

**Selected
Health Professional
Workforce
New Zealand
2000**



New Zealand Health Information Service
November 2001



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Foreword

The New Zealand Health Information Service has maintained the New Zealand Selected Health Professional Workforce data collection since 1995. Our objectives for the collection are to maintain the database and also to ensure that information from it is available to customers in a usable and user-friendly format.

This publication is based on survey data, and so it is important that readers consider the response rates when using the data. The report provides a comprehensive summary of available workforce statistics on New Zealand Selected Health Professionals. More in-depth data is available on request.



Jim Fraser
New Zealand Health Information Service
November 2001



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Special thanks are also due to the external peer reviewers, who reviewed the draft manuscript and provided welcome comment and suggestions.

Most of all, the New Zealand Health Information Service would like to thank all the respondents from the selected health professions who completed the 2000 health workforce surveys.



Introduction

Active selected health professional workforce

This publication contains data about the active selected health professional workforce in New Zealand in both public and private sectors who purchased an Annual Practising Certificate (APC) or Annual Licence (AL) between March 2000 and September 2000. The criteria that must be met in order for any of the selected health professionals to be defined as active is that they:

- hold a current Annual Practising Certificate (APC) or Annual Licence (AL), and
- have reported in their respective workforce survey that they are working in their profession.



Respondents were considered to be working in their profession if they responded to at least one question on the survey regarding their employer, work type, or hours that they work.

Health professionals who were working on a part-time or casual basis are included as active and are therefore included in the data.

Data collection process

The data for this publication is based on a workforce questionnaire that accompanied the APC or AL invoice sent by the Registration Boards Secretariat. The applications were sent in February 2000 to those on the register for each health profession on behalf of the New Zealand Health Information Service (NZHIS). The data was entered and quality assured by NZHIS.

The data is based on surveys that have varying response rates, they should not be interpreted as a definitive description of each profession. Included in each chapter is the appropriate response rate that helps to put the resulting data in context. Each chapter also includes an indication of the number of APC and AL holders who did not respond to the survey. It is not known if some or all of these are actively working in their profession.



This publication builds on the publications *The New Zealand Health Workforce 1994*, *New Zealand Medical Practitioners 2000* and *New Zealand Nurses and Midwives 1999*. In earlier publications there have been additional data sources, including the National Payroll System, but because of restructuring in the health sector these information resources are no longer available.

Optometrists

There were 508 optometrists who purchased Annual Practising Certificates (APCs) between March and September 2000. A health workforce survey was included with each invoice sent out in February 2000.

These statistics are based on the 360 active (working) optometrists who responded to the health workforce survey. This represents 70.9 percent of optometrists who are 2000 APC holders. A further 9.6 percent of optometrists responded to the 2000 survey but did not report that they were actively working. It is not known if the APC holders who did not respond to the survey (19.5 percent) are actively working as optometrists.

Table 1 shows the number of APCs purchased by optometrists each year. Although not all of those purchasing APCs are actively working in the profession, this is an indicator of the size of the optometrist workforce. The number of APCs purchased has increased by 50.7 percent from 337 to 508 over the last 10 years.

Table 1: Number of Annual Practising Certificates purchased by optometrists, 1991/92–2000/01

| Year | Number of APCs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|--------------------------|--|----------------------------|
| 1991/92 | 337 | 303 | 89.9 |
| 1992/93 | 330 | * | * |
| 1993/94 | 346 | 269 | 77.7 |
| 1994/95 | 370 | 279 | 75.4 |
| 1995/96 | 393 | 319 | 81.2 |
| 1996/97 | 407 | 328 | 80.6 |
| 1997/98 | 415 | 321 | 77.3 |
| 1998/99 | 457 | 344 | 75.3 |
| 1999/2000 | 468 | 329 | 70.3 |
| 2000/01 | 508 | 360 | 70.9 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

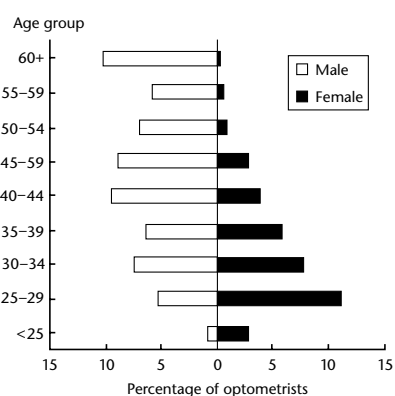
The active optometrist workforce was predominantly male in 2000. Males accounted for 61.7 percent of optometrists as depicted in Table 2 and Figure 1.

Table 2: Age and sex distribution of active optometrists, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 3 | 19 | 27 | 23 | 34 | 32 | 25 | 21 | 37 | 1 | 222 |
| Female | 10 | 40 | 28 | 21 | 14 | 10 | 3 | 2 | 1 | 2 | 131 |
| Not reported | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 3 | 7 |
| Total | 13 | 59 | 55 | 44 | 48 | 44 | 28 | 24 | 39 | 6 | 360 |

Fig 1:
Age and sex distribution of active optometrists, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 3 shows prioritised ethnicity of active optometrists (refer to ethnicity notes, Appendix 1). The majority of the active optometrists (78.9 percent) identified themselves as belonging to the New Zealand/Pākehā ethnic group.

Table 3: Prioritised ethnicity of optometrists, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 284 | 78.9 |
| Other European | 36 | 10.0 |
| South East Asian | 2 | 0.6 |
| Chinese | 21 | 5.8 |
| Indian | 5 | 1.4 |
| Other Asian | 2 | 0.6 |
| Other Pacific | 1 | 0.3 |
| Other | 3 | 0.8 |
| Not reported | 6 | 1.7 |
| Total | 360 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

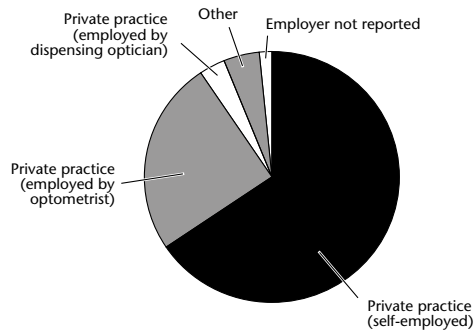
Employment setting

Table 4 illustrates the main employment setting of both male and female active optometrists. Figure 2 (page 14) shows that the majority (65.3 percent) of active optometrists were self-employed in private practice. There were only four optometrists who reported that their main employment was with a CHE (Crown health enterprise).

Table 4: Main employment setting of active optometrists, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|--|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 2 | 2 | 0 | 4 | 1.1 |
| Private practice (self-employed) | 173 | 57 | 5 | 235 | 65.3 |
| Private practice (employed by optometrist) | 30 | 59 | 2 | 91 | 25.3 |
| Private practice (employed by dispensing optician) | 8 | 4 | 0 | 12 | 3.3 |
| University | 4 | 4 | 0 | 8 | 2.2 |
| Other | 2 | 3 | 0 | 5 | 1.4 |
| Not reported | 3 | 2 | 0 | 5 | 1.4 |
| Total | 222 | 131 | 7 | 360 | 100.0 |

Fig 2:
Main employment setting of active optometrists, 2000



Work type

General optometry was reported as the work type for 60.5 percent of respondents when working in their main employment setting (see Table 5). Management was the second most frequently reported work type, at 25.4 percent. These results are consistent with the large number of optometrists who are self-employed in private practice.

Table 5: Work type of active optometrists in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|-------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| General optometry | 215 | 127 | 6 | 348 | 60.5 |
| Management | 106 | 37 | 3 | 146 | 25.4 |
| Study/research | 38 | 10 | 1 | 49 | 8.5 |
| Teaching | 11 | 4 | 0 | 15 | 2.6 |
| Other | 5 | 4 | 1 | 10 | 1.7 |
| Not reported | 5 | 2 | 0 | 7 | 1.2 |
| Total | 380 | 184 | 11 | 575 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Table 6 shows the main employment setting by work type of the 360 active optometrists who responded to the 2000 survey. Each optometrist could specify more than one work type and Tables 5 and 6 show that many optometrists worked in more than one field within their main employment setting.

Table 6: Work type of active optometrists by main employment setting, 2000

| Employment setting by work type | General optometry | Teaching | Study/research | Management | Other | Not reported | Total |
|--|-------------------|----------|----------------|------------|-------|--------------|-------|
| CHE | 4 | 1 | 1 | 0 | 0 | 0 | 6 |
| Private practice (self-employed) | 229 | 7 | 38 | 135 | 9 | 5 | 423 |
| Private practice (employed by an optometrist) | 90 | 1 | 4 | 7 | 1 | 1 | 104 |
| Private practice (employed by a dispensing optician) | 12 | 0 | 0 | 1 | 0 | 0 | 13 |
| University | 4 | 6 | 6 | 2 | 0 | 0 | 18 |
| Other | 4 | 0 | 0 | 0 | 0 | 1 | 5 |
| Not reported | 5 | 0 | 0 | 1 | 0 | 0 | 6 |
| Total | 348 | 15 | 49 | 146 | 10 | 7 | 575 |

Country of qualification

Table 7 shows most of the active optometrists in New Zealand, (79.4 percent) were New Zealand graduates. Most overseas graduates qualified in the United Kingdom (12.5 percent) and South Africa (3.6 percent).

Table 7: Country of qualification of active optometrists, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 286 | 79.4 |
| United Kingdom | 45 | 12.5 |
| Australia | 10 | 2.8 |
| South Africa | 13 | 3.6 |
| Not reported | 6 | 1.7 |
| Total | 360 | 100.0 |

Hours worked

Table 8 shows the number of full-time equivalent (FTE) optometrists by geographic region. It shows that on average there were 9.2 active optometrists per 100 000 estimated population. Wellington and Otago had the highest rates and Taranaki and Southland the lowest.

Table 8: Geographic distribution of active optometrists by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|----------|-------|-----------------------------|
| Northland | 355.0 | 8.9 | 6.1 |
| Auckland | 4742.3 | 118.6 | 9.8 |
| Waikato | 872.5 | 21.8 | 6.2 |
| Bay of Plenty | 1024.5 | 25.6 | 10.4 |
| Tairāwhiti | 123.0 | 3.1 | 6.6 |
| Hawke's Bay | 582.0 | 14.6 | 10.0 |
| Taranaki | 238.0 | 6.0 | 5.7 |
| Manawatu-Wanganui | 931.0 | 23.3 | 8.6 |
| Wellington | 1831.0 | 45.8 | 11.8 |
| Nelson-Marlborough | 472.0 | 11.8 | 9.7 |
| West Coast | 97.0 | 2.4 | 7.5 |
| Canterbury | 1582.0 | 39.6 | 8.1 |
| Otago | 822.0 | 20.6 | 10.9 |
| Southland | 195.0 | 4.9 | 5.2 |
| Not reported | 210.5 | 5.3 | - |
| Total | 14 077.8 | 351.9 | 9.2 |

Table 9 shows the number of FTE optometrists across main employment setting by work type for 2000. This shows that general optometry was reported to account for 88.1 percent of working time. On average, optometrists reported that they worked approximately 39.1 hours per week.

Table 9: Work type of active optometrists at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|-------------------|----------|-------|------------|
| General optometry | 12 402.3 | 310.1 | 88.1 |
| Teaching | 245.5 | 6.1 | 1.7 |
| Study/research | 248.0 | 6.2 | 1.8 |
| Management | 1055.0 | 26.4 | 7.5 |
| Other | 87.0 | 2.2 | 0.6 |
| Not reported | 40.0 | 1.0 | 0.3 |
| Total | 14 077.8 | 351.9 | 100.0 |

Dispensing opticians

There were 96 dispensing opticians who purchased Annual Practising Certificates (APCs) between March and September 2000. A health workforce survey was included with each invoice sent out in February 2000.

These statistics are based on the 49 active (working) dispensing opticians who responded to the health workforce survey. This represents 51.0 percent of dispensing opticians who are 2000 APC holders. A further 4.2 percent of dispensing opticians responded to the 2000 survey but did not report that they were actively working. It is not known if the APC holders who did not respond to the survey (44.8 percent) are actively working as dispensing opticians.

Table 10 shows the number of APCs purchased by dispensing opticians each year. Although not all of those purchasing APCs are actively working in the profession, this is an indicator of the size of the dispensing optician workforce. The number of APCs purchased has increase 92.0 percent from 50 to 96 over the last 10 years.

Table 10: Number of Annual Practising Certificates purchased by dispensing opticians, 1991/92–2000/01

| Year | Number of APCs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|--------------------------|--|----------------------------|
| 1991/92 | 50 | 50 | 100.0 |
| 1992/93 | 53 | * | * |
| 1993/94 | 56 | 43 | 76.8 |
| 1994/95 | 63 | 37 | 58.7 |
| 1995/96 | 73 | 57 | 78.1 |
| 1996/97 | 76 | 49 | 64.5 |
| 1997/98 | 77 | 58 | 75.3 |
| 1998/99 | 90 | 56 | 62.2 |
| 1999/2000 | 85 | 57 | 67.1 |
| 2000/01 | 96 | 49 | 51.0 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

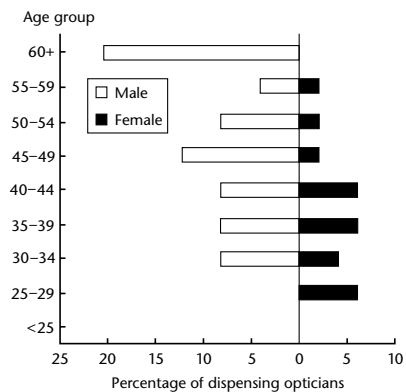
The active dispensing optician workforce was predominantly male. Males accounted for 69.4 percent of dispensing opticians as depicted in Table 11 and Figure 3.

Table 11: Age and sex distribution of active dispensing opticians, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 0 | 0 | 4 | 4 | 4 | 6 | 4 | 2 | 10 | 0 | 34 |
| Female | 1 | 3 | 2 | 3 | 3 | 1 | 1 | 1 | 0 | 0 | 15 |
| Not reported | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 3 | 6 | 7 | 7 | 7 | 5 | 3 | 10 | 0 | 49 |

Fig 3:
Age and sex distribution of active dispensing opticians, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 12 (page 20) shows prioritised ethnicity of active dispensing opticians (refer to ethnicity notes, Appendix 1, page 83). The majority of the active dispensing opticians identified themselves as belonging to the New Zealand/Pākehā ethnic group (75.5 percent).

Table 12: Prioritised ethnicity of active dispensing opticians, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 37 | 75.5 |
| Other European | 11 | 22.4 |
| Other | 1 | 2.0 |
| Not reported | 0 | 0.0 |
| Total | 49 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Employment setting

Table 13 illustrates the main employment setting of both male and female active dispensing opticians. Figure 4 shows that the majority (40.8 percent) of active dispensing opticians were self-employed in private practice. This was the main employment setting for 26.7 percent of females and 47.1 percent of males.

Table 13: Main employment setting of active dispensing opticians, by sex, 2000

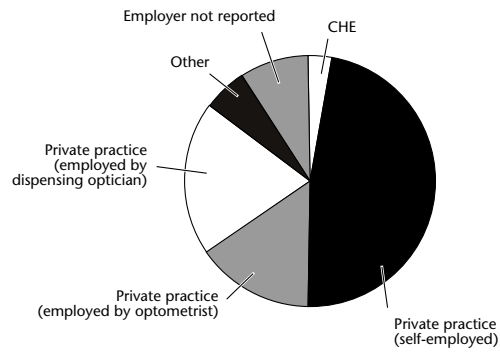
| Employment setting | Male | Female | Not reported | Total | |
|--|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 1 | 0 | 0 | 1 | 2.0 |
| Private practice (self-employed) | 16 | 4 | 0 | 20 | 40.8 |
| Private practice (employed by optometrist) | 5 | 5 | 0 | 10 | 20.4 |
| Private practice (employed by dispensing optician) | 7 | 4 | 0 | 11 | 22.4 |
| Other | 2 | 1 | 0 | 3 | 6.1 |
| Not reported | 3 | 1 | 0 | 4 | 8.2 |
| Total | 34 | 15 | 0 | 49 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Work type

Table 14 shows the proportion of active dispensing opticians working in each work type classification within their main employment setting.

Fig 4:
Main employment setting of active
dispensing opticians, 2000



The most common work type for dispensing opticians was general dispensing (52.3 percent) when working in their main employment setting. Management was the second most frequently reported work type, at 29.5 percent.

Table 15 (page 22) shows the main employment setting by work type of the 49 active dispensing opticians who responded to the 2000 survey. Each dispensing optician could specify more than one work type and Tables 14 and 15 show that many dispensing opticians worked in more than one field within their main employment setting.

Table 14: Work type of active dispensing opticians in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|--------------------|-----------|-----------|--------------|-----------|--------------|
| | | | | Number | Percentage |
| General dispensing | 31 | 15 | 0 | 46 | 52.3 |
| Teaching | 8 | 0 | 0 | 8 | 9.1 |
| Study/research | 4 | 1 | 0 | 5 | 5.7 |
| Management | 17 | 9 | 0 | 26 | 29.5 |
| Other | 2 | 1 | 0 | 3 | 3.4 |
| Not reported | 0 | 0 | 0 | 0 | 0.0 |
| Total | 62 | 26 | 0 | 88 | 100.0 |

Table 15: Work type of active dispensing opticians by main employment setting, 2000

| Employment setting by work type | General dispensing | Teaching | Study/research | Management | Other | Not reported | Total |
|--|--------------------|----------|----------------|------------|-------|--------------|-------|
| CHE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Private practice (self-employed) | 20 | 5 | 4 | 13 | 1 | 0 | 43 |
| Private practice (employed by an optometrist) | 10 | 0 | 0 | 2 | 0 | 0 | 12 |
| Private practice (employed by a dispensing optician) | 10 | 1 | 0 | 5 | 0 | 0 | 16 |
| Other | 1 | 0 | 0 | 2 | 1 | 0 | 4 |
| Not reported | 4 | 2 | 1 | 4 | 1 | 0 | 12 |
| Total | 46 | 8 | 5 | 26 | 3 | 0 | 88 |

Country of qualification

Table 16 shows that the majority of active dispensing opticians who practise in New Zealand also qualified here (55.1 percent). Most overseas graduates qualified in the United Kingdom (16.3 percent) and Australia (12.2 percent), with 10.2 percent not reporting where they graduated.

Table 16: Country of qualification of active dispensing opticians, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 27 | 55.1 |
| United Kingdom | 8 | 16.3 |
| Australia | 6 | 12.2 |
| Germany | 2 | 4.1 |
| Switzerland | 1 | 2.0 |
| Not reported | 5 | 10.2 |
| Total | 49 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Hours worked

Table 17 shows the number of full-time equivalent (FTE) dispensing opticians by geographic region. On average in New Zealand there were 1.4 FTE dispensing opticians reported per 100 000 population. Tairāwhiti had the highest reported rate at 4.6 FTEs per 100 000 population.

Table 18 (page 24) shows the number of FTE dispensing opticians at their main employment setting by work type for 2000. General dispensing was reported to account for 74.7 percent of working time. On average, dispensing opticians reported that they worked approximately 42.7 hours per week.

Table 17: Geographic distribution of active dispensing opticians by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|--------|------|-----------------------------|
| Northland | 209.0 | 5.2 | 3.6 |
| Auckland | 764.0 | 19.1 | 1.6 |
| Waikato | 300.0 | 7.5 | 2.1 |
| Bay of Plenty | 85.0 | 2.1 | 0.9 |
| Tairāwhiti | 86.0 | 2.2 | 4.6 |
| Hawke's Bay | 39.0 | 1.0 | 0.7 |
| Taranaki | 0.0 | 0.0 | 0.0 |
| Manawatu-Wanganui | 0.0 | 0.0 | 0.0 |
| Wellington | 316.0 | 7.9 | 2.0 |
| Nelson-Marlborough | 0.0 | 0.0 | 0.0 |
| West Coast | 0.0 | 0.0 | 0.0 |
| Canterbury | 249.0 | 6.2 | 1.3 |
| Otago | 0.0 | 0.0 | 0.0 |
| Southland | 0.0 | 0.0 | 0.0 |
| Not reported | 45.0 | 1.1 | - |
| Total | 2093.0 | 52.3 | 1.4 |

Table 18: Work type of active dispensing opticians at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|--------------------|--------|------|------------|
| General dispensing | 1563.5 | 39.1 | 74.7 |
| Teaching | 41.0 | 1.0 | 2.0 |
| Study/research | 11.0 | 0.3 | 0.5 |
| Management | 415.5 | 10.4 | 19.9 |
| Other | 62.0 | 1.6 | 3.0 |
| Not reported | 0.0 | 0.0 | 0.0 |
| Total | 2093.0 | 52.3 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Chiropractors

There were 218 chiropractors who purchased Annual Practising Certificates (APCs) between March and September 2000. A health workforce survey was included with each invoice sent out in February 2000.

These statistics are based on the 139 active (working) chiropractors that responded to the health workforce survey. This represents 63.8 percent of the 2000 APC holders. A further 2.8 percent responded to the 2000 survey but did not report that they were actively working. It is not known if the APC holders who did not respond to the survey (33.5 percent) are actively working as chiropractors.

Table 19 shows the number of APCs purchased by chiropractors each year. Although not all of those purchasing APCs are actively working in the profession, this is an indication of the size of the chiropractor workforce. The number of APCs purchased has increased by 42.5 percent from 153 to 218 over the last 10 years.

Table 19: Number of Annual Practising Certificates purchased by chiropractors, 1991/92–2000/01

| Year | Number of APCs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|--------------------------|--|----------------------------|
| 1991/92 | 153 | 136 | 88.9 |
| 1992/93 | 151 | * | * |
| 1993/94 | 145 | 115 | 79.3 |
| 1994/95 | 158 | 96 | 60.8 |
| 1995/96 | 171 | 121 | 70.8 |
| 1996/97 | 180 | 119 | 66.1 |
| 1997/98 | 170 | 121 | 71.2 |
| 1998/99 | 192 | 129 | 67.2 |
| 1999/2000 | 188 | 135 | 71.8 |
| 2000/01 | 218 | 139 | 63.8 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

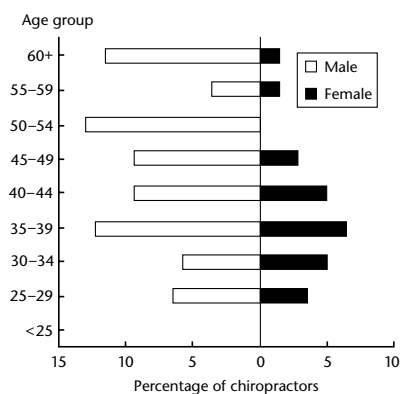
The active chiropractic workforce was predominantly male (72.7 percent), as shown in Table 20 and Figure 5.

Table 20: Age and sex distribution of active chiropractors, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 0 | 9 | 8 | 17 | 13 | 13 | 18 | 5 | 16 | 2 | 101 |
| Female | 0 | 5 | 7 | 9 | 7 | 4 | 0 | 2 | 2 | 2 | 38 |
| Not reported | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 14 | 15 | 26 | 20 | 17 | 18 | 7 | 18 | 4 | 139 |

Fig 5: Age and sex distribution of active chiropractors, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 21 shows prioritised ethnicity of active chiropractors (refer to ethnicity notes, Appendix 1, page 83). The majority of the active chiropractors identified themselves as belonging to the New Zealand/Pākehā ethnic group (76.3 percent).

Table 21: Prioritised ethnicity of active chiropractors, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 106 | 76.3 |
| Other European | 20 | 14.4 |
| New Zealand Māori | 1 | 0.7 |
| Indian | 2 | 1.4 |
| Other/Not reported | 10 | 7.2 |
| Total | 139 | 100.0 |

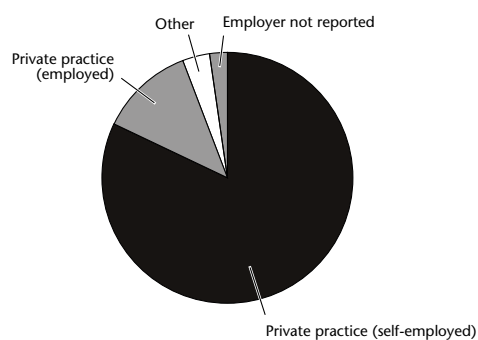
Employment setting

Table 22 illustrates the main employment setting of active chiropractors. Figure 6 shows that the majority (82.0 percent) of active chiropractors were self-employed in a private practice.

Table 22: Main employment setting of active chiropractors, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|----------------------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| Private practice (self-employed) | 83 | 31 | 0 | 114 | 82.0 |
| Private practice (employed) | 11 | 6 | 0 | 17 | 12.2 |
| Other | 4 | 1 | 0 | 5 | 3.6 |
| Not reported | 3 | 0 | 0 | 3 | 2.2 |
| Total | 101 | 38 | 0 | 139 | 100.0 |

Fig 6:
Main employment setting of active chiropractors, 2000



Work type

Table 23 shows that general chiropractic practice was reported as the work type for 47.3 percent of respondents when working in their main employment setting. Management was the second most frequently reported work type, at 26.3 percent.

Table 24 shows the main employment setting by work type of the 139 active chiropractors who responded to the 2000 survey. Each chiropractor could specify more than one work type and Tables 23 and 24 show that many chiropractors worked in more than one field within their main employment setting.

Table 23: Work type of active chiropractors in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|----------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| General chiropractic | 96 | 37 | 0 | 133 | 47.3 |
| Study/research | 43 | 16 | 0 | 59 | 21.0 |
| Management | 54 | 20 | 0 | 74 | 26.3 |
| Other | 8 | 2 | 0 | 10 | 3.6 |
| Not reported | 3 | 2 | 0 | 5 | 1.8 |
| Total | 204 | 77 | 0 | 281 | 100.0 |

Table 24: Work type of active chiropractors by main employment setting, 2000

| Employment setting by work type | General chiropractic | Study/research | Management | Other | Not reported | Total |
|----------------------------------|----------------------|----------------|------------|-------|--------------|-------|
| Private practice (self-employed) | 112 | 49 | 65 | 9 | 2 | 237 |
| Private practice (employed) | 17 | 7 | 6 | 0 | 1 | 31 |
| Other | 1 | 3 | 2 | 1 | 2 | 9 |
| Not reported | 3 | 0 | 1 | 0 | 0 | 4 |
| Total | 133 | 59 | 74 | 10 | 5 | 281 |

Country of qualification

Table 25 shows where chiropractors received their qualifications. In 2000, the majority (51.8 percent) of respondents to the workforce survey obtained their chiropractic qualifications in the United States of America, followed by Australia (22.3 percent). New Zealand graduates accounted for 18.0 percent of all respondents.

Table 25: Country of qualification of active chiropractors, 2000

| Country | Number | Percentage |
|----------------|---------------|-------------------|
| New Zealand | 25 | 18.0 |
| United Kingdom | 7 | 5.0 |
| USA | 72 | 51.8 |
| Canada | 4 | 2.9 |
| Australia | 31 | 22.3 |
| Not reported | 0 | 0.0 |
| Total | 139 | 100.0 |

Hours worked

Table 26 (page 30) shows the number of full-time equivalent (FTE) chiropractors by geographic region. Chiropractors were distributed throughout New Zealand at a rate of 3.4 FTEs per 100 000 population. The highest concentration of chiropractors was in the Nelson-Marlborough region, where there were 5.8 FTEs per 100 000 population. The lowest concentration was in Tairāwhiti and Manawatu-Wanganui where there were 1.9 FTEs per 100 000 population.

The various amounts of time spent by chiropractors in each type of work are shown in Table 27 (page 30). General chiropractic practice took up the majority of the work time of chiropractors, equating to 105.6 FTEs. On average, chiropractors reported that they worked approximately 37.2 hours per week.

Table 26: Geographic distribution of active chiropractors by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|--------|-------|-----------------------------|
| Northland | 206.0 | 5.2 | 3.5 |
| Auckland | 1871.5 | 46.8 | 3.9 |
| Waikato | 305.0 | 7.6 | 2.2 |
| Bay of Plenty | 445.0 | 11.1 | 4.5 |
| Tairāwhiti | 35.0 | 0.9 | 1.9 |
| Hawke's Bay | 281.0 | 7.0 | 4.8 |
| Taranaki | 145.0 | 3.6 | 3.5 |
| Manawatu-Wanganui | 200.5 | 5.0 | 1.9 |
| Wellington | 534.0 | 13.4 | 3.4 |
| Nelson-Marlborough | 284.0 | 7.1 | 5.8 |
| West Coast | 65.0 | 1.6 | 5.0 |
| Canterbury | 502.5 | 12.6 | 2.6 |
| Otago | 150.0 | 3.8 | 2.0 |
| Southland | 143.0 | 3.6 | 3.8 |
| Not reported | 0.0 | 0.0 | - |
| Total | 5167.5 | 129.2 | 3.4 |

Table 27: Work type of active chiropractors at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|----------------------|--------|-------|------------|
| General chiropractic | 4225.5 | 105.6 | 81.8 |
| Study/research | 373.0 | 9.3 | 7.2 |
| Management | 420.0 | 10.5 | 8.1 |
| Other | 147.0 | 3.7 | 2.8 |
| Not reported | 2.0 | 0.1 | 0.0 |
| Total | 5167.5 | 129.2 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Dietitians

There were 343 dietitians who purchased Annual Practising Certificates (APCs) between March and September 2000. A health workforce survey was included with each invoice sent out in February 2000.

These statistics are based on the 248 active (working) dietitians who responded to the health workforce survey. This represents 72.3 percent of the 2000 APC holders. A further 5.0 percent did not report they were actively working. It is not known if the APC holders who did not respond to the survey (22.7 percent) are actively working as dietitians.

Table 28 shows the number of APCs purchased by dietitians each year. Although not all of those purchasing APCs are actively working in the profession, this is an indicator of the size of the dietitian workforce. The number of APCs purchased has increased by 14.7 percent from 299 to 343 over the last 10 years.

Table 28: Number of Annual Practising Certificates purchased by dietitians, 1991/92–2000/01

| Year | Number of APCs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|--------------------------|--|----------------------------|
| 1991/92 | 299 | 236 | 78.9 |
| 1992/93 | 302 | * | * |
| 1993/94 | 310 | 188 | 60.6 |
| 1994/95 | 318 | 246 | 77.4 |
| 1995/96 | 388 | 245 | 63.1 |
| 1996/97 | 340 | 244 | 71.8 |
| 1997/98 | 336 | 250 | 74.4 |
| 1998/99 | 341 | 250 | 73.3 |
| 1999/2000 | 334 | 239 | 71.6 |
| 2000/01 | 343 | 248 | 72.3 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

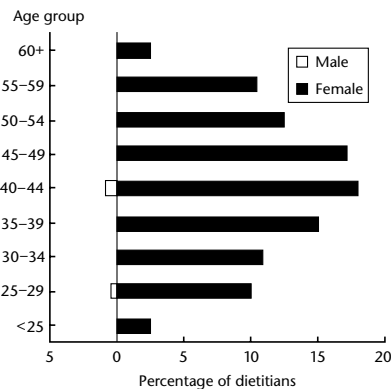
The active dietitian workforce was predominantly female (97.6 percent), as illustrated in Figure 7 and Table 29.

Table 29: Age and sex distribution of active dietitians, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 |
| Female | 6 | 24 | 26 | 36 | 43 | 41 | 30 | 25 | 6 | 5 | 242 |
| Not reported | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 3 |
| Total | 6 | 25 | 26 | 36 | 45 | 41 | 30 | 26 | 6 | 7 | 248 |

Fig 7:
Age and sex distribution of active dietitians, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 30 shows prioritised ethnicity of active dietitians (refer to ethnicity notes, Appendix 1, page 83). The majority (89.5 percent) of the active dietitians identified themselves as belonging to the New Zealand European/Pākehā ethnic group.

Table 30: Prioritised ethnicity of active dietitians, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 222 | 89.5 |
| Other European | 10 | 4.0 |
| Chinese | 7 | 2.8 |
| New Zealand Māori | 4 | 1.6 |
| Indian | 1 | 0.4 |
| Other/Not reported | 4 | 1.6 |
| Total | 248 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

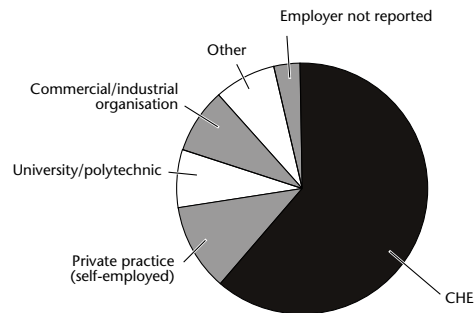
Employment setting

Table 31 shows the breakdown of males and females in each main employment setting. Figure 8 shows the majority (60.9 percent) of active dietitians were working for Crown health enterprises (CHEs). Fourteen percent were working primarily in private practice.

Table 31: Main employment setting of active dietitians, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|------------------------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 3 | 146 | 2 | 151 | 60.9 |
| Private practice (self-employed) | 0 | 27 | 1 | 28 | 11.3 |
| Private practice (group practice) | 0 | 6 | 0 | 6 | 2.4 |
| University / polytechnic | 0 | 19 | 0 | 19 | 7.7 |
| Government dept / Crown agency | 0 | 4 | 0 | 4 | 1.6 |
| Commercial/industrial organisation | 0 | 21 | 0 | 21 | 8.5 |
| Other | 0 | 10 | 0 | 10 | 4.0 |
| Not reported | 0 | 9 | 0 | 9 | 3.6 |
| Total | 3 | 242 | 3 | 248 | 100.0 |

Fig 8:
Main employment setting of active dietitians, 2000



Work type

Table 32 shows the number of dietitians in each work type for 2000. Clinical outpatients (24.3 percent) and clinical inpatients (19.6 percent) were reported as the main work types of respondents when working in their main employment setting.

Table 32: Work type of active dietitians in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|--------------------------------|----------|------------|--------------|------------|--------------|
| | | | | Number | Percentage |
| Clinical inpatients | 1 | 98 | 1 | 100 | 19.6 |
| Clinical outpatients | 2 | 120 | 2 | 124 | 24.3 |
| Community/district/domiciliary | 0 | 27 | 0 | 27 | 5.3 |
| Food service management | 0 | 23 | 0 | 23 | 4.5 |
| Health promotion | 1 | 34 | 0 | 35 | 6.9 |
| Consultancy/advisory | 0 | 32 | 0 | 32 | 6.3 |
| Sports nutrition | 0 | 9 | 0 | 9 | 1.8 |
| Administration | 1 | 45 | 0 | 46 | 9.0 |
| General management | 1 | 27 | 0 | 28 | 5.5 |
| Teaching | 0 | 37 | 0 | 37 | 7.3 |
| Study/research | 1 | 24 | 0 | 25 | 4.9 |
| Other | 1 | 20 | 0 | 21 | 4.1 |
| Not reported | 0 | 2 | 1 | 3 | 0.6 |
| Total | 8 | 498 | 4 | 510 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Table 33 shows the main employment setting by work type of the 248 active dietitians who responded to the 2000 survey. Each dietitian could specify more than one work type, and Tables 32 and 33 show that many dietitians worked in more than one field within their main employment setting.

Table 33: Work type of active dietitians by main employment setting, 2000

| Employment setting by work type | Clinical inpatients | Clinical outpatients | Community/district/domiciliary | Food service management | Health promotion | Consultancy/advisory | Sports nutrition | Administration | General management | Teaching | Study/research | Other | Not reported | Total |
|------------------------------------|---------------------|----------------------|--------------------------------|-------------------------|------------------|----------------------|------------------|----------------|--------------------|----------|----------------|-------|--------------|-------|
| CHE | 87 | 94 | 22 | 13 | 20 | 7 | 0 | 29 | 14 | 13 | 10 | 8 | 0 | 317 |
| Private practice (self-employed) | 3 | 13 | 2 | 0 | 5 | 12 | 6 | 4 | 2 | 4 | 3 | 3 | 2 | 59 |
| Private practice (group practice) | 0 | 4 | 1 | 2 | 1 | 2 | 1 | 1 | 0 | 1 | 2 | 0 | 0 | 15 |
| University / polytechnic | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 4 | 5 | 17 | 8 | 1 | 1 | 42 |
| Government dept / Crown agency | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 4 |
| Commercial/industrial organisation | 4 | 5 | 1 | 4 | 1 | 5 | 0 | 5 | 4 | 1 | 0 | 6 | 0 | 36 |
| Other | 2 | 2 | 1 | 2 | 4 | 2 | 0 | 1 | 1 | 1 | 2 | 1 | 0 | 19 |
| Not reported | 3 | 5 | 0 | 2 | 1 | 3 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 18 |
| Total | 100 | 124 | 27 | 23 | 35 | 32 | 9 | 46 | 28 | 37 | 25 | 21 | 3 | 510 |

Country of qualification

Most active dietitians (89.9 percent) qualified in New Zealand (Table 34, page 36), followed by the United States of America (2.4 percent).

Hours worked

Table 35 (page 36) shows the number of full-time equivalent (FTE) dietitians by geographic region. The national average was 4.9 per 100 000 population. The West Coast and Canterbury had the highest average rates while Bay of Plenty had the lowest average rate.

Table 34: Country of qualification of active dietitians, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 223 | 89.9 |
| United Kingdom | 5 | 2.0 |
| Netherlands | 2 | 0.8 |
| South Africa | 4 | 1.6 |
| USA | 6 | 2.4 |
| Australia | 1 | 0.4 |
| Sweden | 1 | 0.4 |
| India | 1 | 0.4 |
| Not reported | 5 | 2.0 |
| Total | 248 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Table 35: Geographic distribution of active dietitians by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|--------|-------|-----------------------------|
| Northland | 180.0 | 4.5 | 3.1 |
| Auckland | 2496.7 | 62.4 | 5.2 |
| Waikato | 592.0 | 14.8 | 4.2 |
| Bay of Plenty | 224.0 | 5.6 | 2.3 |
| Tairāwhiti | 122.0 | 3.1 | 6.6 |
| Hawke's Bay | 210.0 | 5.3 | 3.6 |
| Taranaki | 229.0 | 5.7 | 5.5 |
| Manawatu-Wanganui | 361.0 | 9.0 | 3.3 |
| Wellington | 651.0 | 16.3 | 4.2 |
| Nelson-Marlborough | 209.0 | 5.2 | 4.3 |
| West Coast | 130.0 | 3.3 | 10.1 |
| Canterbury | 1564.0 | 39.1 | 8.0 |
| Otago | 442.5 | 11.1 | 5.9 |
| Southland | 140.0 | 3.5 | 3.8 |
| Not reported | 20.0 | 0.5 | - |
| Total | 7571.2 | 189.3 | 4.9 |

Table 36 shows the number of FTE dietitians in each type of work. Clinical inpatients and clinical outpatients accounted for 25.0 percent and 23.0 percent respectively of all work undertaken. On average, dietitians reported that they worked approximately 30.5 hours per week.

Table 36: Work type of active dietitians at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|-------------------------------------|--------|-------|------------|
| Clinical inpatients | 1890.0 | 47.3 | 25.0 |
| Clinical outpatients | 1742.7 | 43.6 | 23.0 |
| Commercial/district/ domiciliary | 465.0 | 11.6 | 6.1 |
| Food service management | 551.0 | 13.8 | 7.3 |
| Health promotion | 588.0 | 14.7 | 7.8 |
| Consultancy/advisory | 480.5 | 12.0 | 6.3 |
| Sports nutrition | 124.0 | 3.1 | 1.6 |
| Administration | 321.5 | 8.0 | 4.2 |
| General management | 465.5 | 11.6 | 6.1 |
| Teaching | 325.0 | 8.1 | 4.3 |
| Study/research | 234.0 | 5.9 | 3.1 |
| Other | 384.0 | 9.6 | 5.1 |
| Not reported | 0.0 | 0.0 | - |
| Total | 7571.2 | 189.3 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Medical laboratory technologists

There were 1292 medical laboratory technologists who purchased Annual Licences (AL) between March and September 2000. A health workforce survey was included with each invoice sent in February 2000.

These statistics are based on the 634 active (working) medical laboratory technologists who responded to the health workforce survey. This represents 49.1 percent of the 2000 licence holders. A further 4.0 percent responded to the 2000 survey but did not report that they were actively working. It is not known if the AL holders who did not respond to the survey (46.9 percent) are actively working as medical laboratory technologists.

Table 37 shows the number of ALs purchased by medical laboratory technologists each year. Although not all of those purchasing ALs are actively working in the profession, this is an indicator of the size of the medical laboratory technology workforce. The number of ALs purchased has increased by 18.5 percent from 1090 to 1292 over the last 10 years.

Table 37: Number of Annual Licences purchased by medical laboratory technologists, 1991/92–2000/01

| Year | Number of ALs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|-------------------------|--|----------------------------|
| 1991/92 | 1090 | 856 | 78.5 |
| 1992/93 | 1100 | * | * |
| 1993/94 | 1161 | 705 | 60.7 |
| 1994/95 | 1224 | 763 | 62.3 |
| 1995/96 | 1299 | 769 | 59.2 |
| 1996/97 | 1302 | 810 | 62.2 |
| 1997/98 | 1260 | 686 | 54.4 |
| 1998/99 | 1319 | 658 | 49.9 |
| 1999/2000 | 1267 | 660 | 52.1 |
| 2000/01 | 1292 | 634 | 49.1 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

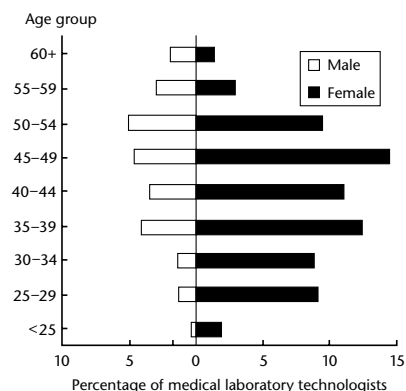
In 2000 the active medical laboratory technology workforce was predominantly female (72.6 percent), as shown in Table 38 and Figure 9.

Table 38: Age and sex distribution of active medical laboratory technologists, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 2 | 8 | 9 | 26 | 22 | 29 | 32 | 19 | 12 | 2 | 161 |
| Female | 12 | 58 | 56 | 79 | 70 | 92 | 60 | 19 | 9 | 5 | 460 |
| Not reported | 0 | 0 | 1 | 3 | 0 | 1 | 1 | 2 | 0 | 5 | 13 |
| Total | 14 | 66 | 66 | 108 | 92 | 122 | 93 | 40 | 21 | 12 | 634 |

Fig 9:
Age and sex distribution of active medical laboratory technologists, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 39 (page 40) shows prioritised ethnicity (refer to ethnicity notes, Appendix 1, page 83). The majority (87.1 percent) of the active medical laboratory technologists identified themselves as belonging to the New Zealand/Pākehā ethnic group.

Table 39: Prioritised ethnicity of active medical laboratory technologists, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 552 | 87.1 |
| Other European | 30 | 4.7 |
| Chinese | 9 | 1.4 |
| New Zealand Māori | 1 | 0.2 |
| Indian | 12 | 1.9 |
| Samoan | 3 | 0.5 |
| Cook Island Māori | 1 | 0.2 |
| Fijian | 4 | 0.6 |
| South East Asian | 1 | 0.2 |
| Other Asian | 1 | 0.2 |
| Other/Not reported | 20 | 3.2 |
| Total | 634 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Employment setting

Table 40 shows the breakdown of males and females in each main employment setting. Figure 10 shows that the majority (72.4 percent) of medical laboratory technologists worked for CHEs in their main employment setting. Working in a private practice (group practice) was the second most common reported main employment setting (17.5 percent).

Table 40: Main employment setting of active medical laboratory technologists, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|------------------------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 116 | 332 | 11 | 459 | 72.4 |
| Private practice (self-employed) | 1 | 12 | 0 | 13 | 2.1 |
| Private practice (group practice) | 27 | 83 | 1 | 111 | 17.5 |
| University / polytechnic | 0 | 2 | 0 | 2 | 0.3 |
| Commercial/industrial organisation | 5 | 4 | 0 | 9 | 1.4 |
| Other | 3 | 9 | 1 | 13 | 2.1 |
| Not reported | 9 | 18 | 0 | 27 | 4.3 |
| Total | 161 | 460 | 13 | 634 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Fig 10:
Main employment setting of active medical laboratory technologists, 2000

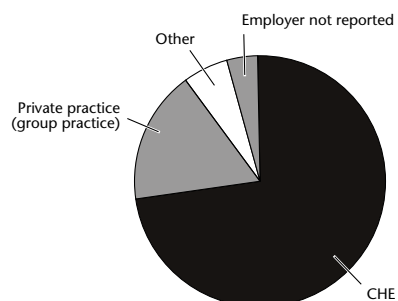


Table 41: Work type of active medical laboratory technologists in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|---------------------------------------|------------|------------|--------------|------------|--------------|
| | | | | Number | Percentage |
| Clinical biochemistry | 44 | 102 | 3 | 149 | 17.1 |
| Haematology | 33 | 102 | 3 | 138 | 15.9 |
| Microbiology | 33 | 127 | 3 | 163 | 18.8 |
| Transfusion science | 19 | 63 | 2 | 84 | 9.7 |
| Immunology | 10 | 18 | 0 | 28 | 3.2 |
| Histology | 5 | 18 | 0 | 23 | 2.6 |
| Cytology | 3 | 23 | 1 | 27 | 3.1 |
| Virology | 2 | 11 | 0 | 13 | 1.5 |
| Cytogenetics | 2 | 13 | 0 | 15 | 1.7 |
| Nuclear medicine | 0 | 1 | 0 | 1 | 0.1 |
| Serology | 3 | 7 | 0 | 10 | 1.2 |
| General medical laboratory technology | 18 | 19 | 0 | 37 | 4.3 |
| Teaching | 3 | 7 | 0 | 10 | 1.2 |
| Study/research | 2 | 10 | 0 | 12 | 1.4 |
| Management | 37 | 32 | 3 | 72 | 8.3 |
| Other | 8 | 20 | 0 | 28 | 3.2 |
| Not reported | 17 | 39 | 3 | 59 | 6.8 |
| Total | 239 | 612 | 18 | 869 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0



Work type

Microbiology was reported as the work type for 18.8 percent of respondents when working in their main employment setting (see Table 41, page 41). Clinical biochemistry was the second most frequently reported work type, at 17.1 percent.

Table 42 shows the main employment setting by work type of the 634 active medical laboratory technologists who responded to the 2000 survey. Each medical laboratory technologist could specify more than one work type, and Tables 41 and 42 show that many medical laboratory technologists worked in more than one field within their main employment setting.

Country of qualification

Table 43 (page 44) shows that the majority (91.2 percent) of active medical laboratory technologists who responded to the survey in 2000 were trained in New Zealand. Most overseas graduates gained their qualifications in the United Kingdom (3.2 percent); however, 3.5 percent did not report their country of qualification.

Hours worked

Table 44 (page 44) shows the number of full-time equivalent (FTE) medical laboratory technologists in each geographic region based on the distribution of the 634 medical laboratory technologists who responded to the survey. On average in New Zealand there were 14.2 FTE medical laboratory technologists per 100 000 population. In 2000 Tairāwhiti and Otago reported the highest rate per capita, while Southland and West Coast reported the lowest rates.

Table 45 (page 45) shows the number of FTE medical laboratory technologists in each type of work across their main employers. Microbiology accounted for 19.8 percent of all work undertaken, followed by clinical biochemistry (17.6 percent). On average, medical laboratory technologists reported that they worked 34.2 hours per week.

Table 33: Work type of active medical laboratory technologists by main employment setting, 2000

| Employment setting by work type | Clinical biochemistry | Haematology | Microbiology | Transfusion science | Immunology | Histology | Cytology | Virology | Cytogenetics | Nuclear medicine | Serology | General medical laboratory technology | Teaching | Study/research | Management | Other | Not reported | Total |
|---------------------------------------|-----------------------|-------------|--------------|---------------------|------------|-----------|----------|----------|--------------|------------------|----------|--|----------|----------------|------------|-------|--------------|-------|
| CHE | 102 | 104 | 116 | 72 | 14 | 16 | 11 | 10 | 11 | 1 | 8 | 25 | 8 | 8 | 44 | 19 | 59 | 628 |
| Private practice (self-employed) | 4 | 4 | 2 | 0 | 0 | 1 | 2 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 20 |
| Private practice (group practice) | 32 | 22 | 35 | 4 | 9 | 3 | 12 | 0 | 0 | 0 | 2 | 7 | 1 | 1 | 12 | 4 | 0 | 144 |
| University / polytechnic | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 4 |
| Commercial/industrial organisation | 3 | 2 | 1 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 5 | 1 | 0 | 19 |
| Other | 3 | 2 | 2 | 2 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 20 |
| Not reported | 5 | 4 | 7 | 6 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 4 | 2 | 0 | 34 |
| Total | 149 | 138 | 163 | 84 | 28 | 23 | 27 | 13 | 15 | 1 | 10 | 37 | 10 | 12 | 72 | 28 | 59 | 869 |

Table 43: Country of qualification of active medical laboratory technologists, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 578 | 91.2 |
| United Kingdom | 20 | 3.2 |
| Netherlands | 1 | 0.2 |
| South Africa | 6 | 0.9 |
| Canada | 2 | 0.3 |
| Australia | 2 | 0.3 |
| Hong Kong | 1 | 0.2 |
| Yugoslavia | 1 | 0.2 |
| Zimbabwe | 1 | 0.2 |
| Not reported | 22 | 3.5 |
| Total | 634 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Table 44: Geographic distribution of active medical laboratory technologists by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|----------|-------|-----------------------------|
| Northland | 698.0 | 17.5 | 12.0 |
| Auckland | 6348.5 | 158.7 | 13.1 |
| Waikato | 1841.3 | 46.0 | 13.2 |
| Bay of Plenty | 1154.5 | 28.9 | 11.7 |
| Tairāwhiti | 369.0 | 9.2 | 19.8 |
| Hawke's Bay | 801.0 | 20.0 | 13.7 |
| Taranaki | 552.0 | 13.8 | 13.2 |
| Manawatu-Wanganui | 1109.0 | 27.7 | 10.2 |
| Wellington | 2730.5 | 68.3 | 17.6 |
| Nelson-Marlborough | 542.5 | 13.6 | 11.1 |
| West Coast | 88.0 | 2.2 | 6.8 |
| Canterbury | 3622.0 | 90.6 | 18.5 |
| Otago | 1448.0 | 36.2 | 19.1 |
| Southland | 264.0 | 6.6 | 7.1 |
| Not reported | 141.0 | 3.5 | - |
| Total | 21 709.3 | 542.7 | 14.2 |

Table 45: Work type of active medical laboratory technologists at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|---------------------------------------|-----------------|--------------|--------------|
| Clinical biochemistry | 3821.0 | 95.5 | 17.6 |
| Haematology | 3375.5 | 84.4 | 15.5 |
| Microbiology | 4294.5 | 107.4 | 19.8 |
| Transfusion science | 2049.8 | 51.2 | 9.4 |
| Immunology | 545.0 | 13.6 | 2.5 |
| Histology | 635.0 | 15.9 | 2.9 |
| Cytology | 887.0 | 22.2 | 4.1 |
| Virology | 365.0 | 9.1 | 1.7 |
| Cytogenetics | 540.0 | 13.5 | 2.5 |
| Nuclear medicine | 40.0 | 1.0 | 0.2 |
| Serology | 185.5 | 4.6 | 0.9 |
| General medical laboratory technology | 548.0 | 13.7 | 2.5 |
| Teaching | 75.0 | 1.9 | 0.3 |
| Study/research | 119.0 | 3.0 | 0.5 |
| Management | 1627.0 | 40.7 | 7.5 |
| Other | 608.0 | 15.2 | 2.8 |
| Not reported | 1994.0 | 49.9 | 9.2 |
| Total | 21 709.3 | 542.7 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Medical radiation technologists

There were 1459 medical radiation technologists who purchased Annual Licences (ALs) between March and September 2000. A health workforce survey was included with each invoice sent in February 2000.

These statistics are based on the 903 active (working) medical radiation technologists who responded to the health workforce survey. This represents 61.9 percent of the 2000 licence holders. A further 3.6 percent responded to the 2000 survey but did not report that they were actively working. It is not known if the licence holders who did not respond to the survey (34.5 percent) are working as medical radiation technologists.

Table 46 shows the number of ALs purchased by medical radiation technologists each year. Although not all those purchasing ALs are actively working in the profession, this is an indicator of the size of the medical radiation technology workforce. The number of ALs purchased has increased by 39.1 percent from 1049 to 1459 over the last 10 years.

Table 46: Number of Annual Licences purchased by medical radiation technologists, 1991/92–2000/01

| Year | Number of ALs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|-------------------------|--|----------------------------|
| 1991/92 | 1049 | 907 | 86.5 |
| 1992/93 | 1082 | * | * |
| 1993/94 | 1116 | 704 | 63.1 |
| 1994/95 | 1181 | 765 | 64.8 |
| 1995/96 | 1166 | 890 | 76.3 |
| 1996/97 | 1327 | 886 | 66.8 |
| 1997/98 | 1315 | 841 | 64.0 |
| 1998/99 | 1369 | 809 | 59.1 |
| 1999/2000 | 1402 | 794 | 56.6 |
| 2000/01 | 1459 | 903 | 61.9 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

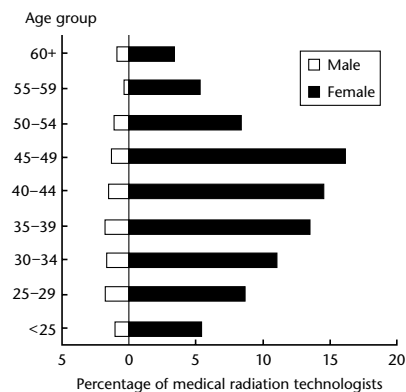
The active medical radiation technologist workforce was predominantly female (87.9 percent), as illustrated by Table 47 and Figure 11.

Table 47: Age and sex distribution of active medical radiation technologists, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 10 | 16 | 15 | 16 | 14 | 12 | 10 | 3 | 8 | 1 | 105 |
| Female | 49 | 78 | 100 | 122 | 131 | 146 | 76 | 48 | 31 | 13 | 794 |
| Not reported | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| Total | 59 | 94 | 115 | 139 | 145 | 158 | 86 | 51 | 39 | 17 | 903 |

Fig 11:
Age and sex distribution of active medical radiation technologists, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 48 (page 48) shows prioritised ethnicity of active medical radiation technologists (refer to ethnicity notes, Appendix 1, page 83). As in previous years the majority (83.7 percent) of active medical radiation technologists identified themselves as belonging to the New Zealand/Pākehā ethnic group.

Table 48: Prioritised ethnicity of active medical radiation technologists, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 756 | 83.7 |
| Other European | 67 | 7.4 |
| Chinese | 11 | 1.2 |
| New Zealand Māori | 6 | 0.7 |
| Indian | 5 | 0.6 |
| Samoan | 3 | 0.3 |
| Tongan | 1 | 0.1 |
| Fijian | 1 | 0.1 |
| South East Asian | 1 | 0.1 |
| Other/Not reported | 52 | 5.8 |
| Total | 903 | 100.0 |

Employment setting

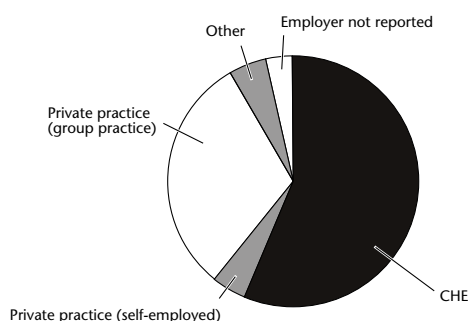
Table 49 shows the numbers of medical radiation technologists in each main employment setting. Figure 12 shows that the majority of active medical radiation technologists were working in either CHEs (56.1 percent) or in private practice (group practice) (31.1 percent).

Table 49: Main employment setting of active medical radiation technologists, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|-----------------------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 74 | 432 | 1 | 507 | 56.1 |
| Private practice (self-employed) | 7 | 31 | 1 | 39 | 4.3 |
| Private practice (group practice) | 15 | 265 | 1 | 281 | 31.1 |
| Private hospital or rest home | 1 | 8 | 0 | 9 | 1.0 |
| University / polytechnic | 2 | 14 | 0 | 16 | 1.8 |
| Government dept / Crown agency | 1 | 2 | 0 | 3 | 0.3 |
| Other | 2 | 16 | 0 | 18 | 2.0 |
| Not reported | 3 | 26 | 1 | 30 | 3.3 |
| Total | 105 | 794 | 4 | 903 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Fig 12:
Main employment setting of active medical radiation technologists, 2000



Work type

As shown in Table 50, the majority of medical radiation technologists surveyed indicated that their work type in their main employment setting was diagnostic radiography (48.7 percent). Diagnostic ultrasound (9.4 percent) and radiotherapy (7.9 percent) were the next most significant work types.

Table 50: Work type of active medical radiations technologists in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|----------------------------|------------|-------------|--------------|-------------|--------------|
| | | | | Number | Percentage |
| Diagnostic radiography | 54 | 514 | 2 | 570 | 48.7 |
| Radiotherapy | 18 | 74 | 0 | 92 | 7.9 |
| Diagnostic ultrasound | 12 | 98 | 0 | 110 | 9.4 |
| Computerised tomography | 3 | 85 | 1 | 89 | 7.6 |
| Radionuclide imaging | 7 | 11 | 0 | 18 | 1.5 |
| Magnetic resonance imaging | 7 | 34 | 1 | 42 | 3.6 |
| Breast screening | 0 | 59 | 1 | 60 | 5.1 |
| Teaching | 7 | 26 | 0 | 33 | 2.8 |
| Study/research | 4 | 12 | 0 | 16 | 1.4 |
| Management | 19 | 53 | 1 | 73 | 6.2 |
| Other | 6 | 30 | 0 | 36 | 3.1 |
| Not reported | 2 | 30 | 0 | 32 | 2.7 |
| Total | 139 | 1026 | 6 | 1171 | 100.0 |

Table 51 shows the main employment setting by work type of the 903 active medical radiation technologists who responded to the 2000 survey. Each medical radiation technologist could specify more than one work type, and Tables 50 and 51 show that many medical radiation technologists worked in more than one field within their main employment setting.

Table 51: Work type of active medical radiations technologists by main employment setting, 2000

| Employment setting by work type | Diagnostic radiography | Radiography | Diagnostic ultrasound | Computerised tomography | Radionuclide imaging | Magnetic resonance imaging | Breast screening | Teaching | Study/research | Management | Other | Not reported | Total |
|-----------------------------------|------------------------|-------------|-----------------------|-------------------------|----------------------|----------------------------|------------------|----------|----------------|------------|-------|--------------|-------|
| CHE | 299 | 90 | 54 | 62 | 12 | 15 | 17 | 14 | 8 | 40 | 18 | 11 | 640 |
| Private practice (self-employed) | 22 | 0 | 15 | 2 | 0 | 3 | 4 | 0 | 0 | 5 | 1 | 2 | 54 |
| Private practice (group practice) | 206 | 0 | 35 | 20 | 6 | 22 | 35 | 4 | 1 | 19 | 12 | 12 | 372 |
| Private hospital or rest home | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 12 |
| University / polytechnic | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 5 | 2 | 0 | 0 | 22 |
| Government dept / Crown agency | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 8 |
| Other | 15 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 3 | 2 | 25 |
| Not reported | 15 | 2 | 5 | 3 | 0 | 2 | 2 | 1 | 0 | 3 | 1 | 4 | 38 |
| Total | 570 | 92 | 110 | 89 | 18 | 42 | 60 | 33 | 16 | 73 | 36 | 32 | 1171 |

Country of qualification

New Zealand was the country of qualification for 81.0 percent of medical radiation technologists (see Table 52). Medical radiation technologists who qualified in the United Kingdom accounted for 9.4 percent of those surveyed, and Australia ranked third with 2.8 percent.

Table 52: Country of qualification of active medical radiation technologists, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 731 | 81.0 |
| United Kingdom | 89 | 9.9 |
| Netherlands | 6 | 0.7 |
| South Africa | 18 | 2.0 |
| Canada | 7 | 0.8 |
| Australia | 25 | 2.8 |
| Hungary | 1 | 0.1 |
| Malaysia | 1 | 0.1 |
| USA | 6 | 0.7 |
| Zimbabwe | 2 | 0.2 |
| Not reported | 17 | 1.9 |
| Total | 903 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Table 53: Geographic distribution of active medical radiation technologists by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|----------|-------|-----------------------------|
| Northland | 848.0 | 21.2 | 14.6 |
| Auckland | 8731.3 | 218.3 | 18.1 |
| Waikato | 2916.5 | 72.9 | 20.8 |
| Bay of Plenty | 1451.5 | 36.3 | 14.7 |
| Tairāwhiti | 195.0 | 4.9 | 10.5 |
| Hawke's Bay | 959.0 | 24.0 | 16.4 |
| Taranaki | 598.5 | 15.0 | 14.3 |
| Manawatu-Wanganui | 1568.0 | 39.2 | 14.5 |
| Wellington | 2529.5 | 63.2 | 16.3 |
| Nelson-Marlborough | 729.0 | 18.2 | 15.0 |
| West Coast | 51.0 | 1.3 | 3.9 |
| Canterbury | 3904.0 | 97.6 | 19.9 |
| Otago | 1712.0 | 42.8 | 22.6 |
| Southland | 492.5 | 12.3 | 13.3 |
| Not reported | 472.0 | 11.8 | - |
| Total | 27 157.8 | 678.9 | 17.7 |

Hours worked

Table 53 (page 51) shows the number of full-time equivalent (FTE) medical radiation technologists by geographic region. The highest concentration appeared in Otago and Waikato (FTE 20.7 and 20.8 respectively per 100 000 population) and the lowest was in West Coast (FTE 3.9 per 100 000 population). On average there were 17.7 FTE medical radiation technologists per 100 000 population in New Zealand.

Table 54 shows the number of FTE medical radiation technologists in each type of work in their main employment setting. Diagnostic radiography accounted for 50.8 percent of all work undertaken. On average, medical radiation technologists reported that they worked 30.0 hours per week.

Table 54: Work type of active medical radiation technologists at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|----------------------------|----------|-------|------------|
| Diagnostic radiography | 13 786.7 | 344.7 | 50.8 |
| Radiography | 3476.0 | 86.9 | 12.8 |
| Diagnostic ultrasound | 3042.5 | 76.1 | 11.2 |
| Computerised tomography | 1431.1 | 35.8 | 5.3 |
| Radionuclide imaging | 538.5 | 13.5 | 2.0 |
| Magnetic resonance imaging | 1123.0 | 28.1 | 4.1 |
| Breast screening | 898.5 | 22.5 | 3.3 |
| Teaching | 571.5 | 14.3 | 2.1 |
| Study/research | 171.0 | 4.3 | 0.6 |
| Management | 1312.5 | 32.8 | 4.8 |
| Other | 733.5 | 18.3 | 2.7 |
| Not reported | 73.0 | 1.8 | 0.3 |
| Total | 27 157.8 | 678.9 | 100.0 |

Occupational therapists

There were 1372 occupational therapists who purchased Annual Practising Certificates (APCs) between March and September 2000. A health workforce survey was included with each invoice sent out in February 2000.

These statistics are based on the 808 active (working) occupational therapists that responded to the health workforce survey. This represents 58.9 percent of the 2000 APC holders. A further 6.3 percent responded to the 2000 survey but did not report that they were actively working. It is not known if the APC holders who did not respond to the survey (34.8 percent) are working as occupational therapists.

Table 55 shows the number of APCs purchased by occupational therapists each year. Although not all of those purchasing APCs are actively working in the profession, this is an indicator of the size of the occupational therapist workforce. The number of APCs purchased has increased by 56.1 percent from 879 to 1372 over the last 10 years.

Table 55: Number of Annual Practising Certificates purchased by occupational therapists, 1991/92–2000/01

| Year | Number of APCs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|--------------------------|--|----------------------------|
| 1991/92 | 879 | 707 | 80.4 |
| 1992/93 | 927 | * | * |
| 1993/94 | 920 | 719 | 78.2 |
| 1994/95 | 982 | 695 | 70.8 |
| 1995/96 | 1090 | 676 | 62.0 |
| 1996/97 | 1189 | 758 | 63.8 |
| 1997/98 | 1134 | 559 | 49.3 |
| 1998/99 | 1264 | 752 | 59.5 |
| 1999/2000 | 1274 | 766 | 60.1 |
| 2000/01 | 1372 | 808 | 58.9 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

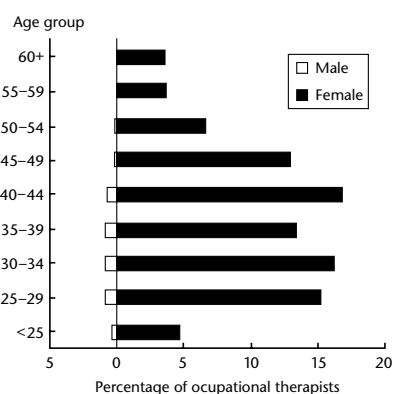
The active occupational therapy workforce was predominantly female (94.8 percent), as shown in Table 56 and Figure 13.

Table 56: Age and sex distribution of active occupational therapists, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 3 | 7 | 7 | 7 | 6 | 1 | 1 | 0 | 0 | 0 | 32 |
| Female | 38 | 123 | 131 | 108 | 136 | 105 | 54 | 30 | 29 | 12 | 766 |
| Not reported | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 6 | 10 |
| Total | 41 | 131 | 138 | 116 | 144 | 106 | 55 | 30 | 29 | 18 | 808 |

Fig 13:
Age and sex distribution of active occupational therapists, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 57 shows prioritised ethnicity of active occupational therapists (refer to ethnicity notes, Appendix 1, page 83). The majority (82.1 percent) of active occupational therapists identified themselves as belonging to the New Zealand European/Pākehā ethnic group.

Table 57: Prioritised ethnicity of active occupational therapists, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 663 | 82.1 |
| Other European | 106 | 13.1 |
| New Zealand Māori | 5 | 0.6 |
| Cook Island Māori | 1 | 0.1 |
| South East Asian | 2 | 0.2 |
| Chinese | 6 | 0.7 |
| Indian | 2 | 0.2 |
| Other/Not reported | 23 | 2.8 |
| Total | 808 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

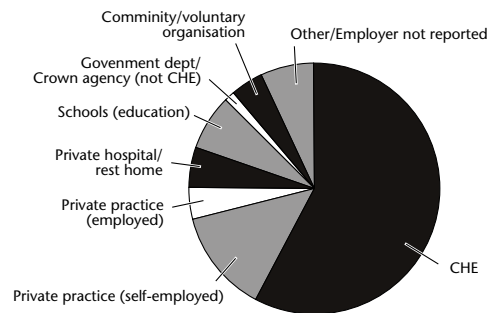
Employment setting

Table 58 shows the breakdown of males and females in each main employment setting for active occupational therapists. Figure 14 (page 56) shows the majority (57.4 percent) worked for CHEs in their main employment setting.

Table 58: Main employment setting of active occupational therapists, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|--|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 18 | 440 | 6 | 464 | 57.4 |
| Private practice (self-employed) | 4 | 105 | 0 | 109 | 13.5 |
| Private practice (employed) | 2 | 32 | 0 | 34 | 4.2 |
| Private hospital or rest home | 1 | 41 | 0 | 42 | 5.2 |
| Schools (education) | 2 | 53 | 2 | 57 | 7.1 |
| Government dept / Crown agency (not CHE) | 0 | 12 | 0 | 12 | 1.5 |
| Community/voluntary organisation | 2 | 30 | 2 | 34 | 4.2 |
| Other | 1 | 32 | 0 | 33 | 4.1 |
| Not reported | 2 | 21 | 0 | 23 | 2.8 |
| Total | 32 | 766 | 10 | 808 | 100.0 |

Fig 14:
Main employment setting of active occupational therapists, 2000



Work type

Table 59 shows the proportion of occupational therapists working in each work type classification within their main employment setting. Rehabilitation (20.1 percent) and community/domiciliary (14.7 percent) were the most reported work types.

Table 60 (page 58) shows the main employment setting by work type of the 808 active occupational therapists who responded to the 2000 survey. Each occupational therapist could specify more than one work type, and Tables 59 and 60 show that many occupational therapists worked in more than one field, within their main employment setting.

Country of qualification

Table 61 (page 59) shows where occupational therapists received their qualifications. Most occupational therapists practising in New Zealand also qualified here (83.5 percent).

Hours worked

Table 62 (page 59) shows the number of full-time equivalent (FTE) occupational therapists in each geographic region, based on the distribution of 808 active occupational therapists that responded to the survey. On average in New Zealand, there were 17.2 FTE occupational therapists per 100 000 population. In 2000 Otago and the West Coast reported the highest FTEs per 100 000 population, while Southland reported the lowest FTE's per 100 000 population.

Table 59: Work type of active occupational therapists in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|-----------------------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| Rehabilitation | 11 | 218 | 1 | 230 | 20.1 |
| Medical/surgical | 1 | 64 | 0 | 65 | 5.7 |
| Paediatric | 4 | 126 | 2 | 132 | 11.5 |
| Adolescent | 0 | 19 | 0 | 19 | 1.7 |
| Geriatric | 3 | 68 | 0 | 71 | 6.2 |
| Continuing care (non-psychiatric) | 0 | 21 | 0 | 21 | 1.8 |
| Acute psychiatry | 3 | 43 | 0 | 46 | 4.0 |
| Continuing care (psychiatric) | 6 | 53 | 0 | 59 | 5.1 |
| Community/domiciliary | 4 | 162 | 3 | 169 | 14.7 |
| Acute/intensive care | 2 | 6 | 0 | 8 | 0.7 |
| Intellectual handicap | 5 | 23 | 2 | 30 | 2.6 |
| Teaching | 1 | 33 | 0 | 34 | 3.0 |
| Study/research | 0 | 20 | 0 | 20 | 1.7 |
| Management | 6 | 111 | 1 | 118 | 10.3 |
| Other | 3 | 108 | 1 | 112 | 9.8 |
| Not reported | 0 | 13 | 0 | 13 | 1.1 |
| Total | 49 | 1088 | 10 | 1147 | 100.0 |

Table 63 (page 60) shows the number of FTE occupational therapists in each type of work. Rehabilitation (22.1 percent) and community/domiciliary (15.6 percent) were the areas where the most time was spent. Occupational therapists reported that they worked 32.7 hours per week on average.

Table 60: Work type of active occupational therapists by main employment setting, 2000

| Employment setting by work type | Rehabilitation | Medical/surgical | Paediatric | Adolescent | Geriatric | Continuing care (non-psychiatric) | Acute psychiatry | Continuing care (psychiatric) | Community/domiciliary | Acute/intensive care | Intellectual handicap | Teaching | Study/research | Management | Other | Not reported | Total |
|---|----------------|------------------|------------|------------|-----------|--------------------------------------|------------------|----------------------------------|-----------------------|----------------------|-----------------------|-----------|----------------|------------|------------|--------------|-------------|
| CHE | 119 | 58 | 58 | 6 | 34 | 3 | 42 | 45 | 120 | 8 | 11 | 4 | 5 | 55 | 57 | 6 | 631 |
| Private practice (self-employed) | 56 | 3 | 16 | 1 | 12 | 4 | 0 | 1 | 33 | 0 | 1 | 6 | 4 | 28 | 29 | 4 | 198 |
| Private practice (employed) | 21 | 1 | 4 | 0 | 3 | 1 | 1 | 1 | 5 | 0 | 5 | 1 | 1 | 6 | 3 | 0 | 53 |
| Private hospital or rest home | 11 | 2 | 0 | 0 | 21 | 12 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 62 |
| Schools (education) | 2 | 0 | 36 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 11 | 2 | 2 | 1 | 1 | 72 |
| Government dept / Crown agency (not CHE) | 5 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 2 | 3 | 3 | 0 | 19 |
| Community/voluntary organisation | 6 | 0 | 7 | 1 | 0 | 1 | 0 | 5 | 3 | 0 | 5 | 0 | 0 | 6 | 7 | 0 | 41 |
| Other | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 9 | 6 | 5 | 10 | 0 | 45 |
| Not reported | 4 | 1 | 5 | 0 | 1 | 0 | 0 | 2 | 4 | 0 | 1 | 0 | 0 | 4 | 2 | 2 | 26 |
| Total | 230 | 65 | 132 | 19 | 71 | 21 | 46 | 59 | 169 | 8 | 30 | 34 | 20 | 118 | 112 | 13 | 1147 |

Table 61: Country of qualification of active occupational therapists, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 675 | 83.5 |
| United Kingdom | 72 | 8.9 |
| USA | 1 | 0.1 |
| Canada | 8 | 1.0 |
| Australia | 13 | 1.6 |
| South Africa | 16 | 2.0 |
| Germany | 3 | 0.4 |
| Sweden | 2 | 0.2 |
| Netherlands | 2 | 0.2 |
| Dubai | 1 | 0.1 |
| Hong Kong | 1 | 0.1 |
| India | 1 | 0.1 |
| Ireland | 1 | 0.1 |
| Philippines | 1 | 0.1 |
| Not reported | 11 | 1.4 |
| Total | 808 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Table 62: Geographic distribution of active occupational therapists by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|----------|-------|-----------------------------|
| Northland | 1069.0 | 26.7 | 18.4 |
| Auckland | 7791.5 | 194.8 | 16.1 |
| Waikato | 2307.0 | 57.7 | 16.5 |
| Bay of Plenty | 1533.5 | 38.3 | 15.6 |
| Tairāwhiti | 300.0 | 7.5 | 16.1 |
| Hawke's Bay | 775.4 | 19.4 | 13.3 |
| Taranaki | 533.0 | 13.3 | 12.8 |
| Manawatu-Wanganui | 1387.0 | 34.7 | 12.8 |
| Wellington | 2739.0 | 68.5 | 17.7 |
| Nelson-Marlborough | 889.0 | 22.2 | 18.2 |
| West Coast | 345.0 | 8.6 | 26.7 |
| Canterbury | 3903.0 | 97.6 | 19.9 |
| Otago | 2273.0 | 56.8 | 30.1 |
| Southland | 449.0 | 11.2 | 12.1 |
| Overseas | 82.0 | 2.1 | - |
| Not reported | 46.0 | 1.2 | - |
| Total | 26 422.4 | 660.6 | 17.2 |

Table 63: Work type of active occupational therapists at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|-----------------------------------|-----------------|--------------|--------------|
| Rehabilitation | 5829.0 | 145.7 | 22.1 |
| Medical/surgical | 1286.0 | 32.2 | 4.9 |
| Paediatric | 3431.9 | 85.8 | 13.0 |
| Adolescent | 351.0 | 8.8 | 1.3 |
| Geriatric | 1340.0 | 33.5 | 5.1 |
| Continuing care (non-psychiatric) | 240.0 | 6.0 | 0.9 |
| Acute psychiatry | 1303.0 | 32.6 | 4.9 |
| Continuing care (psychiatric) | 1752.0 | 43.8 | 6.6 |
| Community/domiciliary | 4111.0 | 102.8 | 15.6 |
| Acute/intensive care | 241.0 | 6.0 | 0.9 |
| Intellectual handicap | 659.0 | 16.5 | 2.5 |
| Teaching | 689.0 | 17.2 | 2.6 |
| Study/research | 174.0 | 4.4 | 0.7 |
| Management | 2055.0 | 51.4 | 7.8 |
| Other | 2895.5 | 72.4 | 11.0 |
| Not reported | 65.0 | 1.6 | 0.2 |
| Total | 26 422.4 | 660.6 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Podiatrists

There were 240 podiatrists who purchased Annual Licences (ALs) between March and September 2000. A health workforce survey was included with each invoice sent out in February 2000.

These statistics are based on the 127 active (working) podiatrists who responded to the health workforce survey. This represents 52.9 percent of the 2000 licence holders. A further 2.9 percent responded to the 2000 survey but did not report that they were actively working. It is not known if the licence holders who did not respond to the survey (44.1 percent) are working as podiatrists.

Table 64 shows the number of ALs purchased by podiatrists each year. Although not all of those purchasing ALs are actively working in the profession, this is an indicator of the size of the podiatrist workforce. The number of ALs purchased has increased by 27.0 percent from 189 to 240 over the last 10 years.

Table 64: Number of Annual Licences purchased by podiatrists, 1991/92–2000/01

| Year | Number of ALs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|-------------------------|--|----------------------------|
| 1991/92 | 189 | 172 | 91.0 |
| 1992/93 | 191 | * | * |
| 1993/94 | 196 | 119 | 60.7 |
| 1994/95 | 201 | 118 | 58.7 |
| 1995/96 | 232 | 132 | 56.9 |
| 1996/97 | 225 | 140 | 62.2 |
| 1997/98 | 226 | 142 | 62.8 |
| 1998/99 | 242 | 147 | 60.7 |
| 1999/2000 | 241 | 140 | 58.1 |
| 2000/01 | 240 | 127 | 52.9 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

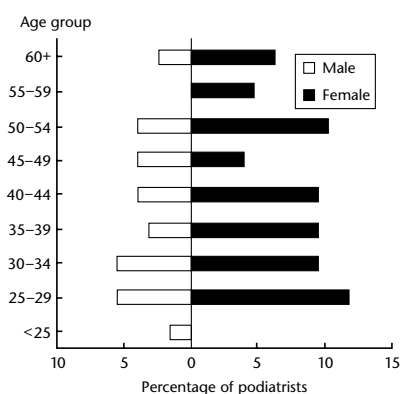
The active podiatry workforce was predominantly female (66.1 percent), as illustrated in Figure 15 and Table 65.

Table 65: Age and sex distribution of active podiatrists, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 2 | 7 | 7 | 4 | 5 | 5 | 5 | 0 | 3 | 3 | 41 |
| Female | 0 | 15 | 12 | 12 | 12 | 5 | 13 | 6 | 8 | 1 | 84 |
| Not reported | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Total | 2 | 22 | 19 | 17 | 17 | 10 | 18 | 6 | 11 | 5 | 127 |

Fig 15:
Age and sex distribution of active podiatrists, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 66 shows prioritised ethnicity of active podiatrists (refer to ethnicity notes, Appendix 1, page 83). The majority (82.7 percent) of the active podiatrists identified themselves as belonging to the New Zealand/Pākehā ethnic group.

Table 66: Prioritised ethnicity of active podiatrists, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 105 | 82.7 |
| Other European | 12 | 9.4 |
| New Zealand Māori | 2 | 1.6 |
| Chinese | 1 | 0.8 |
| Other | 3 | 2.4 |
| Not reported | 4 | 3.1 |
| Total | 127 | 100.0 |

Employment setting

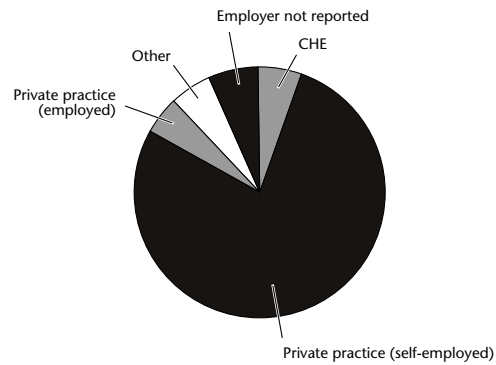
Table 67 shows the breakdown of males and females in each main employment setting. Figure 16 shows that the majority (77.2 percent) of active podiatrists were self-employed in a private practice.

Table 67: Main employment setting of active podiatrists, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|--|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 3 | 4 | 0 | 7 | 5.5 |
| Private practice (self-employed) | 28 | 68 | 2 | 98 | 77.2 |
| Private practice (employed) | 3 | 4 | 0 | 7 | 5.5 |
| Private hospital or rest home | 0 | 3 | 0 | 3 | 2.4 |
| University / polytechnic | 0 | 1 | 0 | 1 | 0.8 |
| Orthotic laboratory representative | 1 | 0 | 0 | 1 | 0.8 |
| Shoe manufacturer's technical representative | 0 | 1 | 0 | 1 | 0.8 |
| Other | 1 | 0 | 0 | 1 | 0.8 |
| Not reported | 5 | 3 | 0 | 8 | 6.3 |
| Total | 41 | 84 | 2 | 127 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Fig 16:
Main employment setting of active podiatrists, 2000



Work type

Table 68 shows the number of male and female podiatrists in each work type for 2000. It shows that general podiatry was reported as a work type for 42.7 percent of respondents when working in their main employment setting. Sports medicine (18.7 percent), diabetes podiatry (16.0 percent) were the next most common work types reported.

Table 68: Work type of active podiatrists in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|--------------------------|-----------|------------|--------------|------------|--------------|
| | | | | Number | Percentage |
| General podiatry | 33 | 78 | 1 | 112 | 42.7 |
| Sports medicine | 23 | 26 | 0 | 49 | 18.7 |
| Diabetes podiatry | 12 | 30 | 0 | 42 | 16.0 |
| Teaching | 0 | 4 | 0 | 4 | 1.5 |
| Study/research | 3 | 9 | 0 | 12 | 4.6 |
| Management | 6 | 18 | 0 | 24 | 9.2 |
| Technical representative | 2 | 2 | 0 | 4 | 1.5 |
| Other | 5 | 6 | 0 | 11 | 4.2 |
| Not reported | 2 | 1 | 1 | 4 | 1.5 |
| Total | 86 | 174 | 2 | 262 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Table 69 shows the main employment setting by work type of the 127 active podiatrists who responded to the 2000 survey. Each podiatrist could specify more than one work type, and Tables 68 and 69 show that many podiatrists worked in more than one field within their main employment setting.

Table 69: Work type of active podiatrists by main employment setting, 2000

| Employment setting by work type | General podiatry | Sports medicine | Diabetes podiatry | Teaching | Study/research | Management | Technical representative | Other | Not reported | Total |
|------------------------------------|------------------|-----------------|-------------------|----------|----------------|------------|-----------------------------|-------|--------------|-------|
| CHE | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Private practice (self-employed) | 91 | 40 | 32 | 3 | 11 | 22 | 3 | 7 | 4 | 213 |
| Private practice (employed) | 7 | 6 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 17 |
| Private hospital or rest home | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 |
| University / polytechnic | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Orthotic laboratory representative | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Shoe manufacturer's representative | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| Other | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| Not reported | 6 | 3 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 13 |
| Total | 112 | 49 | 42 | 4 | 12 | 24 | 4 | 11 | 4 | 262 |

Country of qualification

Table 70 shows the majority of podiatrists surveyed in 2000 qualified in New Zealand (84.3 percent).

Table 70: Country of qualification of active podiatrists, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 107 | 84.3 |
| Australia | 1 | 0.8 |
| South Africa | 2 | 1.6 |
| United Kingdom | 10 | 7.9 |
| USA | 1 | 0.8 |
| Not reported | 6 | 4.7 |
| Total | 127 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Hours worked

Table 71 shows the number of full-time equivalent (FTE) podiatrists by geographic region. It shows on average there were 2.7 active podiatrists per 100 000 estimated population. Wellington had the highest rate at 5.4 and Waikato had the lowest with a rate of 1.1 FTEs per 100 000 population.

Table 72 shows the number of FTE podiatrists in each type of work. General podiatry accounted for 65.1 percent of all work types. On average, podiatrists reported that they worked in podiatry 32.0 hours per week.

Table 71: Geographic distribution of active podiatrists by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|--------|-------|-----------------------------|
| Northland | 74.5 | 1.9 | 1.3 |
| Auckland | 959.0 | 24.0 | 2.0 |
| Waikato | 159.0 | 4.0 | 1.1 |
| Bay of Plenty | 176.0 | 4.4 | 1.8 |
| Tairāwhiti | 24.0 | 0.6 | 1.3 |
| Hawke's Bay | 291.5 | 7.3 | 5.0 |
| Taranaki | 65.0 | 1.6 | 1.6 |
| Manawatu-Wanganui | 283.0 | 7.1 | 2.6 |
| Wellington | 841.0 | 21.0 | 5.4 |
| Nelson-Marlborough | 135.0 | 3.4 | 2.8 |
| West Coast | 40.0 | 1.0 | 3.1 |
| Canterbury | 705.0 | 17.6 | 3.6 |
| Otago | 186.0 | 4.7 | 2.5 |
| Southland | 75.0 | 1.9 | 2.0 |
| Not reported | 53.0 | 1.3 | - |
| Total | 4067.0 | 101.7 | 2.7 |

Table 72: Work type of active podiatrists at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|--------------------------|--------|-------|------------|
| General podiatry | 2648.5 | 66.2 | 65.1 |
| Sports medicine | 485.5 | 12.1 | 11.9 |
| Diabetes podiatry | 417.0 | 10.4 | 10.3 |
| Teaching | 45.0 | 1.1 | 1.1 |
| Study/research | 50.0 | 1.3 | 1.2 |
| Management | 120.0 | 3.0 | 3.0 |
| Technical representative | 40.0 | 1.0 | 1.0 |
| Other | 215.0 | 5.4 | 5.3 |
| Not reported | 46.0 | 1.2 | 1.1 |
| Total | 4067.0 | 101.7 | 100.0 |

Physiotherapists

There were 2500 physiotherapists who purchased Annual Practising Certificates (APCs) between March and September 2000. A health workforce survey was included with each invoice sent in February 2000.

These statistics are based on the 1509 active (working) physiotherapists who responded to the health workforce survey. This represents 60.4 percent of 2000 APC holders. A further 6.4 percent responded to the 2000 survey but did not report that they were active. It is not known if the APC holders who did not respond to the survey (33.2 percent) are working as physiotherapists.

Table 73 shows the number of APCs purchased by physiotherapists each year. Although not all of those purchasing APCs are actively working in the profession, this is an indicator of the size of the physiotherapist workforce. The number of APCs purchased increased by 31.0 percent to 2500 over the last 10 years.

Table 73: Number of Annual Practising Certificates purchased by physiotherapists, 1991/92–2000/01

| Year | Number of APCs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|--------------------------|--|----------------------------|
| 1991/92 | 1909 | 1552 | 81.3 |
| 1992/93 | 1913 | * | * |
| 1993/94 | 1990 | 1264 | 63.5 |
| 1994/95 | 2081 | 1277 | 61.4 |
| 1995/96 | 2318 | 1436 | 61.9 |
| 1996/97 | 2308 | 1513 | 65.6 |
| 1997/98 | 2280 | 1484 | 65.1 |
| 1998/99 | 2395 | 1442 | 60.2 |
| 1999/2000 | 2444 | 1475 | 60.4 |
| 2000/01 | 2500 | 1509 | 60.4 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

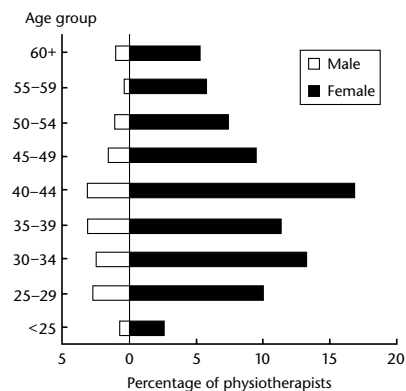
The active physiotherapy workforce was predominantly female (83.0 percent), as illustrated in Table 74 and Figure 17.

Table 74: Age and sex distribution of active physiotherapists, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 10 | 40 | 37 | 46 | 46 | 24 | 16 | 5 | 14 | 4 | 242 |
| Female | 40 | 152 | 200 | 171 | 254 | 143 | 112 | 87 | 80 | 13 | 1252 |
| Not reported | 2 | 0 | 2 | 1 | 2 | 0 | 3 | 0 | 1 | 4 | 15 |
| Total | 52 | 192 | 239 | 218 | 302 | 167 | 131 | 92 | 95 | 21 | 1509 |

Fig 17:
Age and sex distribution of active physiotherapists, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 75 (page 70) shows the prioritised ethnicity of active physiotherapists (refer to ethnicity notes, Appendix 1, page 83). The majority (80.1 percent) of the active physiotherapists identified themselves as belonging to the New Zealand/Pākehā ethnic group.

Table 75: Prioritised ethnicity of active physiotherapists, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 1208 | 80.1 |
| Other European | 200 | 13.3 |
| New Zealand Māori | 11 | 0.7 |
| Chinese | 16 | 1.1 |
| Samoan | 1 | 0.1 |
| Indian | 4 | 0.3 |
| South East Asian | 3 | 0.2 |
| Other Asian | 4 | 0.3 |
| Other | 31 | 2.1 |
| Not reported | 31 | 2.1 |
| Total | 1509 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Employment setting

Table 76 shows the main employment setting of both male and female physiotherapists. Figure 18 shows the majority (36.4 percent) of active physiotherapists were self-employed in private practice. A further 30.5 percent worked for a CHE.

Table 76: Main employment setting of active physiotherapists, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|------------------------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 37 | 420 | 3 | 460 | 30.5 |
| Private practice (self-employed) | 140 | 403 | 6 | 549 | 36.4 |
| Private practice (employed) | 38 | 164 | 3 | 205 | 13.6 |
| Private hospital or rest home | 1 | 76 | 2 | 79 | 5.2 |
| University / polytechnic | 9 | 40 | 0 | 49 | 3.2 |
| Schools (education service) | 1 | 53 | 0 | 54 | 3.6 |
| Government dept / Crown agency | 0 | 5 | 0 | 5 | 0.3 |
| Commercial/industrial organisation | 1 | 10 | 0 | 11 | 0.7 |
| Voluntary agency | 2 | 5 | 0 | 7 | 0.5 |
| Other | 2 | 21 | 0 | 23 | 1.5 |
| Not reported | 11 | 55 | 1 | 67 | 4.4 |
| Total | 242 | 1252 | 15 | 1509 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Fig 18:
Main employment setting of active physiotherapists, 2000

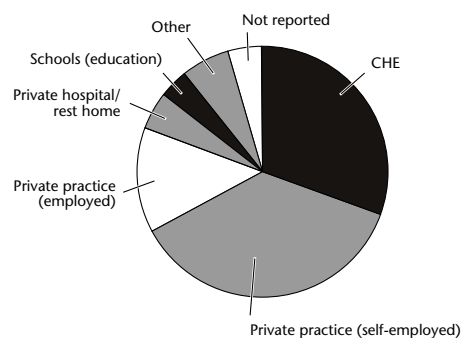


Table 77: Work type of active physiotherapists in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|------------------------------------|------------|-------------|--------------|-------------|--------------|
| | | | | Number | Percentage |
| Musculoskeletal inpatient | 40 | 122 | 1 | 163 | 5.2 |
| Musculoskeletal outpatient | 168 | 524 | 7 | 699 | 22.3 |
| Sports physiotherapy | 135 | 309 | 6 | 450 | 14.3 |
| Care of elderly | 21 | 200 | 3 | 224 | 7.1 |
| Mental health | 1 | 24 | 0 | 25 | 0.8 |
| Paediatric neurology | 4 | 119 | 1 | 124 | 4.0 |
| Adult neurology | 16 | 156 | 0 | 172 | 5.5 |
| Other paediatric | 4 | 59 | 0 | 63 | 2.0 |
| Medical/surgical cardiorespiratory | 9 | 107 | 1 | 117 | 3.7 |
| Community/domiciliary | 10 | 136 | 1 | 147 | 4.7 |
| Specialist Education Services | 1 | 20 | 0 | 21 | 0.7 |
| Women's health/obstetrics | 3 | 91 | 0 | 94 | 3.0 |
| Continuing care | 1 | 14 | 1 | 16 | 0.5 |
| Occupational health | 25 | 73 | 1 | 99 | 3.2 |
| Teaching | 26 | 86 | 0 | 112 | 3.6 |
| Study/research | 34 | 101 | 1 | 136 | 4.3 |
| Management | 75 | 249 | 3 | 327 | 10.4 |
| Other | 14 | 106 | 1 | 121 | 3.9 |
| Not reported | 4 | 21 | 1 | 26 | 0.8 |
| Total | 591 | 2517 | 28 | 3136 | 100.0 |



Work type

Table 77 (page 71) shows the number of male and female physiotherapists in each type of work. Musculoskeletal outpatient was reported as the principal work type for 22.3 percent of respondents when working in their main employment setting. Sports physiotherapy was the second most frequently reported work type, at 14.3 percent.

Table 78 shows the main employment setting by work type of the 1509 physiotherapists who responded to the survey. Each physiotherapist could specify more than one work type, and Tables 77 and 78 show that many physiotherapists worked in more than one field within their main employment setting.

Country of qualification

Table 79 (page 74) shows where physiotherapists received their qualifications. Most physiotherapists practising in New Zealand have also trained here (79.3 percent).

Hours worked

Table 80 (page 74) shows the number of full-time equivalent (FTE) physiotherapists in each geographic region. There was a national average of 16.2 physiotherapists per 100 000 population. West Coast and Northland had fewer reported physiotherapists than the national average, while Otago and Wellington had a higher rate.

Table 81 (page 75) shows the number of (FTE) physiotherapists in each type of work. Musculoskeletal outpatient and sports physiotherapy were the areas where most physiotherapists who responded to the survey spent most of their time.

Table 78: Work type of active physiotherapists by main employment setting, 2000

| Employment setting by work type | Musculoskeletal inpatient | Musculoskeletal outpatient | Sports physiotherapy | Care of elderly | Mental health | Paediatric neurology | Adult neurology | Other paediatric | Medical/surgical cardiorespiratory | Community/domiciliary | Specialist Education Services | Women's health/obstetrics | Continuing care | Occupational health | Teaching | Study/research | Management | Other | Not reported | Total |
|------------------------------------|---------------------------|----------------------------|----------------------|-----------------|---------------|----------------------|-----------------|------------------|------------------------------------|-----------------------|-------------------------------|---------------------------|-----------------|---------------------|----------|----------------|------------|-------|--------------|-------|
| CHE | 60 | 120 | 10 | 80 | 11 | 60 | 96 | 38 | 81 | 79 | 2 | 52 | 4 | 10 | 21 | 11 | 69 | 44 | 2 | 850 |
| Private practice (self-employed) | 66 | 377 | 296 | 59 | 10 | 18 | 40 | 6 | 21 | 51 | 1 | 29 | 8 | 62 | 36 | 76 | 207 | 43 | 5 | 1411 |
| Private practice (employed) | 18 | 153 | 119 | 12 | 1 | 4 | 11 | 1 | 5 | 9 | 0 | 5 | 2 | 14 | 5 | 17 | 18 | 11 | 4 | 409 |
| Private hospital or rest home | 12 | 5 | 0 | 62 | 1 | 0 | 10 | 0 | 6 | 2 | 0 | 2 | 2 | 3 | 6 | 3 | 6 | 3 | 1 | 124 |
| University/polytechnic | 1 | 10 | 1 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 35 | 14 | 4 | 3 | 0 | 72 |
| Schools (education service) | 0 | 1 | 0 | 0 | 0 | 36 | 2 | 13 | 0 | 0 | 16 | 0 | 0 | 2 | 4 | 2 | 5 | 1 | 0 | 82 |
| Government dept / Crown agency | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 10 |
| Commercial/industrial organisation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 2 | 4 | 2 | 0 | 13 |
| Voluntary agency | 0 | 1 | 0 | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 0 | 1 | 0 | 12 |
| Other | 1 | 6 | 4 | 3 | 1 | 1 | 7 | 2 | 1 | 4 | 0 | 1 | 0 | 2 | 0 | 1 | 3 | 7 | 1 | 45 |
| Not reported | 4 | 25 | 20 | 5 | 1 | 3 | 3 | 2 | 1 | 1 | 0 | 4 | 0 | 2 | 4 | 7 | 9 | 4 | 13 | 108 |
| Total | 163 | 699 | 450 | 224 | 25 | 124 | 172 | 63 | 117 | 147 | 21 | 94 | 16 | 99 | 112 | 136 | 327 | 121 | 26 | 3136 |

Table 79: Country of qualification of active physiotherapists, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 1196 | 79.3 |
| United Kingdom | 161 | 10.7 |
| Netherlands | 38 | 2.5 |
| Australia | 39 | 2.6 |
| South Africa | 21 | 1.4 |
| Canada | 9 | 0.6 |
| USA | 6 | 0.4 |
| Germany | 6 | 0.4 |
| Switzerland | 2 | 0.1 |
| India | 2 | 0.1 |
| Ireland | 2 | 0.1 |
| Czech Republic | 1 | 0.1 |
| Norway | 1 | 0.1 |
| Russia | 1 | 0.1 |
| Sri Lanka | 1 | 0.1 |
| Zimbabwe | 1 | 0.1 |
| Not reported | 22 | 1.5 |
| Total | 1509 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Table 80: Geographic distribution of active physiotherapists by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|----------|--------|-----------------------------|
| Northland | 1824.0 | 45.6 | 31.4 |
| Auckland | 14 345.5 | 358.6 | 29.7 |
| Waikato | 4382.0 | 109.6 | 31.3 |
| Bay of Plenty | 3375.5 | 84.4 | 34.3 |
| Tairāwhiti | 530.0 | 13.3 | 28.5 |
| Hawke's Bay | 1667.5 | 41.7 | 28.6 |
| Taranaki | 1012.5 | 25.3 | 24.2 |
| Manawatu-Wanganui | 2147.6 | 53.7 | 19.8 |
| Wellington | 4424.9 | 110.6 | 28.5 |
| Nelson-Marlborough | 1626.5 | 40.7 | 33.4 |
| West Coast | 284.0 | 7.1 | 22.0 |
| Canterbury | 7316.5 | 182.9 | 37.3 |
| Otago | 3343.5 | 83.6 | 44.2 |
| Southland | 966.0 | 24.2 | 26.0 |
| Not reported | 446.0 | 11.2 | - |
| Total | 47 691.0 | 1192.3 | 31.1 |

Table 81: Work type of active physiotherapists at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|------------------------------------|-----------------|---------------|--------------|
| Musculoskeletal inpatient | 2719.8 | 68.0 | 5.7 |
| Musculoskeletal outpatient | 15 626.8 | 390.7 | 32.8 |
| Sports physiotherapy | 5602.0 | 140.1 | 11.7 |
| Care of elderly | 3153.0 | 78.8 | 6.6 |
| Mental health | 280.5 | 7.0 | 0.6 |
| Paediatric neurology | 2334.0 | 58.4 | 4.9 |
| Adult neurology | 2643.0 | 66.1 | 5.5 |
| Other paediatric | 656.2 | 16.4 | 1.4 |
| Medical/surgical cardiorespiratory | 2000.5 | 50.0 | 4.2 |
| Community/domiciliary | 2388.0 | 59.7 | 5.0 |
| Specialist Education Services | 457.0 | 11.4 | 1.0 |
| Women's health/obstetrics | 799.6 | 20.0 | 1.7 |
| Continuing care | 91.5 | 2.3 | 0.2 |
| Occupational health | 1088.5 | 27.2 | 2.3 |
| Teaching | 1354.2 | 33.9 | 2.8 |
| Study/research | 1177.5 | 29.4 | 2.5 |
| Management | 3044.5 | 76.1 | 6.4 |
| Other | 2198.5 | 55.0 | 4.6 |
| Not reported | 76.0 | 1.9 | 0.2 |
| Total | 47 691.0 | 1192.3 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Registered psychologists

There were 1124 registered psychologists who purchased Annual Practising Certificates (APCs) between March and September 2000. A health workforce survey was included with each invoice sent out in February 2000.

These statistics are based on the 667 active (working) registered psychologists who responded to the health workforce survey. This represents 59.3 percent of the 2000 APC holders. A further 2.8 percent responded to the 2000 survey but did not report they were actively working. It is not known if the APC holders who did not respond to the survey (37.8 percent) are working as registered psychologists.

Table 82 shows the number of APCs purchased by registered psychologists each year. Although not all of those purchasing APCs are actively working in the profession, this is an indicator of the size of the registered psychologist workforce. The number of APCs has increased by 42.6 percent from 788 to 1124 over the last 10 years.

Table 82: Number of Annual Practising Certificates purchased by registered psychologists, 1991/92–2000/01

| Year | Number of APCs purchased | Completed surveys from respondents who were active | Response rate (percentage) |
|-----------|--------------------------|--|----------------------------|
| 1991/92 | 788 | 658 | 83.5 |
| 1992/93 | 825 | * | * |
| 1993/94 | 834 | 313 | 37.5 |
| 1994/95 | 856 | 558 | 65.2 |
| 1995/96 | 1066 | 642 | 60.2 |
| 1996/97 | 996 | 686 | 68.9 |
| 1997/98 | 998 | 659 | 66.0 |
| 1998/99 | 1025 | 611 | 59.6 |
| 1999/2000 | 1042 | 598 | 57.4 |
| 2000/01 | 1124 | 667 | 59.3 |

* see Appendix 6 (page 91) for a note on 1992 data.

Demographic data

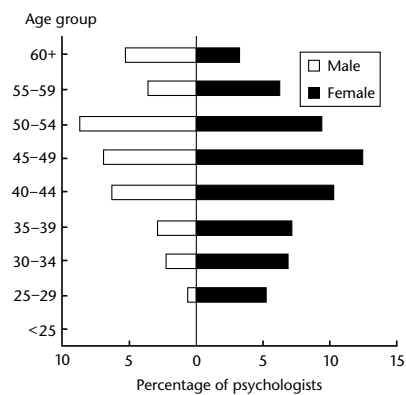
The active registered psychologist workforce was predominantly female (61.9 percent), as depicted in Table 83 and Figure 19.

Table 83: Age and sex distribution of active registered psychologists, 2000

| Sex | Age group | | | | | | | | | Not reported | Total |
|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-------|
| | <25 | 25– | 30– | 35– | 40– | 45– | 50– | 55– | 60+ | | |
| Male | 0 | 4 | 15 | 19 | 42 | 46 | 58 | 24 | 35 | 3 | 246 |
| Female | 0 | 35 | 46 | 48 | 69 | 83 | 63 | 42 | 22 | 5 | 413 |
| Not reported | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 4 | 8 |
| Total | 0 | 39 | 61 | 67 | 112 | 129 | 122 | 68 | 57 | 12 | 667 |

Fig 19: Age and sex distribution of active registered psychologists, 2000

(Note: respondents who did not identify their sex have been excluded.)



Ethnicity

Table 84 (page 78) shows prioritised ethnicity of active registered psychologists (refer to ethnicity notes, Appendix 1, page 83). The majority (80.7 percent) of the active registered psychologists identified themselves as belonging to the New Zealand European/Pākehā ethnic group.

Table 84: Prioritised ethnicity of active registered psychologists, 2000

| Ethnic group | Number | Percentage |
|-----------------------------|--------|------------|
| New Zealand European/Pākehā | 538 | 80.7 |
| Other European | 78 | 11.7 |
| Chinese | 3 | 0.4 |
| New Zealand Māori | 9 | 1.3 |
| Indian | 7 | 1.0 |
| South East Asian | 1 | 0.1 |
| Other/Not reported | 31 | 4.6 |
| Total | 667 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Employment setting

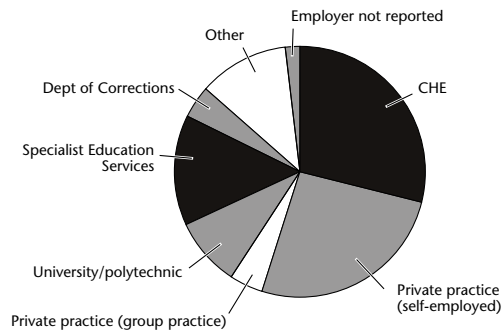
Table 85 shows the breakdown of males and females in the main employment settings. The largest employment setting of registered psychologists was in a Crown health enterprise (CHE). This made up 28.8 percent of the workforce (see Figure 20).

Table 85: Main employment setting of active registered psychologists, by sex, 2000

| Employment setting | Male | Female | Not reported | Total | |
|--------------------------------------|------|--------|--------------|--------|------------|
| | | | | Number | Percentage |
| CHE | 64 | 125 | 3 | 192 | 28.8 |
| Private practice (self-employed) | 68 | 104 | 3 | 175 | 26.2 |
| Private practice (group practice) | 8 | 19 | 0 | 27 | 4.0 |
| University / polytechnic | 19 | 41 | 0 | 60 | 9.0 |
| Specialist Education Services | 36 | 59 | 0 | 95 | 14.2 |
| Child, Youth & Family Service | 0 | 10 | 0 | 10 | 1.5 |
| Department of Corrections | 12 | 16 | 0 | 28 | 4.2 |
| Other government department | 5 | 11 | 1 | 17 | 2.5 |
| Commercial/industrial organisation | 9 | 10 | 0 | 19 | 2.8 |
| Voluntary agency | 6 | 4 | 1 | 11 | 1.6 |
| Consultant to public sector employer | 2 | 3 | 0 | 5 | 0.7 |
| Other | 7 | 8 | 0 | 15 | 2.2 |
| Not reported | 10 | 3 | 0 | 13 | 1.9 |
| Total | 246 | 413 | 8 | 667 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Fig 20:
Main employment setting of active registered psychologists, 2000



Work type

Table 86 shows the number of male and female psychologists in each work type for 2000. Clinical psychology was reported as the work type for 29.7 percent of respondents when working in their main employment setting.

Table 86: Work type of active registered psychologists in main employment setting, by sex, 2000

| Work type | Male | Female | Not reported | Total | |
|--------------------------------------|------------|------------|--------------|-------------|--------------|
| | | | | Number | Percentage |
| Clinical psychology | 128 | 246 | 5 | 379 | 29.7 |
| Educational psychology | 59 | 78 | 0 | 137 | 10.8 |
| Industrial/organisational psychology | 33 | 33 | 1 | 67 | 5.3 |
| Personnel management | 20 | 23 | 0 | 43 | 3.4 |
| Rehabilitation | 11 | 16 | 0 | 27 | 2.1 |
| Psychotherapy | 34 | 56 | 3 | 93 | 7.3 |
| Counselling | 57 | 56 | 2 | 115 | 9.0 |
| Teaching | 43 | 66 | 1 | 110 | 8.6 |
| Study | 11 | 20 | 1 | 32 | 2.5 |
| Research | 41 | 53 | 0 | 94 | 7.4 |
| Service management | 45 | 48 | 1 | 94 | 7.4 |
| Other | 23 | 48 | 0 | 71 | 5.6 |
| Not reported | 5 | 7 | 0 | 12 | 0.9 |
| Total | 510 | 750 | 14 | 1274 | 100.0 |

Table 87 shows the main employment setting by work type of the 667 active registered psychologists who responded to the 2000 survey. Each registered psychologist could specify more than one work type, and Tables 86 and 87 show that many registered psychologists reported worked in more than one field within their main employment setting.

Table 87: Work type of active registered psychologists by main employment setting, 2000

| Employment setting by work type | Clinical psychology | Educational psychology | Industrial/organisational psychology | Personnel management | Rehabilitation | Psychotherapy | Counselling | Teaching | Study | Research | Service management | Other | Not reported | Total |
|--------------------------------------|---------------------|------------------------|--------------------------------------|----------------------|----------------|---------------|-------------|----------|-------|----------|--------------------|-------|--------------|-------|
| CHE | 180 | 3 | 3 | 9 | 7 | 22 | 14 | 13 | 6 | 14 | 25 | 12 | 0 | 308 |
| Private practice (self-employed) | 103 | 24 | 26 | 9 | 15 | 52 | 65 | 26 | 15 | 14 | 18 | 37 | 5 | 409 |
| Private practice (group practice) | 15 | 5 | 6 | 1 | 1 | 7 | 3 | 1 | 1 | 1 | 1 | 3 | 2 | 47 |
| University / polytechnic | 16 | 2 | 2 | 1 | 0 | 4 | 6 | 46 | 5 | 41 | 9 | 8 | 1 | 141 |
| Specialist Education Services | 9 | 89 | 2 | 5 | 1 | 1 | 12 | 5 | 1 | 3 | 15 | 2 | 1 | 146 |
| Child, Youth & Family Services | 10 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Dept of Corrections | 24 | 0 | 0 | 3 | 1 | 1 | 1 | 2 | 1 | 3 | 9 | 2 | 0 | 47 |
| Other government departments | 1 | 1 | 10 | 6 | 0 | 0 | 4 | 5 | 1 | 5 | 5 | 3 | 0 | 41 |
| Commercial/industrial organisation | 2 | 0 | 16 | 4 | 1 | 0 | 2 | 2 | 1 | 4 | 3 | 0 | 0 | 35 |
| Voluntary agency | 7 | 3 | 0 | 2 | 0 | 3 | 4 | 3 | 1 | 5 | 5 | 1 | 0 | 34 |
| Consultant to public sector employer | 3 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 2 | 0 | 1 | 0 | 11 |
| Other | 6 | 5 | 0 | 1 | 1 | 1 | 2 | 3 | 0 | 1 | 4 | 2 | 0 | 26 |
| Not reported | 3 | 4 | 2 | 1 | 0 | 1 | 0 | 3 | 0 | 1 | 0 | 0 | 3 | 18 |
| Total | 379 | 137 | 67 | 43 | 27 | 93 | 115 | 110 | 32 | 94 | 94 | 71 | 12 | 1274 |

Country of qualification

Table 88 shows that the majority of registered psychologists who practise in New Zealand also trained in New Zealand (82.2 percent).

Table 88: Country of qualification of active registered psychologists, 2000

| Country | Number | Percentage |
|----------------|--------|------------|
| New Zealand | 548 | 82.2 |
| United Kingdom | 30 | 4.5 |
| Germany | 5 | 0.7 |
| South Africa | 32 | 4.8 |
| Canada | 6 | 0.9 |
| Australia | 12 | 1.8 |
| USA | 18 | 2.7 |
| Yugoslavia | 1 | 0.1 |
| Belgium | 1 | 0.1 |
| Croatia | 1 | 0.1 |
| India | 1 | 0.1 |
| Sweden | 1 | 0.1 |
| Switzerland | 1 | 0.1 |
| Not reported | 10 | 1.5 |
| Total | 667 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Hours worked

Table 89 (page 82) shows the number of full-time equivalent (FTE) registered psychologists in each geographic region, based on the distribution of the 667 registered psychologists who responded to the survey. On average in New Zealand, there were 16.2 registered psychologists per 100 000 population. In 2000 West Coast and Northland reported fewer registered psychologists than the national average, whereas Otago and Wellington reported much higher rates per capita.

Table 90 (page 82) shows the number of FTE registered psychologists in each work type. Clinical psychology (43.5 percent) and educational psychology (14.1 percent) were the areas where registered psychologists spent most of their time. On average registered psychologists reported that they worked approximately 37.1 hours per week.

Table 89: Geographic distribution of active registered psychologists by hours, FTE, 2000

| Geographic region | Hours | FTE | Rate per 100 000 population |
|--------------------|----------|-------|-----------------------------|
| Northland | 458.0 | 11.5 | 7.9 |
| Auckland | 6980.8 | 174.5 | 14.5 |
| Waikato | 2135.5 | 53.4 | 15.3 |
| Bay of Plenty | 1370.5 | 34.3 | 13.9 |
| Tairāwhiti | 162.0 | 4.1 | 8.7 |
| Hawke's Bay | 470.0 | 11.8 | 8.1 |
| Taranaki | 486.0 | 12.2 | 11.6 |
| Manawatu-Wanganui | 1349.0 | 33.7 | 12.4 |
| Wellington | 3965.0 | 99.1 | 25.6 |
| Nelson-Marlborough | 863.0 | 21.6 | 17.7 |
| West Coast | 50.0 | 1.3 | 3.9 |
| Canterbury | 3823.1 | 95.6 | 19.5 |
| Otago | 2084.0 | 52.1 | 27.6 |
| Southland | 400.0 | 10.0 | 10.8 |
| Not reported | 170.0 | 4.3 | - |
| Total | 24 766.9 | 619.2 | 16.2 |

Table 90: Work type of active registered psychologists at their main employment setting by hours, FTE, 2000

| Work type | Hours | FTE | Percentage |
|------------------------------------|----------|-------|------------|
| Clinical psychology | 10 777.5 | 269.4 | 43.5 |
| Educational psychology | 3490.4 | 87.3 | 14.1 |
| Industrial/organisation psychology | 1623.0 | 40.6 | 6.6 |
| Personnel management | 494.0 | 12.4 | 2.0 |
| Rehabilitation | 464.0 | 11.6 | 1.9 |
| Psychotherapy | 1167.0 | 29.2 | 4.7 |
| Counselling | 1231.0 | 30.8 | 5.0 |
| Teaching | 1478.5 | 37.0 | 6.0 |
| Study | 168.5 | 4.2 | 0.7 |
| Research | 1151.0 | 28.8 | 4.6 |
| Service management | 1562.0 | 39.1 | 6.3 |
| Other | 1060.0 | 26.5 | 4.3 |
| Not reported | 100.0 | 2.5 | 0.4 |
| Total | 24 766.9 | 619.2 | 100.0 |

Note: because of rounding errors, percentages do not add to 100.0

Appendix 1

Ethnicity

The ethnicity of active selected health professionals in New Zealand was self-identified. The following explanation of ethnicity was included in the survey notes to assist active medical practitioners in identifying their ethnic groups. The ethnic groups chosen were then prioritised. The prioritisation system used is included in the table below. This is the standard prioritisation of ethnicity used by Statistics New Zealand and the New Zealand Health Information Service.

The opportunity to select more than one ethnicity for each of the selected health professions was introduced in the 1996 workforce surveys. This means that a new time series of prioritised ethnicity for the selected health professionals started in 1996. For this reason ethnicity data since 1996 cannot be compared with previous years.

The table details the ethnic categories included in the survey results and the order of prioritisation.

| Ethnicity | Prioritisation order |
|-------------------------------|-----------------------------|
| New Zealand European / Pākehā | 9 |
| New Zealand Māori | 1 |
| Pacific Island | 2 |
| South East Asian | 3 |
| Indian | 4 |
| Chinese | 5 |
| Other Asian | 6 |
| Other | 7 |
| Other European | 8 |
| Not reported | 10 |

Appendix 2

Employer

The workforce survey asks each selected health profession to report on their employment setting. The survey allows respondents to report a main, a secondary and a tertiary employer. The analysis in this publication is based on the respondents' main employment setting.

The following employment setting categories were included in the survey results as stated for each of the selected professions.

Optometrists

- Private practice (self-employed)
- Private practice (employed by an optometrist)
- Private practice (employed by a dispensing optician)
- CHE
- University
- Other employer
- Employment setting not reported

Dispensing opticians

- Private practice (self-employed)
- Private practice (employed by an optometrist)
- Private practice (employed by a dispensing optician)
- Other employer
- Employment setting not reported

Chiropractors

- Private practice (self-employed)
- Private practice (employed)
- Other employer
- Employment setting not reported

Dietitians

- CHE
- Private practice (self-employed)
- Private practice (group practice)
- University/polytechnic
- Government dept/Crown agency
- Commercial/industrial organisation
- Other employer
- Employment setting not reported

Medical laboratory technologists

- CHE
- Private practice (self-employed)
- Private practice (group practice)
- University/polytechnic
- Government dept/Crown agency
- Commercial/industrial organisation
- Other employer
- Employment setting not reported

Medical radiation technologists

- CHE
- Private practice (self-employed)
- Private practice (employed)
- Private hospital or rest home
- University/polytechnic
- Government dept/Crown agency
- Other employer
- Employment setting not reported

Occupational therapists

- CHE
- Private practice (self-employed)
- Private practice (employed)
- Private hospital or rest home
- Schools (education service)
- Government dept/Crown agency
- Community/voluntary organisation
- Other employer
- Employment setting not reported

Podiatrists

CHE
Private practice (self-employed)
Private practice (employed)
Private hospital or rest home
University/polytechnic
Orthotic laboratory representative
Shoe manufacturer's representative
Other employer
Employment setting not reported

Physiotherapists

CHE
Private practice (self-employed)
Private practice (employed)
Private hospital or rest home
University/polytechnic
Schools (education)
Government dept/Crown agency
Commercial/industrial organisation
Voluntary agency
Other employer
Employment setting not reported

Registered psychologists

CHE
Private practice (self-employed)
Private practice (employed)
University/polytechnic
Specialist Education Services
Child, Youth and Family Service
Department of Corrections
Other government departments
Commercial/industrial organisation
Voluntary agency
Consultant to public sector employer
Other employer
Employment setting not reported

Appendix 3

Work type

The workforce survey asks each selected health profession to classify themselves in any number of work type categories for up to three employers. The total number of respondents for each work type is therefore greater than the number of individual responses. The tables in this publication which refer to the number of respondents per work type use the categories which were classified for the main employer only.

The following work type categories were included in the survey results as stated for each of the selected professions.

Optometrists

- General optometry
- Teaching
- Study/research
- Management
- Other work type
- Work type not reported

Dispensing opticians

- General dispensing
- Teaching
- Study/research
- Management
- Other work type
- Work type not reported

Chiropractors

- General chiropractic
- Study/research
- Management
- Other work type
- Work type not reported

Dietitians

- Clinical inpatients
- Clinical outpatients
- Community/district/domiciliary
- Food service management
- Health promotion
- Consultancy/advisory
- Sports nutrition
- Administration
- General management
- Teaching
- Study/research
- Other work type
- Work type not reported

Medical laboratory technologists

- Clinical biochemistry
- Haematology
- Microbiology
- Transfusion science
- Immunology
- Histology
- Cytology
- Virology
- Cytogenetics
- Nuclear medicine
- Serology
- General medical laboratory technology
- Teaching
- Study/research
- Management
- Other work type
- Work type not reported

Medical radiation technologists

- Diagnostic radiography
- Radiotherapy
- Diagnostic ultrasound
- Computerised tomography
- Radionuclide imaging
- Magnetic resonance imaging
- Breast screening
- Teaching
- Study/research
- Management
- Other work type
- Work type not reported

Occupational therapists

Rehabilitation
Medical/surgical
Paediatric
Adolescent
Geriatric
Continuing care (non-psychiatric)
Acute psychiatry
Continuing care (psychiatric)
Community/domiciliary
Acute/intensive
Intellectual handicap
Teaching
Study/research
Management
Other work type
Work type not reported

Podiatry

General podiatry
Sports medicine
Diabetes podiatry
Teaching
Study/research
Management
Technical representative
Other work type
Work type not reported

Physiotherapists

Musculoskeletal inpatient
Musculoskeletal outpatient
Sports physiotherapy
Care of elderly
Mental health
Paediatric neurology
Adult neurology
Other paediatric
Medical/surgical cardiorespiratory
Community/domiciliary
Special Education Services
Women's health/obstetrics
Continuing care
Occupational health
Teaching
Study/research
Management
Other work type
Work type not reported

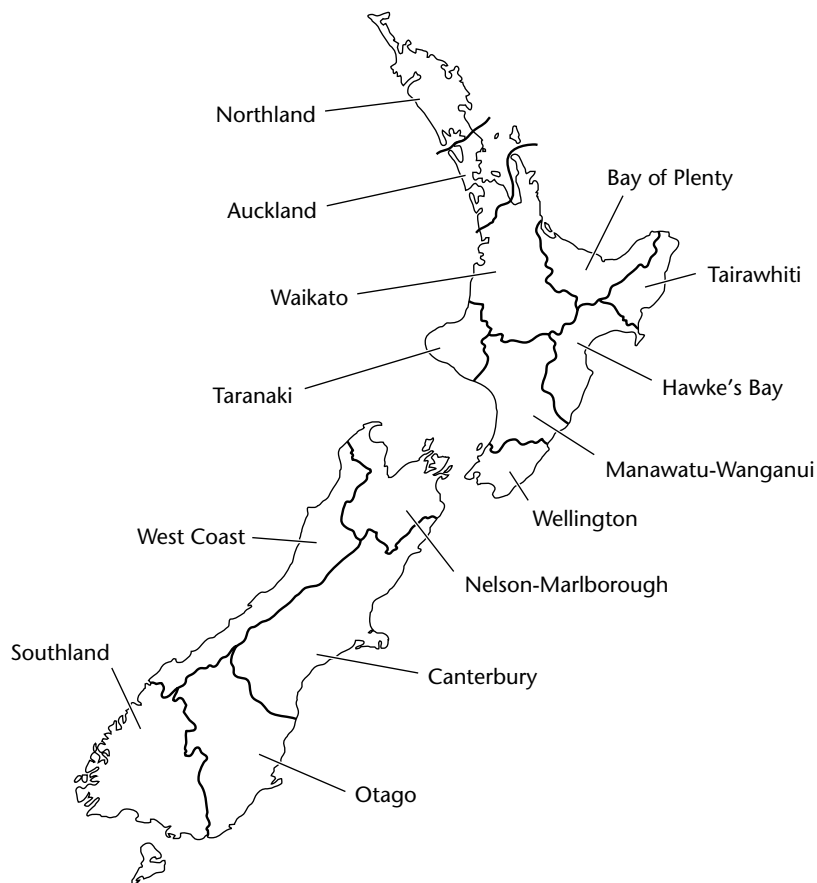
Registered psychologists

Clinical psychology
Educational psychology
Industrial/organisational psychology
Personnel management
Rehabilitation
Psychotherapy
Counselling
Teaching
Study
Research
Service management
Other work type
Work type not reported

Appendix 4

Geographic regions

The geographic regions used in this publication are the regions that were once known as Area Health Board (AHB) districts. This is based on the address of each respondent's main employer. This classification allows a consistent time-series comparison for active selected health professionals in New Zealand. The map below shows the boundary of each AHB district, and the table opposite lists the territorial local authorities (TLAs) included in each AHB. The TLA grouping was determined by Statistics New Zealand.



| Area Health Board district | TLAs included within Area Health Board district |
|----------------------------|--|
| Northland | Far North, Whangarei, Kaipara |
| Auckland | Rodney, North Shore, Waitakere, Auckland, Manakau, Papakura, Franklin |
| Waikato | Thames-Coromandel, Hauraki, Waikato, Matamata-Piako, Hamilton, Waipa, Otorohanga, South Waikato, Waitomo, Taupo, Ruapehu |
| Bay of Plenty | Western Bay of Plenty, Tauranga, Rotorua, Whakatane, Kawerau, Opotiki |
| Tarawhiti | Gisborne |
| Hawke's Bay | Wairoa, Hastings, Napier, Central Hawke's Bay, Chatham Islands |
| Taranaki | New Plymouth, Stratford, South Taranaki |
| Manawatu-Wanganui | Wanganui, Rangitikei, Manawatu, Palmerston North, Tararua, Horowhenua |
| Wellington | Kapiti Coast, Porirua, Upper Hutt, Lower Hutt, Wellington, Masterton, Carterton, South Wairarapa |
| Nelson-Marlborough | Tasman, Nelson, Marlborough |
| West Coast | Buller, Grey, Westland |
| Canterbury | Kaikoura, Hurunui, Waimakariri, Christchurch, Banks Peninsula, Selwyn, Ashburton, Timaru, Mackenzie, Waimate |
| Otago | Waitaki, Central Otago, Queenstown Lakes, Dunedin, Clutha |
| Southland | Southland, Gore, Invercargill |

Notes:

- The Waikato AHB district includes the Ruapehu TLA, to include the major population centre of Taumaranui, though a third of this TLA was actually in the Manawatu-Wanganui AHB.
- The Wellington AHB includes the Kapiti TLA, to include the major population centres of Paraparaumu and Waikanae, though the northern part of this TLA was actually in the Manawatu-Wanganui AHB.

Appendix 5

Population data

The New Zealand population used for the calculation of rates is the estimated resident population for 30 June 2000 (source – Statistics New Zealand).

| Area Health Board | Population |
|--------------------|------------|
| Northland | 145 300 |
| Auckland | 1 207 700 |
| Waikato | 349 860 |
| Bay of Plenty | 246 370 |
| Tairāwhiti | 46 500 |
| Hawke's Bay | 145 880 |
| Taranaki | 104 460 |
| Manawatu-Wanganui | 270 900 |
| Wellington | 387 840 |
| Nelson-Marlborough | 121 900 |
| West Coast | 32 320 |
| Canterbury | 490 160 |
| Otago | 189 050 |
| Southland | 92 900 |
| New Zealand | 3 831 000 |

Note: Owing to rounding, figures in this table do not add to give the stated total.



Appendix 6

Explanatory notes

Data collection

The annual cycle for collecting the New Zealand Selected Health Professional Workforce Survey information begins with the distribution of the questionnaire with the invoice for the Annual Practising Certificates or Annual Licences. When the bulk of responses have been returned, the survey is closed off. There will be a few selected health professionals who purchased their practising certificate or licence part way through the year (after close-off date), and these people are not included in the survey.

Definition of full-time equivalents (FTE)

In this publication full-time equivalents have been calculated by summing the hours worked by each individual (across their main employer and all work categories reported for that employer). FTEs are calculated on the basis of 40 hours per week equalling one FTE. Where respondents indicated that they worked less than 40 hours, they have been included as a proportion of an FTE; where a respondent indicated that they worked more than 40 hours, they have been included as more than one FTE.

ie, $\text{hours worked} / 40 = \text{number of FTEs}$.

1992 data

In 1992 the workforce questionnaires were posted out independently of the annual practising certificate/licence invoice. The number of completed surveys returned to the Department of Health was much lower than in other years (35.2 percent overall). The time-series data in this publication therefore excludes 1992 data.

