

## Dental Prosthetist Labour Force, 1998

**T**his Newsletter provides information on the dental prosthetist labour force in Australia. Data were collected for the national dental labour force collection with all dental prosthetists receiving a mail questionnaire.

### Data Collection

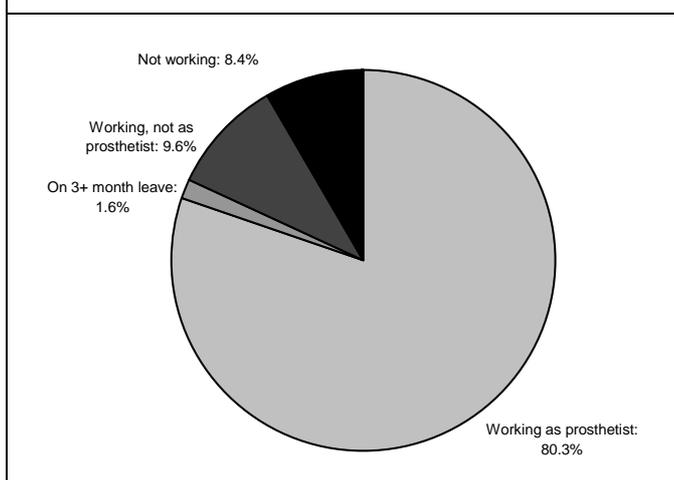
This data collection was conducted in the last quarter of 1998 and the first quarter of 1999 in all States of Australia and the Australian Capital Territory. Dental prosthetists are registered with State/Territory Dental Prosthetist Boards (except in the Northern Territory) and these registers were used in the data collection.

The data collection was supported by the Australian Dental Prosthetists and Dental Technicians Society and a response rate of 64.6% was achieved. The questionnaire included data items on practice status; demographic characteristics; education background; location, area and type of practice; hours worked; reasons if working in casual or less than full-time work and musculoskeletal complaints.

### Practice Status

Figure 1 shows that the majority (80.3%) of dental prosthetists are in practice in Australia with an additional 1.6% on leave for 3 months or longer.

**Figure 1: Practice status, 1998**



It can be seen from Table 1 and Figure 2 that Tasmania has the highest rate of dental prosthetists per 100,000 population, while South Australia has the lowest rate per 100,000 population. The national practising rate is 4.2 and the full-time equivalent (FTE) rate is 4.3.

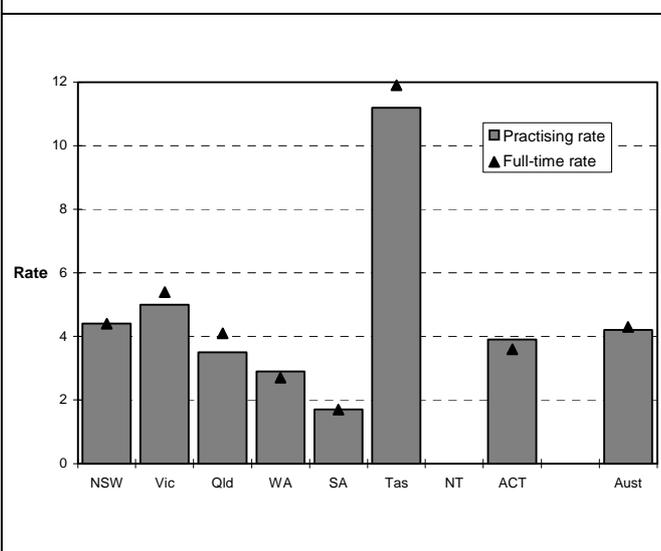
The FTE rate was calculated by multiplying the practising rate by the mean hours worked per week as a dental prosthetist, and dividing by 37.5 (a standard week of 7.5 hours per day, 5 days per week).

**Table 1: Practice status by State/Territory, 1998**

	NSW	Vic	Qld	WA	SA	Tas	ACT	Aust
<b>Working:</b>								
Dental prosthetist 3+ months' leave	283	234	123	54	26	53	12	785
Not as dental prosthetist	6	1	3	2	2	-	2	16
	47	17	13	14	1	-	2	94
<b>Not working</b>	32	23	6	15	4	1	1	82
<b>Total Practising rate</b>	<b>368</b>	<b>275</b>	<b>145</b>	<b>85</b>	<b>33</b>	<b>54</b>	<b>17</b>	<b>977</b>
<b>FTE rate</b>	<b>4.4</b>	<b>5.0</b>	<b>3.5</b>	<b>2.9</b>	<b>1.7</b>	<b>11.2</b>	<b>3.9</b>	<b>4.2</b>
	<b>4.4</b>	<b>5.4</b>	<b>4.1</b>	<b>2.7</b>	<b>1.7</b>	<b>11.9</b>	<b>3.6</b>	<b>4.3</b>

It can also be seen from Figure 2 that, with the exception of Tasmania and Queensland, there is a consistent pattern where the practising rate and the FTE rate are at similar levels. In Tasmania and Queensland the practising and FTE rates differ the most, with the mean hours worked per week being above full-time employment.

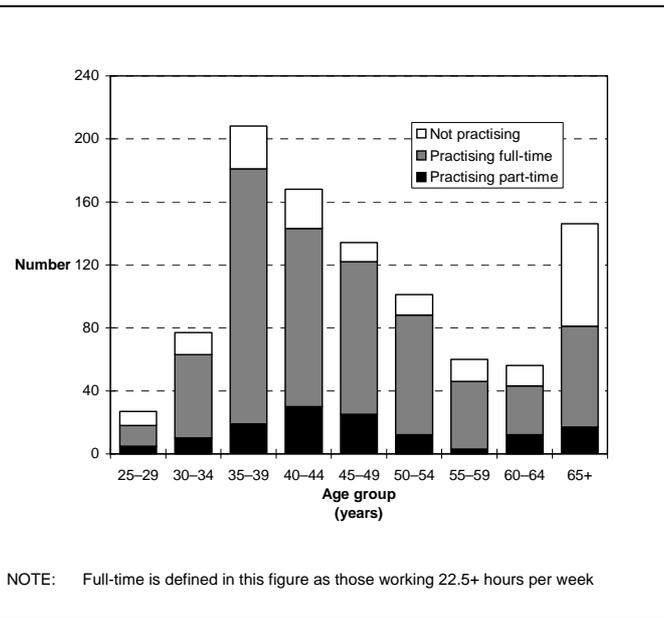
**Figure 2: Practising and full-time equivalent prosthetists, State/Territory, rate per 100,000 population, 1998**



## Demographic Background and Qualifications

The majority of dental prosthetists in practice in Australia are aged in the range 35–54 years with a substantial group aged 35–39 years (Figure 3). The median age is 45 years. It can also be seen that the largest group of dental prosthetists who are not in practice are aged 65+ years. There is also a large group aged 35–44 years who are not practising. The largest group of part-time prosthetists are aged 35–49 years.

**Figure 3: Age by practice status, full- and part-time, 1998**



The majority (74.6%) of prosthetists were born in Australia (Figure 4). In addition, A further 10.9% were born in English-speaking countries. It should be noted that the majority of dental prosthetists were male with only 9.3% female. In addition, there were only two dental prosthetists who were Indigenous Australians.

**Figure 4: Country of birth, 1998**

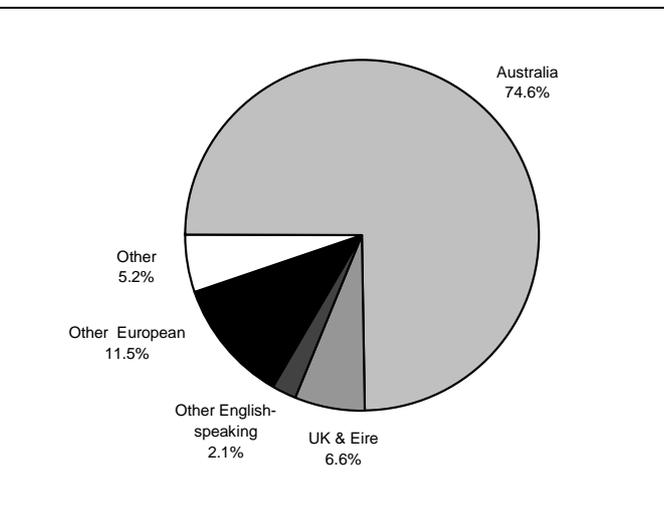
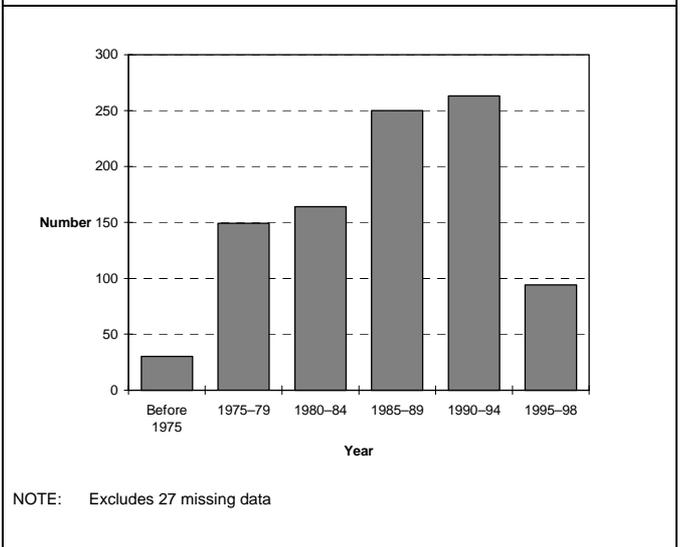


Figure 5 presents the year obtained prosthetist qualification in five-year groupings from 1975. It can be seen that the majority (52.5%) obtained their qualification in the decade from 1985 to 1994. Although the last group (1995–98) does not cover as many years, there has been a substantial decrease in recent years in the number obtaining a prosthetist qualification.

**Figure 5: Year obtained qualification, 1998**

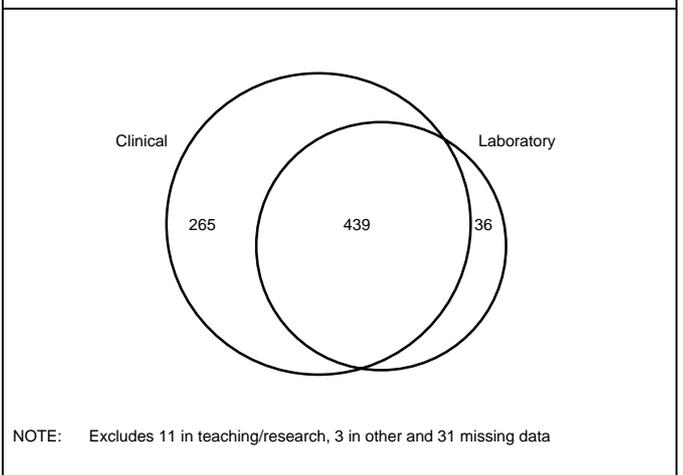


## Practice Activity

From Figure 6 it can be seen that the predominant practice of dental prosthetists is jointly clinical and laboratory (439 or 55.9%). In addition, 265 (33.8%) were in mainly clinical (own clients) practice.

The majority (69.8%) practice at one location, with nearly a quarter (23.3%) practising at two locations and 6.9% practising at three or more locations. At the main practice location the majority (85.7%) were self-employed. An additional 33 (4.2%) were employees in the private sector while 48 (6.1%) were employed in the public sector and nine (1.1%) were employed in tertiary education institutions.

**Figure 6: Area of main practice, 1998**

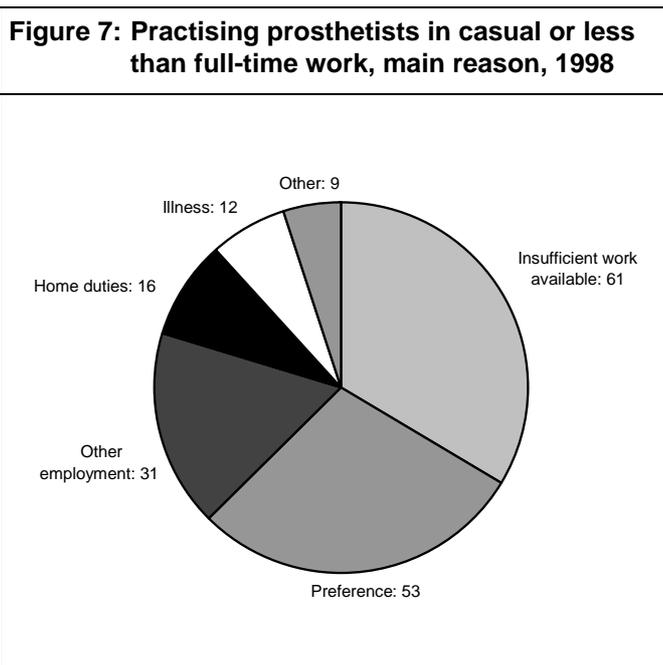


The majority of dental prosthetists (60.8%) work 40 hours or more per week (Table 2) including over a quarter (26.8%) reported working 50 hours or more per week as a prosthetist. The mean hours per week (38.9 hours) is just above the standard FTE level of 37.5 hours. In Queensland this level (43.5 hours) is well above the national average. The Australian Capital Territory (34.2 hours) and Western Australia (34.4 hours) were the lowest, showing almost on average more than a working day per week difference between the States and Territories.

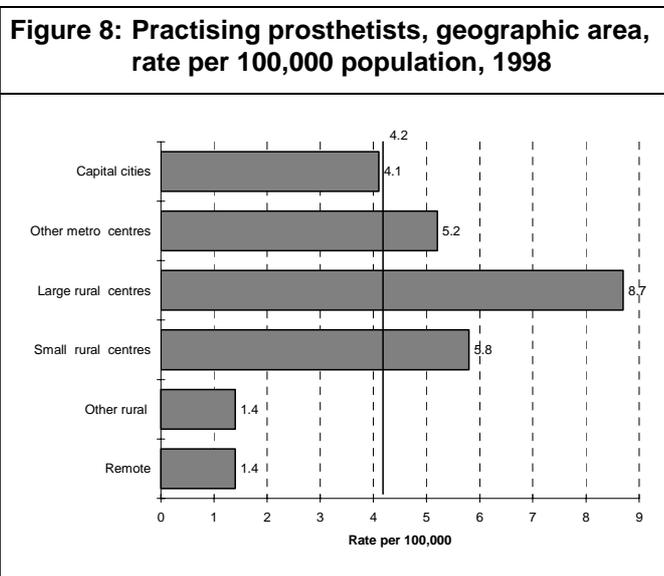
**Table 2: Practising prosthetists, hours worked by State/Territory, 1998**

Hours per week	NSW	Vic	Qld	WA	SA	Tas	ACT	Aust
<10	11	6	3	5	1	2	2	30
10-19	30	19	9	12	-	2	-	72
20-29	32	21	6	2	3	3	1	68
30-39	38	24	13	2	3	18	2	100
40-49	82	82	45	19	15	16	5	264
50+	74	68	43	12	1	10	2	210
Missing	16	14	4	2	3	2	-	41
<b>Total</b>	<b>283</b>	<b>234</b>	<b>123</b>	<b>54</b>	<b>26</b>	<b>53</b>	<b>12</b>	<b>785</b>
<b>Mean</b>	<b>36.9</b>	<b>40.3</b>	<b>43.5</b>	<b>34.4</b>	<b>35.9</b>	<b>39.5</b>	<b>34.2</b>	<b>38.9</b>

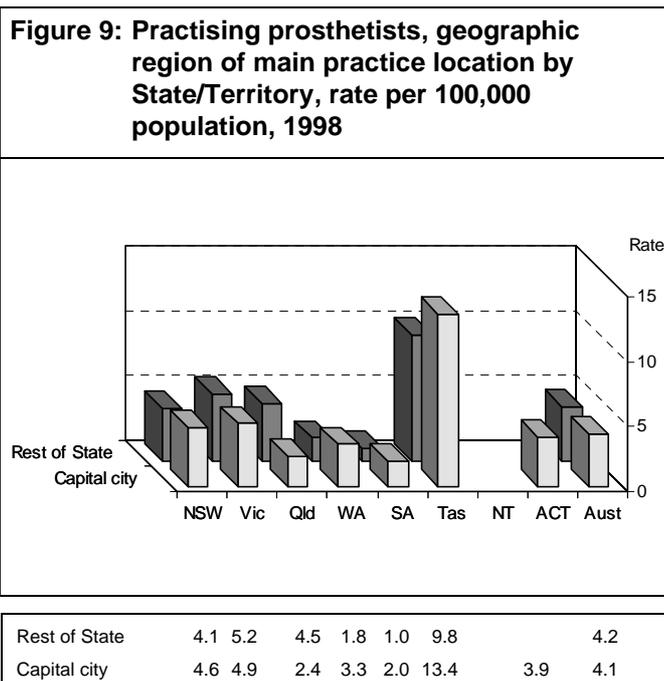
Respondents who worked on a casual basis or less than 35 hours per week were asked to provide the reasons for doing so (Figure 7). Of the 150 (19.1%) who answered this question, there were 182 responses (some provided more than one response). Insufficient work available in prosthetics (61 or 33.5%) and preference (53 or 29.1%) were the main reasons provided followed by other employment (31 or 17.0%).



The distribution of the rate of practising prosthetists per 100,000 population by geographic area is presented in Figure 8. It can be seen that the two rural centre categories have the highest rate (8.7 and 5.8 respectively) while the other rural and remote (both 1.4) were substantially below the national rate of 4.2 per 100,000.



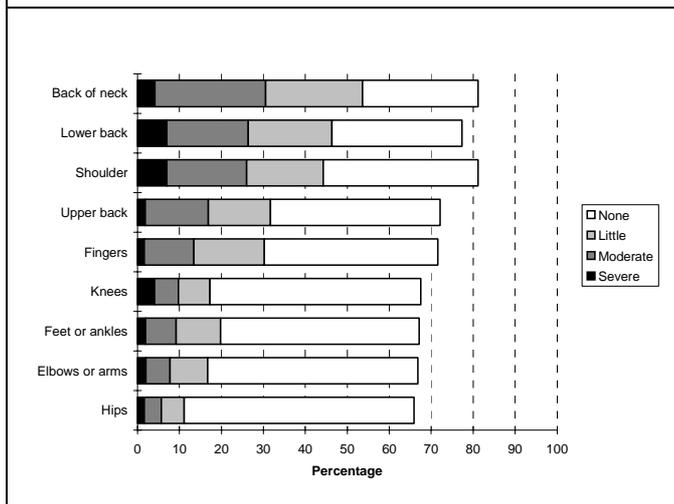
The geographic distribution of practising prosthetists in Australia by capital city/rest of State is presented in Figure 9. There are clear differences in the rate per 100,000 population between the capital cities with Hobart (13.4) far higher than all others. Brisbane (2.4) and Adelaide (2.0) have the lowest rate per 100,000 population. It can also be seen that the non-capital city regions have a rate (4.2) that is similar to the rate for the capital cities (4.1).



## Musculoskeletal Complaints

The intensity of musculoskeletal complaints is presented in Figure 10 for practising prosthetists. For those reporting severe and moderate complaints the highest levels occurred in back of neck (30.5%), lower back (26.4%), shoulder (21.0%) and upper back (16.9%). Well over half (55.5%) reported at least one severe or moderate complaint of some kind.

**Figure 10: Practising prosthetists, musculoskeletal complaints, 1998**



## Summary

From the 1998 national dental prosthetist labour force data collection it can be seen that:

- the majority are working as prosthetists (80.3%);
- nationally there amounts to a rate of 4.2 practising prosthetists per 100,000 population;
- the median age is 45 years with a substantial group aged 35–44 years;
- the greatest proportion were born in English-speaking countries with 74.6% Australian-born;
- the majority were male with only 9.3% female dental prosthetists;

- there were two dental prosthetists who were Indigenous Australians;
- the majority (58.5%) obtained their qualification in the decade from 1985 to 1994;
- the great majority (85.7%) are self-employed and only 6.1% are employed in the public sector;
- clinical practice dominates the area of practice although over half (55.9%) were in joint clinical and laboratory practice;
- there were differences in the level of activity (mean hours per week) between the States/Territories with Queensland the highest (43.5 hours per week) and the Australian Capital Territory (34.2 hours) and Western Australia (34.4 hours) the lowest;
- insufficient work available in prosthetics (61 or 33.5%) and preference (53 or 29.1%) were the main reasons provided by those who were in casual employment or who worked less than 35 hours per week;
- large and small rural centres (8.7 and 5.8 per 100,000 respectively) were the regions with the highest rate while the other rural and remote (both 1.4) were substantially below the national rate (4.2); and
- Hobart (13.4 per 100,000), Melbourne (4.9) and Sydney (4.6) are the capital cities in Australia with the highest rates of prosthetists per 100,000 population while Brisbane (2.4) and Adelaide (2.0) have the lowest rates.

## Acknowledgements

The 1998 national dental prosthetist labour force data collection was supported by the Australian Dental Prosthetists and Dental Technicians Society and the Conference of Regulating Authorities – Dental Technicians and Dental Prosthetists. The assistance of the responding dental prosthetists is greatly appreciated.

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

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