



CHILDRENS DENTAL SURVEY, AUSTRALIA, NOVEMBER 1983, PRELIMINARY

- PHONE INQUIRIES** *for more information about these statistics—contact Mr John Sever on Canberra (062) 52 6203 or any of our State offices.*
other inquiries including copies of publications—contact Information Services on Canberra (062) 52 6627 or in any of our State offices.
- MAIL INQUIRIES** *write to Information Services, ABS, P.O. Box 10, Belconnen, A.C.T. 2616 or any of our State offices.*

MAIN FEATURES

At November 1983, an estimated 2,616,900 (80.0 per cent) of children aged 2 to 14 years in Australia had had a dental consultation at some time in their life. Of these, 391,100 (14.9 per cent) had their first consultation when aged less than 3 years, 1,088,400 (41.6 per cent) when aged 3 or 4 years, 831,300 (31.8 per cent) when aged 5 or 6 years, 266,900 (10.2 per cent) when aged 7 to 14 years and it was not known when 40,000 (1.5 per cent) had their first dental consultation.

The survey showed that an estimated 2,252,800 (68.9 per cent) of children aged 2 to 14 years had had a dental consultation in the previous twelve months. Of these, 1,145,900 (50.9 per cent) had their most recent consultation at a private dental surgery and 929,200 (41.2 per cent) at a school dental clinic. However, it was only in New South Wales and Victoria that the majority of the most recent consultations took place at a private dental surgery.

An estimated 160,700 (6.2 per cent) of children aged 5 to 14 years had never had a dental consultation. For 139,000 (86.6 per cent) of these, 'No problem with teeth' was given as the main reason they had not done so. (Note: Main reason never had a dental consultation was not asked in respect of children aged less than 5 years).

The survey also showed that of the estimated 1,655,700 children aged 4 to 11 years at school, 1,140,600 (68.9 per cent) said that the School Dental Service was available through their school. Of these, 922,200 (80.8 per cent) had used the Service, 211,700 (18.6 per cent) had never used it and it was not known whether 6,800 (0.5 per cent) had ever used it.

EXPLANATORY NOTES

Introduction

In November 1983 a survey was conducted throughout Australia to obtain information about the dental behaviour patterns of children aged 2 to 14 years. Interviews were carried out over a period of two weeks commencing 7 November.

2. This publication contains only a summary of the more important results of the survey. More detailed estimates will be published shortly. The estimates shown are preliminary and are subject to revision.

Scope and coverage

3. The survey was conducted as part of the regular population survey, which is based on a multi-stage area sample of private dwellings (about 33,000 houses, flats, etc.) and covers about two-thirds of one per cent of the population of Australia. Certain groups of persons, such as visitors to private dwellings, occupants of non-private dwellings (hotels, motels etc.), members of the permanent defence forces, diplomatic personnel and persons from overseas holidaying in Australia, were excluded from the survey.

Survey method

4. Information was obtained, by carefully chosen and specially trained interviewers, from the person responsible for the child (usually the mother). Dental health questions were only asked about children aged 2 to 14 years.

Definitions

5. *Dental Consultation*—a consultation with a health professional in relation to teeth or gums. Includes consultations with dentists, orthodontists, dental therapists, dental nurses, doctors, etc.

6. *School Dental Service*—a government funded scheme, run in all States and Territories, to provide free dental care to children at school (government and private) until the end of primary education (except in Tasmania where it is also available in secondary school).

7. *School Dental Clinic*—clinic run by the School Dental Service. May be located at a school or a central office, or may be a mobile clinic.

8. *Private Dental Surgery*—a dental surgery which is independent of other health care facilities and which operates on a fee-for-service basis.

9. *Hospital*—includes dental hospitals.

10. *Dental clinic*—some States have government run clinics providing free dental care to holders of health concession cards and their dependants. Other clinics are run by organisations such as Trade Unions, and provide dental care to members free of charge, or at reduced rates.

Reliability of the estimates

11. Since the estimates are based on a sample, they are subject to sampling variability (see the Technical note for further details). Some figures in this publication are replaced by the symbol *. These have a relative standard error greater than 30 per cent, which is considered too high for the estimate to be used for most practical purposes.

12. In addition to sampling errors, the estimates are subject to non-sampling errors. These may be caused by errors in reporting (e.g. because some answers were based on memory, or because of misunderstanding or unwillingness of respondents to reveal all details) or errors arising during processing (e.g. coding, data recording). Such errors may occur in any statistical collection whether it is a full census count or a sample survey. Every effort is made to reduce non-sampling errors in the survey to a minimum by careful design and testing of questionnaires, by intensive training and supervision of interviewers, and by efficient operating procedures.

Related publications

13. Another ABS publication which may be of interest is *Sight, Hearing and Dental Health (persons aged 2 to 14 years) February-May 1979* (4337.0).

14. Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

Symbols and other usages

- .. not applicable
- * subject to sampling variability too high for most practical purposes. (See paragraph 11).

15. Where figures have been rounded, discrepancies may occur between sums of the component items and totals. Published percentages are calculated prior to rounding of figures and therefore some discrepancy may exist between these percentages and those that could be calculated from the rounded figures.

R. J. CAMERON
Australian Statistician

TABLE 1. PERSONS AGED 2 TO 14 YEARS: AGE AT WHICH THEY FIRST HAD A DENTAL CONSULTATION BY CURRENT AGE BY SEX, AUSTRALIA, NOVEMBER 1983

	Age group (years)			Total	Total per cent
	2-4	5-9	10-14		
	(' 000)				
MALES					
Age first had a dental consultation					
Less than 3 years	52.7	73.4	75.2	201.4	12.0
3 years but under 5 years	51.0	246.9	253.7	551.6	33.0
5 years but under 7 years	..	194.2	232.2	426.4	25.5
7 years old or more	..	29.2	108.3	137.5	8.2
Not known how old	*	3.3	16.3	19.6	1.2
Total having a consultation	103.7	547.1	685.8	1,336.5	79.9
Never had a consultation	250.0	72.3	13.2	335.5	20.1
Total	353.7	619.3	699.0	1,672.0	100.0
FEMALES					
Age first had a dental consultation					
Less than 3 years	47.1	65.7	76.9	189.7	11.9
3 years but under 5 years	48.4	234.1	254.3	536.8	33.6
5 years but under 7 years	..	194.7	210.1	404.8	25.3
7 years old or more	..	25.8	102.7	128.6	8.0
Not known how old	*	4.2	16.2	20.4	1.3
Total having a consultation	95.5	524.5	660.3	1,280.3	80.2
Never had a consultation	241.8	65.0	10.2	317.0	19.8
Total	337.3	589.5	670.5	1,597.3	100.0
PERSONS					
Age first had a dental consultation					
Less than 3 years	99.8	139.2	152.2	391.1	12.0
3 years but under 5 years	99.3	481.1	508.0	1,088.4	33.3
5 years but under 7 years	..	388.9	442.4	831.3	25.4
7 years old or more	..	55.0	211.1	266.0	8.1
Not known how old	*	7.5	32.5	40.0	1.2
Total having a consultation	199.2	1,071.6	1,346.1	2,616.9	80.0
Never had a consultation	491.8	137.2	23.4	652.5	20.0
Total	691.0	1,208.9	1,369.5	3,269.3	100.0

TABLE 2. PERSONS AGED 5 TO 14 YEARS(a) WHO HAVE NEVER HAD A DENTAL CONSULTATION: MAIN REASON NEVER HAD A DENTAL CONSULTATION, BY AGE, AUSTRALIA, NOVEMBER 1983

	Age group (years)		Total	Total per cent
	5-9	10-14		
	('000)			
Main reason never had a consultation				
No problems with teeth	117.3	21.8	139.0	86.6
Too young	8.2	*	8.2	5.1
Too expensive	4.5	*	5.5	3.4
Other	7.2	*	7.9	4.9
Total	137.2	23.4	160.7	100.0

(a) Main reason never had a dental consultation was not asked in respect of children aged less than 5 years.

TECHNICAL NOTE

Reliability of the estimates

Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings they are subject to sampling variability; that is, they may differ from the figures that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the *standard error*, which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included, and about nineteen chances in twenty that the difference will be less than two standard errors. Another measure of the likely difference is the *relative standard error*, which is obtained by expressing the standard errors as a percentage of the estimate.

2. Space does not allow for the separate indication of the standard error of all estimates in this publication. A table of standard errors and relative standard errors for numbers of persons is given below. As these figures are averages based on a range of estimates, they will not give a precise measure of the standard error but they will provide an indication of its magnitude.

3. An example of the calculation and use of standard errors is as follows: Table 1 shows that the estimated number of children aged 2 to 14 years in Australia who have never had a dental consultation is 652,500. Since

this estimate is between 500,000 and 1,000,000 in the table below, the standard error will be between 8,100 and 11,200 and can be approximated by 9,000 (rounded to the nearest 100). Therefore there are about two chances in three that the number of children would be between 643,500 and 661,500 and about nineteen chances in twenty that it would be between 634,500 and 670,500 if all dwellings had been included in the survey.

4. As the standard errors in the table show, the smaller the estimate the higher is the relative standard error. Very small estimates would thus be subject to such high standard errors (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. In this publication, only estimates with relative standard errors less than 30 per cent are considered sufficiently reliable for most purposes. Estimates with relative standard errors greater than 30 per cent have not been shown and although figures for these components can in some cases be derived by subtraction, they should not be regarded as reliable.

5. The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by interviewers and respondents and errors made in the coding and processing of data. Inaccuracies of this kind are referred to as the *non-sampling error*, and they may occur in any enumeration, whether it be a full count or only a sample.

STANDARD ERRORS OF ESTIMATES

Size of estimate	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia	
									—number—	Relative standard error (per cent)(a)
500						190				
1,000				340	340	270		360		
1,500			490	420	420	330		430	490	32.7
2,000			570	480	480	380	650	500	560	28.0
2,500	770	750	630	540	540	420	720	550	630	25.2
3,000	840	820	690	590	590	460	780	600	690	23.0
3,500	910	880	740	630	630	490	830	640	750	21.4
4,000	970	940	790	670	680	520	880	680	800	20.0
4,500	1,000	1,000	840	710	710	550	930	720	850	18.9
5,000	1,100	1,100	880	750	750	580	970	760	890	17.8
6,000	1,200	1,200	960	820	820	630	1,000	820	980	16.3
10,000	1,500	1,500	1,200	1,000	1,000	800	1,300	1,000	1,300	13.0
20,000	2,100	2,100	1,700	1,400	1,400	1,100	1,700	1,400	1,800	9.0
50,000	3,300	3,200	2,600	2,200	2,200	1,600		2,000	2,800	5.6
100,000	4,500	4,300	3,600	3,000	3,000				3,800	3.8
200,000	6,200	5,900	5,000		4,000				5,300	2.7
300,000	7,500	7,100							6,400	2.1
500,000	9,400								8,100	1.6
1,000,000									11,200	1.1
2,000,000									15,400	0.8
5,000,000									23,100	0.5

(a) In this publication, estimates with a standard error of more than 30 per cent have not been shown.