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The Child Dental Health Survey Queensland 1990

by

The AIH Dental Statistics
and Research Unit

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This report is the Queensland component of the Child Dental Health Survey, a project in which all States and Territories are participating.

The AIH Dental Statistics and Research Unit (DSRU) is an external unit of the Australian Institute of Health and was established in 1988 at The University of Adelaide. The DSRU was funded to improve the range and quality of dental statistics and research on the dental workforce, dental health status, dental practices and use of dental services.

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THE CHILD DENTAL HEALTH SURVEY - QUEENSLAND 1990

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Purpose of this report

This report establishes the series of annual reports providing descriptive statistics concerning child dental health in Queensland, and follows the 1989 report. Information listed in the tables includes: the age and sex of children in the sample, their deciduous and permanent caries experience, frequency of fissure sealants, immediate treatment needs and children's history of school dental service examinations.

During 1990, a number of changes were incorporated into the Queensland data collection to make it consistent with the National data set. The changes involved: sampling according to date of birth; the inclusion of data describing missing deciduous teeth, fissure sealants and immediate treatment needs; and the capacity to analyze the period since the previous dental examination. Data were collected during the 1990 calendar year from Queensland School Dental Service patients by dental therapists and dentists. A random sampling procedure was used to select approximately one in five patients. This was achieved by selecting those children whose birthday was between the 1st and 6th (inclusive) of any month. Provision was made for inclusion and numerical weighting of data from all children whose date of birth was unknown.

The following sections briefly describe each table and provide a simple, summary statement highlighting differences between the 1990 and 1989 figures. 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.

Table 1: Demographic composition of the sample

A total number of 32,512 children were sampled during 1990, with only 219 of them having an unknown date of birth. The majority of children in the sample (76 per cent) were aged between 6 and 11 years inclusive, with approximately equivalent numbers in individual ages within this range. Children aged 12 years or less than 6 were also represented in substantial numbers, although there were only about three quarters as many children in those individual ages compared with the individual ages in the core age range (6 to 11 years). Children aged 13 years or more were present in very small numbers. Males were only slightly more likely (51 per cent) to be sampled than females (49 per cent).

This distribution of children in the sample is closely related to the main target groups served by the school dental service in Queensland. It also illustrates that the sample is representative of primary school aged children, rather than all children in the state. Moreover, the small numbers of children aged 4 years or less and 13 years or more results in less reliability of computed statistics for those ages, and they have been suppressed where indicated in the following tables.

Changes since 1989

The total number of children sampled in 1990 is some 20,000 fewer than 1989, and this is consistent with the objectives of the redesigned Child Dental Health Survey. In both years, the core age range (6 to 11 years) accounted for approximately three quarters of the sample, and in both years there was a small predominance of males.

Table 3: Deciduous teeth: age-specific prevalence

The mean number of decayed teeth among children aged 5 to 9 years varies across a wide range (1.56 to 0.53 teeth) and is lower among older children. The variation in mean dmft in this age range is less (2.21 to 2.77), although the prevalence is higher among older children. Mean dmft declines over the age of 9, and this must be interpreted in view of the exfoliation of deciduous teeth as children grow older.

The percentage of caries experience due to decay (d/dmft) shows an age-associated decline, more than halving from 72.5 per cent among five-year-olds to 21.4 per cent among 10-year-olds. By comparison, the percentage of caries-free children (% dmft=0) shows a more modest reduction from 52.3 per cent among 5-year-olds to 35.2 per cent among 9-year-olds. It is noteworthy that only slightly more than one half of children are free of deciduous caries experience at any single age. The percentage of caries free children therefore mirrors the mean dmft prevalence.

Changes since 1989

During 1990 there were very few changes in the mean number of decayed teeth, the d/dmft ratio or the percentage of children with no caries experience. However, there was a small but consistent trend of higher mean dmft prevalences for children aged less than 9 years. This accounted for only a small mean number of teeth (0.1 to 0.2), and it is likely that this reflects the inclusion during 1991 of missing teeth in the dmft index.

Table 4: Permanent teeth: age specific prevalence

The mean number of decayed permanent teeth is consistently smaller than the mean number of decayed deciduous teeth, and is relatively consistent across the range of 7 to 10 years. However, the mean DMFT increases quite consistently across age groups, as expected. As a consequence, the percentage of DMFT due to decay (D/DMFT) and the percentage caries free (DMFT=0) declines quite consistently across age groups. Age-specific D/DMFT percentages are higher than d/dmft percentages in the deciduous dentition between the ages of six and ten. However this phenomenon is due largely to the very low DMFT values which act as the denominator in D/DMFT and drive the percentage upwards. In contrast to the deciduous dentition, well over 50 per cent of children aged 10 or less are caries free.

Changes since 1989

Changes in the caries experience of permanent teeth generally are inconsequential. In particular, the mean DMFT differs by less than 0.1 teeth across the key age groups (6 to 12 years).

Table 5: All teeth: age specific prevalence

Untreated caries in the combined deciduous and permanent dentitions exists for between 31 and 41 per cent of children in the age range 5 to 12 years. The greatest likelihood of untreated decay occurs for 8 and 9 year olds where 60.3 per cent have d+D of zero. Based on observations from previous tables, much of this untreated decay is present in the deciduous dentition. Furthermore, it is noteworthy that the most extensive levels of untreated decay (4 or more deciduous or permanent teeth) occur in the younger age groups, with 10 per cent or more of children aged 6 years or less being affected to this extent. This age distribution suggests further that the greatest contribution comes from the deciduous dentition.

While more than 94 per cent of children have no deciduous or permanent teeth missing due to caries, smaller percentages avoid fillings, and this clearly is associated with age. Similarly, the percentage of children with no caries experience ($dmft+DMFT=0$) is age associated, tending to reduce and plateau at approximately 30 per cent above the age of 10.

Changes since 1989

The changes during 1990 in distribution of combined deciduous and permanent caries experience are small and reveal no consistent trends.

Table 6: Fissure sealants: age-specific prevalence

Fissure sealants were recorded for the first time during 1990 in Queensland. Fissure sealants are present in only small numbers in most age groups, although there is a slightly higher mean number of fissure sealed teeth in younger ages (8 to 9 years), which may reflect more frequent utilization of sealants in recent years. At most ages, the mean number of fissure sealed teeth is smaller than the mean number of decayed permanent teeth. There is a similar frequency of fissure sealants among children with no permanent caries experience ($DMFT=0$) and among those with some caries experience ($DMFT=1+$) suggesting that permanent caries experience is not a criterion used in selection of patients for such preventive care.

Table 7: Immediate treatment needs

Immediate treatment needs for existing or imminent pain or infection was also recorded for the first time during 1990 in Queensland. This diagnosis is a clinical judgement that is intended to capture those cases with more severe disease. Immediate treatment needs are infrequent in the key age groups (5-11 years), affecting fewer than four per cent of children. There was an age-associated trend in immediate treatment needs, and this suggests that both deciduous caries experience (described previously in Table 3), and patterns of utilization (see Table 8 following) may be associated with these infrequent but more urgent treatment requirements. Fewer than one per cent of 11 and 12 year olds have immediate treatment needs, suggesting that caries in the permanent dentition is well controlled and unlikely to become severe.

Table 8: School Dental Service examinations

The left hand side of this table describes the percentage of children who are new patients (having had no previous dental examination) in the Queensland School Dental service. As expected, the figure is highest for the youngest ages (5 years or less) with fewer than 10 per cent of those 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.

The right hand side of the table refers to children with previous examinations, and indicates their distribution according to time since last dental examination. More than one half of children in all ages had a previous examination within the previous 12 months, with the most frequent interval being 7 to 12 months in all ages. Children aged 7 to 10 years had the longest interval, with more than 40 per cent being re-examined within a 13 to 24 month period. Less than 3 per cent of children were re-examined after more than two years.

Changes since 1989

Data describing interval since previous examination were less precise in 1989, but some comparisons are possible. Firstly, the percentage of children previously examined is very similar or slightly higher (by 2 to 5 percentage points) in 1990. The second observation is that a much greater percentage of children in 1990 had a re-examination interval of less than 13 months. For example, more than 85 per cent of children in 1989 received a re-examination in a period of 13 months or more, while the figure was less than 50 per cent in 1990. However, it should be noted that the method of recording previous examinations altered during 1990, and it is most likely that the observed differences are artefactual. During 1989, recorders noted whether the examination was "1st or 2nd" for the year, with some ambiguity as to whether this covered the calendar year or a 12 month period. In contrast, a more precise recording was made during 1990 of the month and year of both the current and previous examination. Hence, it is most likely that the 1990 data represent a more consistent and precise estimate.

TABLE 1: DEMOGRAPHIC COMPOSITION OF THE SAMPLE

Data for the Child Dental Health Survey are collected from a stratified random sample of children in all Australian States and Territories. In Queensland the sampling was 1:5 in 1990. This ratio was achieved by selecting children whose date of birth was between the 1st and 6th (inclusive) in any month. All children for whom date of birth was unknown were also included. The following table describes the number of records processed from children in Queensland.

State/Territory: **Queensland**Sampling Ratio: **1:5**

Data for period January-December 1990

Date of Report: 29th November 1991

Age (years)	UNWEIGHTED NUMBER OF RECORDS PROCESSED						WEIGHTED NUMBER OF CHILDREN IN SAMPLE ¹		
	TYPE OF SAMPLING			TYPE OF SAMPLING			Males	Females	Persons
	Known date of birth		Age only known	Known date of birth		Age only known			
	Males	Females	Persons	Males	Females	Persons			
≤4	624	560	1184	2	3	5	628	564	1192
5	1610	1594	3204	16	11	27	1622	1605	3227
6	2087	1996	4083	20	13	33	2102	2009	4112
7	2100	2063	4163	15	8	23	2114	2076	4190
8	2189	2129	4318	13	8	21	2204	2142	4346
9	2175	2005	4180	19	7	26	2190	2018	4208
10	1945	1978	3923	18	17	35	1959	1992	3951
11	1888	1881	3769	13	14	27	1901	1894	3795
12	1521	1387	2908	9	11	20	1531	1397	2928
13	255	162	417	0	2	2	256	163	420
14	26	35	61	0	0	0	26	35	61
≥15	41	42	83	0	0	0	41	42	83
Total	16461	15832	32293	125	94	219	16575	15937	32512

¹ Processed records are weighted to reflect the sampling scheme. Records from children with a known date of birth are weighted up, while records from children for whom age only is known are weighted down. The sum of the weighted records is equivalent to the number of children sampled for the survey. The number of cases have been rounded to the nearest integer.

TABLE 2: COUNTRY OF BIRTH (INCLUDING ABORIGINALITY)

These data were not collected in Queensland
during the period January-December 1990.

TABLE 3: DECIDUOUS TEETH: AGE-SPECIFIC PREVALENCE¹

This table uses Statewide data to describe the dmft index and its components for individual (year of birth) ages. Indices are 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 is excluded. Age-specific indices denoted with an asterisk (*) are those in which the relative standard error exceeds 25 per cent, and population estimates of these indices are statistically unreliable.

State/Territory: **Queensland**

Sampling ratio: 1:5

Data for period January-December 1990

Date of report: 29th November 1991

Age (years)	Number of children in sample	decayed		dmft		d/dmf %	Children with dmft=0 %
		mean	sd	mean	sd		
≤4	1192	1.56	2.83	1.85	3.12	85.1	57.7
5	3227	1.53	2.71	2.21	3.43	72.5	52.3
6	4110	1.09	1.99	2.43	3.27	48.9	45.4
7	4188	0.73	1.41	2.64	3.16	30.8	40.8
8	4346	0.58	1.10	2.77	3.00	23.8	36.8
9	4209	0.53	1.04	2.77	2.94	21.4	35.2
10	3952	0.36	0.83	2.10	2.60	19.3	44.0
11	3795	0.21	0.59	1.24	1.98	18.6	59.1
12	2928	0.11	0.45	0.67	1.50	18.1	75.1

¹ Legend: d - decayed deciduous teeth
 dmft - decayed, missing or filled deciduous teeth
 sd - standard deviation

TABLE 4: PERMANENT TEETH: AGE-SPECIFIC PREVALENCE¹

This table uses Statewide data to describe the DMFT index and its components for individual (year of birth) ages. Indices are 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 is excluded. Age-specific indices denoted with an asterisk (*) are those in which the relative standard error exceeds 25 per cent, and population estimates of these indices are statistically unreliable.

State/Territory: Queensland

Sampling ratio: 1:5

Data for period January-December 1990

Date of report: 29th November 1991

Age (years)	Number of children in sample	DECAYED		DMFT		D/DMFT %	Children with DMFT=0 %
		mean	sd	mean	sd		
6	4110	0.10	0.44	0.11	0.49	87.7	93.2
7	4188	0.21	0.60	0.31	0.80	67.7	82.3
8	4346	0.24	0.66	0.48	0.96	51.2	74.1
9	4209	0.26	0.65	0.71	1.18	39.6	65.0
10	3952	0.27	0.71	0.90	1.38	30.3	59.1
11	3794	0.35	0.85	1.26	1.73	27.1	49.9
12	2928	0.48	1.03	1.70	2.06	27.1	41.3
13	420	0.65	1.30	2.29	2.53	26.6	34.7
14	61	*	*	1.90	2.55	24.9	47.5
≥15	79	*	*	2.24	2.57	23.5	41.4

¹ Legend: D - decayed permanent teeth
DMFT - decayed, missing or filled permanent teeth
sd - standard deviation

TABLE 5: ALL TEETH: AGE-SPECIFIC PREVALENCE¹

This table uses Statewide data to describe the combined dmft and DMFT indices and their components for individual (year of birth) ages. Indices are 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 is excluded. Age-specific indices denoted with an asterisk (*) are those in which the relative standard error exceeds 25 per cent, and population estimates of these indices are statistically unreliable.

State/Territory: Queensland

Sampling ratio: 1:5

Data for period January-December 1990

Date of report: 29th November 1991

Age (years)	Number of children in sample	% of children with d+D=					% of children with		
		0	1	2	3	≥4	m+M=0	f+F=0	dmft+DMFT=0
≤4	1192	60.3	10.2	8.5	4.4	16.6	98.4	90.5	57.3
5	3227	58.4	10.9	9.2	5.1	16.4	97.7	81.3	52.2
6	4112	58.3	15.1	9.9	5.4	11.4	96.5	63.1	43.9
7	4191	60.2	16.4	10.3	6.1	6.9	94.7	49.1	37.7
8	4346	60.3	18.9	10.4	5.0	5.4	95.2	41.3	32.8
9	4209	60.3	20.1	9.8	5.1	4.7	95.6	35.9	28.5
10	3952	66.0	19.0	8.1	3.6	3.2	97.2	38.3	31.5
11	3795	68.6	17.8	8.0	2.9	2.6	98.4	40.8	33.3
12	2928	68.3	17.0	7.8	3.9	2.9	97.6	41.0	33.4
13	420	64.9	18.3	7.5	4.3	5.0	96.6	37.2	29.7
14	61	68.9	19.7	*	*	*	*	49.2	41.0
≥15	79	68.1	19.0	*	*	*	94.9	40.2	31.3

¹ Legend:

- d - decayed deciduous teeth
- D - decayed permanent teeth
- m - deciduous teeth missing due to caries
- M - permanent teeth missing due to caries
- f - deciduous teeth restored due to caries
- F - permanent teeth restored due to caries
- dmft - decayed, missing or filled deciduous teeth
- DMFT - decayed, missing or filled permanent teeth

TABLE 6: FISSURE SEALANTS: AGE-SPECIFIC PREVALENCE¹

This table uses Statewide data to describe the distribution of fissure sealants for individual (year of birth) ages, along with the caries experience of those who have fissure sealants and those who do not. Indices are 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 is excluded. Age-specific indices denoted with an asterisk (*) are those in which the relative standard error exceeds 25 per cent, and population estimates of these indices are statistically unreliable.

State/Territory: Queensland

Sampling ratio: 1:5

Data for period January-December 1990

Date of report: 29th November 1991

Age (years)	Number of children in sample ²	Number of sealants		CHILDREN WITH DMFT=0		CHILDREN WITH DMFT=1+	
		mean	sd	number	% with F/S=1+	number	% with F/S=1+
6	4112	0.04	0.34	3834	1.3	278	6.1
7	4191	0.19	0.73	3450	6.4	741	11.5
8	4346	0.31	0.94	3220	11.5	1127	13.5
9	4209	0.29	0.88	2736	10.7	1473	15.5
10	3952	0.21	0.77	2336	8.5	1616	9.5
11	3795	0.15	0.64	1895	5.8	1900	6.7
12	2928	0.14	0.69	1209	5.2	1719	6.6
13	420	0.19	0.71	146	6.2	274	11.0
14	61	*	*	29	*	32	*
≥15	79	*	*	33	*	46	*

¹ Legend: DMFT - decayed, missing or filled permanent teeth

² Legend: F/S - number of fissure sealed teeth
sd - standard deviation

TABLE 7: IMMEDIATE TREATMENT NEEDS: AGE-SPECIFIC DISTRIBUTION¹

This table, based on Statewide data, describes the number and proportion of children in immediate need of dental treatment. This classification is accorded to children who have, or who are likely to develop within four weeks, oral pain or infection. The dental caries experience of this group of children is also described. Indices are 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 is excluded. Age-specific indices denoted with an asterisk (*) are those in which the relative standard error exceeds 25 per cent, and population estimates of these indices are statistically unreliable.

State/Territory: Queensland

Sampling ratio: 1:5

Data for period January-December 1990

Date of report: 29th November 1991

CHILDREN IN NEED OF IMMEDIATE TREATMENT

Age (years)	Number of children in sample	No.	% of all children	dmft		DMFT	
				mean	sd	mean	sd
≤4	1192	57	4.8	5.70	3.59	*	*
5	3227	107	3.3	7.04	4.28	*	*
6	4112	85	2.1	7.00	4.40	*	*
7	4191	61	1.5	5.28	3.17	.97	1.28
8	4346	60	1.4	5.80	3.36	1.21	1.43
9	4209	50	1.2	4.73	3.27	1.17	1.44
10	3952	47	1.2	3.79	3.04	1.45	1.78
11	3795	29	0.8	1.84	2.19	3.14	3.89
12	2928	22	0.8	*	*	5.14	3.78

¹ Legend: dmft - number of decayed, missing or filled deciduous teeth
 DMFT - number of decayed, missing or filled permanent teeth
 d - number of decayed deciduous teeth
 D - number of decayed permanent teeth

**TABLE 8: SCHOOL DENTAL SERVICE EXAMINATIONS:
AGE-SPECIFIC DISTRIBUTION**

This table describes the percentage distribution of children who have received initial and subsequent dental examinations in the School Dental Service. Data from all examinations of children who were examined during the report period are included in this table; percentage estimates denoted with an asterisk (*) are those in which the relative standard error exceeds 25 per cent, and population estimates of these percentages are statistically unreliable.

State/Territory: **Queensland**

Sampling ratio: 1:5

Data for period January-December 1990

Date of report: 29th November 1991

Age (years)	Number of children examined	Previous examination in School Dental Service (%)			CHILDREN WITH PREVIOUS EXAMINATION Months since last examination ¹ (%)			
		No	Yes	Unknown	0-6	7-12	13-24	25+
≤4	1227	81.9	6.6	11.5	17.3	64.2	16.0	*
5	3449	58.4	26.8	14.8	11.6	63.1	24.9	*
6	4747	22.7	61.5	15.8	7.3	57.8	34.3	0.6
7	4598	7.7	80.8	11.5	3.7	52.0	43.0	1.4
8	4695	5.5	82.7	11.8	3.7	49.9	44.4	2.0
9	4493	4.9	83.0	12.1	3.6	49.6	44.8	2.0
10	4233	4.6	82.8	12.6	4.0	50.4	42.8	2.8
11	4122	4.3	83.7	12.0	3.7	54.1	39.9	2.3
12	3262	4.9	83.9	11.2	3.0	55.7	38.3	2.9
13	485	7.3	78.4	14.4	*	54.2	39.7	*
14	65	*	75.4	*	*	46.9	40.8	*
≥15	97	*	85.3	12.4	20.2	44.1	35.6	*

¹ Excludes those with no previous examination and where the date of previous examination is unknown.

TABLE 14: INTRASTATE COMPARISON: AGE-STANDARDIZED dmft¹

This table uses age-standardized estimates of dmft within each region. Age standardization eliminates any biases which may be introduced by variations in the age composition among different regions. Data are based on information collected during the previous twelve months, and information collected from subsequent examinations of a child in this period is eliminated.

State/Territory: Queensland

Sampling ratio: 1:5

Data for period January-December 1990

Date of report:

dmft: PREVALENCE FOR AGE GROUPS

Region	Number of children in sample	AGE STANDARDIZED				d/dmft %	Children with dmft=0 %
		decayed mean	sd	dmft mean	sd		
Albany Creek	742	0.45	1.18	1.99	2.74	25.4	48.4
Ayr	248	0.54	1.12	2.07	2.88	29.0	48.4
Beaudesert	400	1.04	2.17	2.33	3.08	42.7	46.0
Beenleigh	622	0.60	1.47	2.14	2.90	29.9	47.1
Biloela	137	0.56	1.36	2.49	3.33	21.7	46.8
Bowen	276	0.70	1.38	2.24	2.82	33.1	44.2
Bracken Ridge	582	0.60	1.46	2.11	3.04	28.9	51.6
Brassall	635	0.63	1.48	2.40	3.10	29.6	45.4
Broadbeach	689	0.51	1.23	1.53	2.51	37.7	59.0
Bundaberg	225	1.11	1.88	2.38	3.04	47.8	46.9
Bundaberg City	591	0.67	1.60	2.20	3.03	30.4	48.8
Burleigh Heads	647	0.65	1.49	2.03	2.84	34.9	47.7
Caboolture	594	0.61	1.38	2.02	2.80	33.0	48.1
Cairns North	488	0.66	1.69	1.80	2.86	39.3	53.3
Cairns South	654	0.80	1.84	2.30	3.13	34.8	47.0
Camp Hill	495	0.55	1.42	1.76	2.71	35.4	55.5
Capalaba	400	0.72	1.59	1.99	2.80	38.5	52.6
Charleville	158	0.67	1.20	2.70	3.05	27.7	40.2
Charters Towers	92	*	*	2.15	2.72	23.9	45.4
Dalby	335	0.54	1.49	2.09	3.14	26.9	49.5
Emerald	494	0.62	1.30	2.69	3.06	23.6	38.7
Far Central West	79	*	*	1.84	2.84	25.2	50.8
Ferny Hills	588	0.33	0.92	1.70	2.65	24.5	56.1

(continued over)

¹ Legend: d - decayed deciduous teeth
dmft - decayed, missing or filled deciduous teeth
sd - standard deviation

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Region	Number of children in sample	AGE STANDARDIZED					Children with dmft=0 %
		decayed mean	sd	dmf mean	sd	d/dmf %	
Gladstone	366	0.54	1.66	1.92	2.82	26.0	51.1
Goodna	543	0.72	1.42	2.65	3.08	30.3	41.2
Goondiwindi	88	0.78	1.61	2.16	2.63	37.7	44.3
Gulfcap	196	1.47	2.44	2.32	3.17	62.7	46.8
Gympie	514	0.71	1.47	2.14	2.79	32.6	47.8
Hermit Park	608	0.56	1.47	1.73	2.67	32.2	53.7
Holland Park SDTTC	211	0.82	1.86	2.36	2.97	33.9	41.0
Inala	590	1.00	2.13	2.87	3.59	35.8	41.8
Indooroopilly	450	0.43	1.22	1.60	2.67	31.4	59.7
Ingham	171	0.88	1.73	1.99	2.87	43.4	50.1
Innisfail	196	0.70	1.55	2.21	2.95	33.3	42.3
Isolated schools	12	*	*	*	*	*	60.3
Kallangur	288	0.71	1.39	2.63	2.98	28.6	41.7
Kingaroy	355	0.70	1.63	2.33	3.02	33.6	47.3
Kingston	680	0.72	1.59	2.35	3.03	31.3	44.2
Mackay	254	0.62	1.60	2.11	2.76	27.7	44.4
Mackay City	790	0.66	1.46	1.87	2.65	37.1	51.0
Mareeba	457	1.00	2.08	2.77	3.28	34.1	39.5
Maroochydore	652	0.66	1.65	2.10	2.93	31.0	46.4
Maryborough	656	0.65	1.64	2.23	3.04	28.3	48.1
Mount Isa	494	0.70	1.70	1.86	2.65	36.5	51.0
Nambour	725	0.66	1.50	1.86	2.69	38.8	51.9
Nundah	565	0.38	1.04	1.77	2.70	24.9	55.1
Raceview	735	0.65	1.54	2.26	2.93	31.0	45.9
Redcliffe	473	0.73	1.78	2.35	3.02	30.6	43.7
Rockhampton	138	0.78	1.70	2.39	2.99	34.2	40.3
Rockhampton City	595	0.76	1.68	2.44	3.12	30.2	44.0
Roma	77	*	*	1.96	2.64	29.6	50.7
Slacks Creek	562	0.61	1.40	2.12	2.93	30.9	48.9
Southport	490	0.51	1.11	1.61	2.42	36.1	54.8
Stafford SDTTC	290	0.69	1.67	1.77	2.79	39.1	54.0
Sunnybank	567	0.49	1.23	1.80	2.71	31.8	55.6
Tewantin	475	0.71	1.44	2.13	2.93	35.4	47.6
The Gap	501	0.42	1.18	1.67	2.59	28.3	56.7
Thursday Island	50	1.60	2.48	3.43	3.55	42.6	28.6
Toowoomba	669	0.64	1.49	2.14	2.85	31.3	46.6
Toowoomba City	475	0.66	1.53	2.02	2.73	32.2	50.4
Tully	150	0.79	1.68	2.20	2.65	32.6	44.9
Upper Ross	694	0.43	1.19	1.35	2.31	35.6	59.3
Victoria Point	411	0.65	1.46	1.87	2.75	34.0	52.9
Warwick	492	0.82	1.52	2.61	2.96	35.4	38.1
Woodridge	591	0.56	1.50	2.40	2.96	21.8	42.3
Wynnum	692	0.56	1.29	2.20	2.86	27.3	46.8
Yeppoon	144	0.91	1.41	2.61	3.22	38.5	38.2
Yeronga SDTTC	500	0.62	1.58	2.11	3.00	29.8	49.0

TABLE 15: INTRASTATE COMPARISON: AGE-STANDARDIZED DMF¹

This table uses age-standardized estimates of dmft within each region. Age standardization eliminates any biases which may be introduced by variations in the age composition among different regions. Data are based on information collected during the previous twelve months, and information collected from subsequent examinations of a child in this period is eliminated.

State/Territory: **Queensland**

Sampling ratio: **1:5**

Data for period **January-December 1990**

Date of report:

DMF: PREVALENCE FOR AGE GROUPS

Region	Number of children in sample	AGE STANDARDIZED				D/DMF %	Children with dmft=0 %
		DECAYED mean	sd	DMF mean	sd		
Albany Creek	743	0.15	0.50	0.61	1.22	29.5	73.0
Ayr	248	0.16	0.49	0.64	1.25	27.9	69.2
Beaudesert	399	0.36	1.01	0.84	1.59	46.0	67.6
Beenleigh	621	0.22	0.68	0.68	1.38	34.3	72.5
Biloela	137	*	*	0.98	2.02	39.0	65.6
Bowen	276	0.17	0.48	0.58	1.21	35.9	73.5
Bracken Ridge	581	0.20	0.59	0.67	1.35	32.9	70.6
Brassall	635	0.25	0.65	0.74	1.34	36.5	67.1
Broadbeach	689	0.17	0.55	0.57	1.17	29.8	74.5
Bundaberg	225	0.53	1.12	1.11	1.86	51.5	61.9
Bundaberg City	591	0.24	0.72	0.80	1.40	30.6	63.3
Burleigh Heads	647	0.14	0.50	0.42	1.02	39.2	78.1
Caboolture	594	0.22	0.61	0.64	1.31	39.1	71.0
Cairns North	488	0.13	0.46	0.47	1.04	33.2	76.3
Cairns South	654	0.22	0.61	0.57	1.18	43.6	73.0
Camp Hill	495	0.23	0.59	0.61	1.24	42.3	71.8
Capalaba	400	0.20	0.59	0.61	1.39	38.8	73.6
Charleville	158	0.25	0.70	0.82	1.51	36.8	68.0
Charters Towers	92	*	*	0.72	1.04	*	58.7
Dalby	336	0.35	0.80	0.93	1.49	38.1	62.6
Emerald	494	0.29	0.86	0.78	1.44	36.7	66.7
Far Central West	79	*	*	0.45	0.89	*	73.6
Ferny Hills	588	0.10	0.36	0.36	0.94	30.6	81.0

(continued over)

¹ Legend: D - decayed permanent teeth
 DMF - decayed, missing or filled permanent teeth
 sd - standard deviation

(continued from previous page)

Region	Number of children in sample	AGE STANDARDIZED				D/DMF %	Children with dmft=0 %
		DECAYED mean	sd	DMF mean	sd		
Gladstone	365	0.18	0.59	0.76	1.35	24.5	67.2
Goodna	543	0.24	0.77	0.74	1.47	31.5	70.6
Goondiwindi	88	*	*	*	*	*	82.5
Gulfcapc	196	0.42	1.06	0.76	1.54	58.8	70.9
Gympie	514	0.26	0.75	0.63	1.27	44.1	72.7
Hermit Park	608	0.16	0.54	0.58	1.24	30.6	74.1
Holland Park SDTTC	211	0.62	1.19	1.23	1.82	50.9	56.0
Inala	590	0.36	0.82	0.98	1.60	39.3	61.5
Indooroopilly	450	0.33	0.74	0.66	1.22	54.1	69.0
Ingham	171	*	*	0.52	1.05	29.3	75.0
Innisfail	196	0.26	0.82	0.62	1.14	37.7	67.4
Isolated schools	12	*	*	*	*	50.0	92.4
Kallangur	288	0.36	0.86	0.77	1.51	48.1	67.8
Kingaroy	355	0.41	0.86	0.93	1.57	46.9	61.9
Kingston	680	0.41	0.82	0.92	1.45	50.1	61.1
Mackay	254	0.24	0.76	0.66	1.41	34.4	74.2
Mackay City	790	0.14	0.49	0.47	1.05	30.8	76.9
Mareeba	457	0.22	0.68	0.59	1.17	35.1	72.7
Maroochydore	652	0.15	0.50	0.50	1.11	31.9	76.0
Maryborough	656	0.18	0.59	0.76	1.42	27.0	67.2
Mount Isa	494	0.15	0.48	0.40	0.97	47.2	79.5
Nambour	725	0.14	0.47	0.53	1.22	29.1	75.1
Nundah	565	0.24	0.73	0.71	1.41	34.9	71.3
Raceview	735	0.31	0.81	0.81	1.45	41.7	66.9
Redcliffe	473	0.21	0.62	0.64	1.30	36.2	73.0
Rockhampton	138	0.37	0.81	0.87	1.52	47.8	66.4
Rockhampton City	594	0.36	0.87	0.82	1.56	47.2	67.8
Roma	77	*	*	0.86	1.38	*	62.8
Slacks Creek	562	0.25	0.87	0.68	1.56	39.5	72.1
Southport	491	0.20	0.57	0.55	1.11	41.7	74.0
Stafford SDTTC	290	0.68	1.39	1.04	1.91	67.9	61.4
Sunnybank	567	0.22	0.75	0.69	1.36	30.6	72.1
Tewantin	475	0.22	0.59	0.56	1.12	47.1	72.6
The Gap	501	0.10	0.36	0.40	0.93	27.2	79.3
Thursday Island	50	*	*	1.63	2.75	*	59.1
Toowoomba	668	0.15	0.49	0.46	1.03	35.1	78.0
Toowoomba City	475	0.16	0.53	0.66	1.35	28.9	73.3
Tully	150	0.29	0.78	0.66	1.44	39.7	72.9
Upper Ross	694	0.13	0.49	0.44	1.09	30.5	79.5
Victoria Point	411	0.29	0.74	0.74	1.37	39.1	69.4
Warwick	491	0.28	0.74	0.98	1.62	30.5	61.8
Woodridge	591	0.25	0.66	0.87	1.43	30.2	60.7
Wynnum	692	0.27	0.74	0.83	1.43	33.3	65.9
Yeppoon	144	0.35	0.91	0.75	1.46	45.5	67.9
Yeronga SDTTC	500	0.50	0.95	1.22	1.76	42.9	56.2

TABLE 16: ALL TEETH: AGE STANDARDIZED PREVALENCE¹

State/Territory: Queensland

Sampling ratio: 1:5

Data for period January-December 1990

Date of report:

Region	Number of children in sample	% of children with d+D=0	% of children with 1	% of children with 2	% of children with 3	% of children with ≥4	m+M=0	f+F=0	dmft+DMFT=0
Albany Creek	743	70.0	15.6	8.1	1.8	4.5	99.3	47.5	39.8
Ayr	248	65.1	16.8	9.7	*	*	98.3	46.3	35.1
Beaudesert	399	52.9	17.3	11.6	5.1	13.0	97.0	49.6	31.9
Beenleigh	621	66.8	14.4	7.7	3.9	7.3	95.2	49.4	36.7
Biloela	137	64.9	17.6	*	*	*	94.6	42.6	31.8
Bowen	276	60.4	18.3	7.1	8.4	5.8	97.6	45.0	34.2
Bracken Ridge	581	64.9	15.1	10.3	4.2	5.5	96.4	48.8	39.7
Brassall	635	60.5	18.3	10.0	3.9	7.3	95.1	45.5	33.8
Broadbeach	689	67.4	17.1	6.9	3.3	5.3	98.5	56.3	45.8
Bundaberg	225	43.6	20.6	13.2	5.5	17.0	98.4	45.3	26.4
Bundaberg City	591	63.3	16.2	8.0	4.6	7.9	97.7	42.6	31.8
Burleigh Heads	647	65.2	14.8	11.8	2.6	5.7	94.2	55.3	39.6
Caboolture	594	62.1	18.2	9.4	4.4	6.0	94.9	48.6	36.1
Cairns North	488	65.6	18.8	6.7	2.8	6.1	97.4	57.9	41.9
Cairns South	654	59.5	18.2	10.3	4.6	7.4	94.6	51.0	36.4
Camp Hill	495	64.7	15.5	10.6	4.2	4.9	97.9	55.0	41.0
Capalaba	400	64.2	13.7	9.0	5.5	7.5	98.6	56.1	40.1
Charleville	158	60.2	15.1	10.3	*	7.5	92.5	39.7	31.8
Charters Towers	92	71.8	15.4	*	*	*	97.1	38.6	28.7
Dalby	336	60.1	19.1	9.6	6.0	5.2	92.4	46.1	31.9
Emerald	494	58.6	22.0	7.0	5.2	7.2	92.4	35.9	27.7
Far Central West	79	78.4	*	*	*	*	88.5	51.7	43.1
Ferny Hills	588	75.8	14.2	6.0	*	*	97.3	56.2	47.9

(continued over)

¹ Legend:

- d - decayed deciduous teeth
- D - decayed permanent teeth
- m - deciduous teeth missing due to caries
- M - permanent teeth missing due to caries
- f - deciduous teeth restored due to caries
- F - permanent teeth restored due to caries
- dmft - decayed, missing or filled deciduous teeth
- DMFT - decayed, missing or filled permanent teeth

(continued from previous page)

Region	Number of children in sample	% of children with d+D=					m+M=0	f+F=0	dmft+DMFT=0
		0	1	2	3	≥4			
Gladstone	365	69.0	15.4	6.5	4.1	5.0	98.0	45.2	36.1
Goodna	543	59.2	18.4	7.9	6.3	8.2	95.8	40.8	31.0
Goondiwindi	88	59.8	15.7	14.1	*	*	93.6	54.7	41.1
Gulfcape	196	46.9	14.1	10.3	9.7	19.1	94.3	62.1	33.3
Gympie	514	60.3	18.3	8.6	4.5	8.2	96.8	50.6	38.5
Hermit Park	608	67.8	14.9	9.5	3.3	4.5	96.1	52.9	41.0
Holland Park SDTTC	211	49.3	18.0	12.4	*	15.1	98.8	42.1	24.3
Inala	590	49.9	19.5	13.0	6.0	11.7	94.0	39.6	25.1
Indooroopilly	450	63.0	18.4	9.4	5.3	3.9	98.4	57.6	42.9
Ingham	171	62.5	15.0	8.4	*	9.9	97.3	51.7	38.4
Innisfail	196	57.4	21.9	9.3	*	7.0	96.4	42.3	29.9
Isolated schools	12	67.9	*	*	0.0	*	100	76.5	60.3
Kallangur	288	55.4	17.7	11.7	7.3	7.8	96.2	41.7	31.7
Kingaroy	355	54.8	17.9	11.5	8.0	7.8	95.8	47.9	30.8
Kingston	680	53.2	18.9	13.3	5.7	8.9	97.9	43.6	29.4
Mackay	254	63.9	16.5	9.5	*	6.7	97.1	43.5	34.5
Mackay City	790	64.3	16.5	9.3	3.8	6.1	96.7	53.5	40.4
Mareeba	457	57.3	17.4	8.6	6.0	10.7	98.0	41.8	29.7
Maroochydore	652	65.5	17.2	6.5	5.4	5.4	96.5	49.2	39.1
Maryborough	656	68.0	13.2	7.9	3.9	7.0	97.6	45.1	34.2
Mount Isa	494	65.8	15.8	8.2	4.3	5.9	97.4	57.4	40.9
Nambour	725	63.8	18.0	8.1	4.6	5.4	97.9	55.5	40.7
Nundah	565	67.0	18.0	9.1	2.8	3.2	96.7	51.2	41.0
Raceview	735	59.5	17.8	9.6	5.5	7.5	95.8	46.3	34.7
Redcliffe	473	63.2	17.1	8.0	4.0	7.7	96.1	46.3	33.0
Rockhampton	138	57.6	15.2	11.5	*	9.9	98.1	46.1	31.8
Rockhampton City	594	56.7	16.5	11.1	7.3	8.4	96.9	45.2	32.9
Roma	77	59.7	23.0	*	*	*	96.0	42.7	33.0
Slacks Creek	562	64.2	16.4	9.2	3.2	7.1	95.8	52.2	40.2
Southport	491	65.1	16.2	9.6	4.0	5.0	97.3	55.6	42.4
Stafford SDTTC	290	52.8	17.2	10.4	7.2	12.5	96.1	56.8	36.5
Sunnybank	567	68.5	15.1	6.5	4.3	5.5	97.9	54.1	42.7
Tewantin	475	58.4	17.1	13.8	4.8	6.0	97.9	49.3	38.8
The Gap	501	74.1	15.9	4.7	*	3.0	97.2	58.5	48.0
Thursday Island	50	33.0	23.2	*	*	*	87.9	22.9	*
Toowoomba	668	65.1	16.9	7.9	4.7	5.4	97.6	49.3	38.9
Toowoomba City	475	64.3	16.4	10.3	3.2	5.9	95.3	48.7	38.3
Tully	150	57.7	16.1	10.7	*	*	99.4	46.4	36.8
Upper Ross	694	73.3	13.9	5.8	3.8	3.3	97.9	61.1	49.0
Victoria Point	411	62.7	14.7	7.8	7.4	7.5	99.1	49.5	39.9
Warwick	491	53.7	19.2	11.6	7.0	8.6	96.2	40.6	27.5
Woodridge	591	64.7	16.9	8.1	5.1	5.2	95.2	36.5	27.9
Wynnum	692	61.8	19.2	9.2	4.2	5.6	97.4	44.6	34.0
Yeppoon	144	49.2	17.3	13.8	10.5	9.2	96.4	43.1	27.7
Yeronga SDTTC	500	53.4	17.5	14.1	6.8	8.2	95.5	44.1	31.1