

AIHW Dental Statistics and Research Unit Research Report No. 37

# Dental prosthetist labour force in Australia, 2005



This report provides information on the dental prosthetist labour force in Australia based on the 2005 national dental labour force collection. Where appropriate, comparisons have been made with data from the most recent previous collection (2003).

**Main findings** 

- In 2005 there were an estimated 1,043 dental prosthetist registrations in Australia, of whom 862 were estimated to be practising in dental prosthetics.
- Since the 2003 labour force collection, the number of practising dental prosthetists has remained relatively stable, decreasing marginally by 2%.
- The practising rate of dental prosthetists ranged from 2.0 dental prosthetists per 100,000 population in South Australia to 10.3 in Tasmania.
- Across Remoteness Areas, the number of dental prosthetists per 100,000 population was higher in Inner Regional areas (4.8) than in Remote areas (0.6).
- The average age of dental prosthetists was 50.3 years and only 9.8% were female.
- The majority (84.5%) of practising dental prosthetists were self-employed.
- On average, dental prosthetists worked 42.6 hours per week and the majority (88%) worked full-time (35 hours per week or more).
- Dental prosthetists aged 30-39 years worked longer hours than those aged 60 years and over.

### **Overall numbers**

In 2005 there were an estimated 1,043 dental prosthetists registered in Australia. Of the total

registrations, an estimated 38 were registered in more than one jurisdiction and therefore considered as multiple registrations; 10 were on extended leave and 4 were working overseas. A further 15 were not in paid work, 67 were working but not in dental prosthetics and 47 were retired. The remaining 862 were working as dental prosthetists (Table 1).

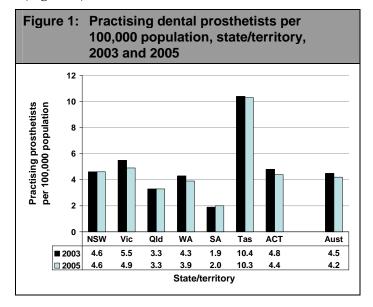
Between 2003 and 2005 the total number of registered dental prosthetists remained steady, decreasing slightly from 1,057 to 1,043. The same pattern emerged for practising dental prosthetists, decreasing from 878 to 862.

Table 1: Dental prosthetists, practice status by state/territory, 2005										
	NSW	Vic	Qld	WA	SA	Tas	ACT	Aust		
Working mainly or solely in state/territory	310	247	133	77	31	50	14	862		
Working mainly or solely in another state/territory	16	7	5	4	3	n.p.	n.p.	38		
On leave for 3 months or more	3	7		_	_	_	_	10		
Overseas	n.p.	_	3	_	_	_	_	4		
Not working	6	n.p.	3	4	_	_	_	15		
Working, but not as a prosthetist	43	12	_	10	n.p.	_	_	67		
Retired	27	5	_	12	n.p.	n.p.	_	47		
Total	408	279	143	108	37	52	16	1,043		
Notes										
Column/row totals may not sum to total because of rounding of estimates.										
2. Values less than 3 are not published (n.p.).										

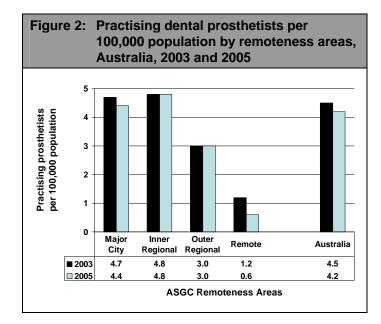
# **Regional distribution**

The number of practising dental prosthetists per 100,000 population decreased from 4.5 in 2003 to 4.2 in 2005. Across most jurisdictions there was marginal, if any, change. South Australia was the only state to record a slight increase, from 1.9 in 2003 to 2.0 in 2005. In 2005 the number of practising dental prosthetists per 100,000 ranged

from 2.0 in South Australia to 10.3 in Tasmania (Figure 1).



100,000 Practising dental prosthetists per population also varied by Remoteness Areas. In 2005 the number of practising dental prosthetists per 100,000 population ranged from 0.6 in Remote areas to 4.8 in Inner Regional areas. Between 2003 and 2005 there were decreases in practising rates in Major Cities from 4.7 to 4.4, and in Remote regions from 1.2 to 0.6. There was no change in the remaining regions (Figure 2).



## **Demographic characteristics**

Dental prosthetics remains a predominantly male profession with females comprising only 9.8% of all practising dental prosthetists. Between 2003 there was a marginal increase

(0.9 percentage points) in the percentage of female dental prosthetists.

In 2005 the average age of dental prosthetists was 50.3 years, a slight increase from 49.0 years in 2003. On average, males were older than females, a trend that was consistent across jurisdictions.

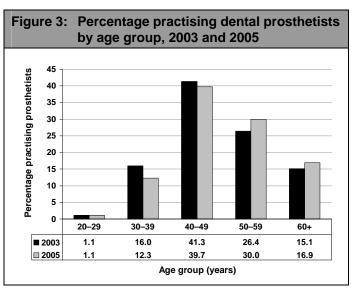
The largest percentage of dental prosthetists was in the 40-49 years age group, making up over one-third (39.7%) of all practising dental prosthetists. The smallest percentage was in the youngest age group, 20–29 years (Table 2).

Table 2: Practising dental prosthetists by age group and state/territory, 2005										
Age group	·			·						
(years)	NSW	Vic	Qld	WA	SA	Tas	ACT	Aust		
20–29	6	n.p.	_	_	n.p.	_	_	10		
30–39	50	26	8	12	n.p.	9	_	106		
40–49	122	99	52	37	9	18	5	342		
50-59	84	80	43	16	12	16	6	258		
60+	48	41	29	12	6	6	3	146		
Total	310	247	133	77	31	50	14	862		
Percentage female										
Female	11.9	8.3	7.9	10.5	5.0	14.3	_	9.8		
Average age (years)										
Males	49.6	51.0	52.3	50.7	54.6	48.7	55.1	50.8		
Females	46.5	43.8	51.3	42.5	35.0	45.1	_	45.7		
Persons	49.2	50.4	52.2	49.8	53.6	48.2	55.1	50.3		
Notes										

Notes

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Between 2003 and 2005 there was a slight shift towards an older age distribution, as indicated by an increase in percentage in the two older age groups, 50-59 years and 60 years and over (Figure 3).



#### **Practice characteristics**

In 2005 the majority (84.5%) of practising dental prosthetists were self-employed, 7.4% worked in a government clinic or laboratory and 4.0% were employed in private practice. Overall, 89.8% of dental prosthetists worked in the private sector, a marginal decrease from 91.8% in 2003 (Table 3).

Table 3: Number of practising dental prosthetists, practice type by state/territory, 2005 Per NSW Vic Qld WA SA Tas **ACT Aust** cent Self-employed 263 213 105 73 25 13 729 84.5 Employee in private practice 10 4 34 4.0 Employee in commercial laboratory 11 1.3 Government clinic/laboratory 21 64 7.4 12 18 n.p. n.p. Public education institution 15 1.7 Other 4 9 1.0 Total 310 247 133 77 31 50 14 862 100 Notes Column/row totals may not sum to total because of rounding of estimates Values less than 3 are not published (n.p).

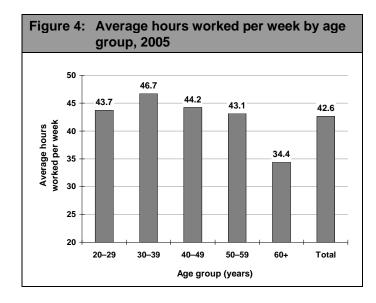
# Practice activity

In 2005 less than one-quarter (22.0%) of all practising dental prosthetists worked part-time, a marginal increase since 2003 (19.8%). Across jurisdictions the percentage working part-time ranged from 0% in the Australian Capital Territory to 36.8% in Western Australia. Females were more likely to work part-time (41.1%) than males (19.9%) (Table 4).

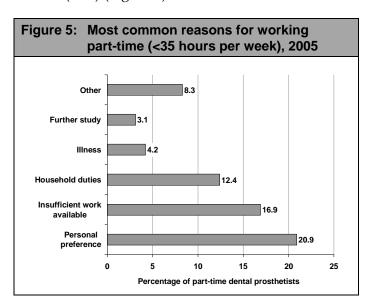
Table 4: Practising dental prosthetists, hours worked by state/territory, 2005 **NSW** Vic Qld WA SA Tas **ACT** Aust Per cent Hours <20 9.0 4.0 18.4 5.0 7.5 5.7 8.2 20-29 11.4 5.0 10.5 10.0 2.0 3.4 7.3 20.2 33.3 30-39 16.6 15.8 13.2 20.0 28.6 18.6 40-49 40.7 33.3 33.7 41.6 21.1 40.0 40.8 36.4 50-59 20.2 20.7 19.8 15.8 15.0 18.4 11.1 19.4 60 +8.8 10.3 12.9 21.1 10.0 2.0 22.2 10.8 **Total** 100 100 100 100 100 100 100 100 Average hours usually worked per week 40.4 41.3 40.4 44.2 42.6 43.1 42.5 43.5 Percentage working part-time<sup>(a)</sup> 22.9 35.3 16.7 19.9 Males 15.0 14.0 31.6 41.1 34.8 58.4 37.5 50.1 28.6 Females **Persons** 24.4 18.6 15.8 36.8 30.0 18.4 22.0 (a) Part-time defined as working less than 35 hours per week

The largest percentage (36.4%) of dental prosthetists worked between 40 and 49 hours per week. Only 7.5% worked less than 20 hours per week. On average, dental prosthetists worked 42.6 hours per week, a marginal decrease from 43.0 hours in 2003. In 2005 the average hours worked per week ranged from 40.4 hours in Western Australia and Tasmania to 44.2 hours in the Australian Capital Territory (Table 4).

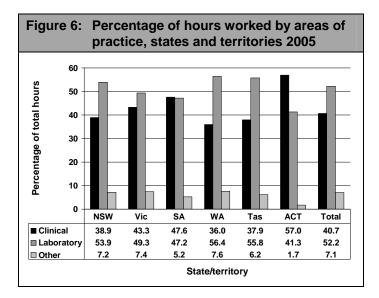
There was some variation in the average hours worked per week by age group. Dental prosthetists in the 30–39 years age group worked on average the longest week (46.7 hours) while those 60 years and over worked the shortest week (34.4 hours) (Figure 4).



Dental prosthetists working part-time (less than 35 hours per week) were asked to indicate their major reasons for doing so. The most common reasons given were personal preference (20.9%), insufficient work available (16.9%) and household duties (12.4) (Figure 5).



Hours dedicated to various areas of practice were totalled for all practice locations reported. Just over half (52.2%) of the hours worked were dedicated to laboratory practice, 40.7% to clinical practice and the remaining 7.1% to other areas including administration/management, research and teaching/education (Figure 6). Across most jurisdictions, the percentage of hours dedicated to laboratory practice was greater than the hours dedicated to clinical practice.



#### **Data collection**

Data were collected in the second half of 2005. The collection was conducted in all states and territories with the exception of the Northern Territory, where dental prosthetists have only recently been permitted to practise. Questionnaires were administered, in conjunction with registration renewal, with the assistance of the dental boards and state health departments. For New South Wales and Western Australia, data were collected by direct mail out from the AIHW Dental Statistics and Research Unit.

An overall response rate of 65% was achieved, with rates ranging from 57% in Western Australia to 98% in Tasmania (Table 5).

For the purposes of generating estimates, it was assumed that non-respondents had the same characteristics as respondents; hence, data were weighted up to the number of dental prosthetists registered in each state/territory.

Table 5: Dental prosthetist labour force collection, effective response rate by state/territory, 2005

	NSW	Vic	Qld	WA	SA	Tas	ACT	Aust
Total registered	408	279	143	108	37	52	16	1,043
Return to sender	5	_	_	15	_	_	_	20
Respondents	254	164	109	53	24	51	10	665
Response rate (%)	63.0	58.8	76.2	57.0	64.9	98.1	62.5	65.0

The questionnaire included items on demographic characteristics, practice status and practice characteristics. Data on hours worked for each location were also collected and summed to give the total hours usually worked per week.

Due to differences in the questionnaire used in Queensland, analysis of hours worked by area of practice could not be performed. Further, previous reports have provided information on the production and repair of dentures. In 2005, there was inconsistency in the collection of these items and therefore they have not been presented in this report.

#### Additional data sources

Teusner DN, Chrisopoulos S & Brennan DS 2007. Geographic distribution of the Australian dental labour force, 2003. Cat. no. DEN 168. (Dental Statistics and Research Series no. 37.) Canberra: AIHW.

Australian Bureau of Statistics 2005. Population estimates by age and sex, Australian States and Territories, June 2005. Cat no. 3201.0.

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

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