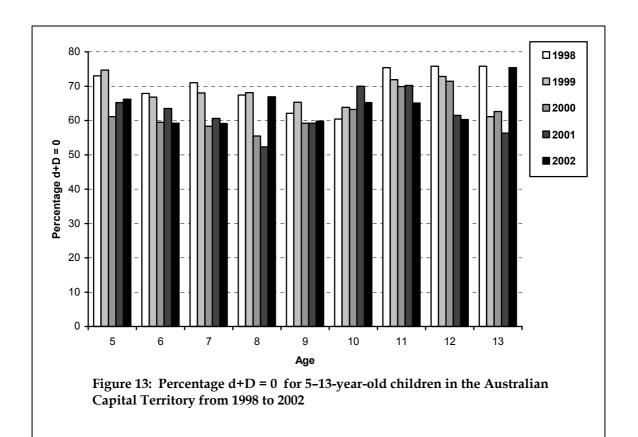
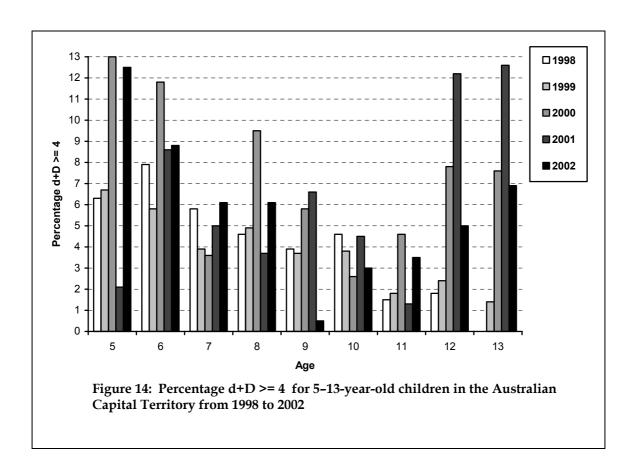
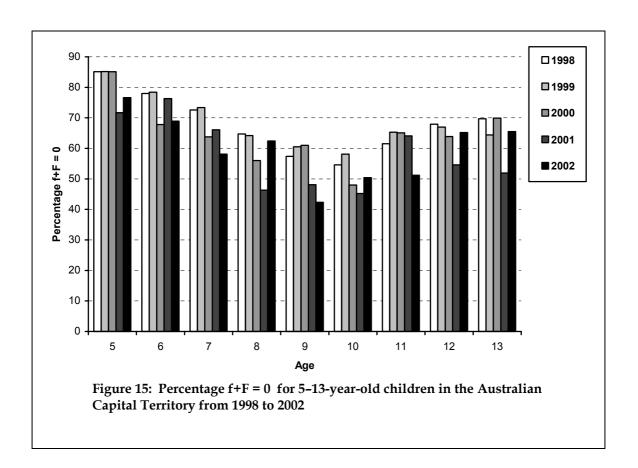


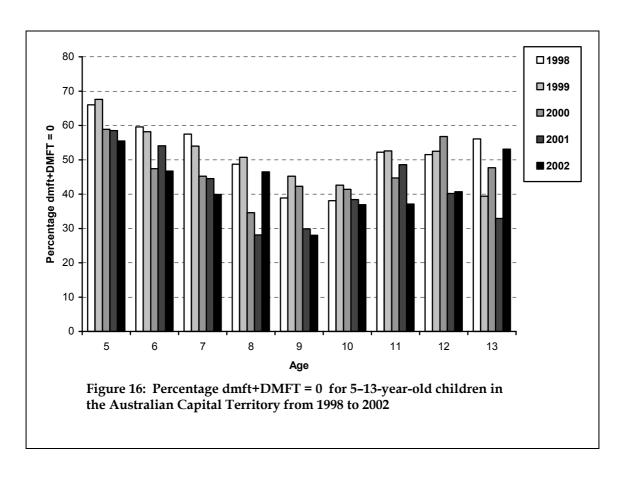
Figure 11: Mean decayed, missing and filled permanent teeth for 7–15-year-old children in the Australian Capital Territory from 1998 to 2002











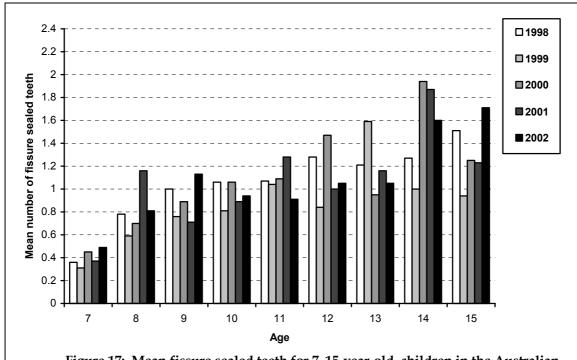


Figure 17: Mean fissure sealed teeth for 7–15-year-old children in the Australian Capital Territory from 1998 to 2002

