


**Selected
Health Professional
Workforce
New Zealand
2002**



New Zealand Health Information Service
2003



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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.

A handwritten signature in black ink, appearing to read 'Jim Fraser', with a long horizontal flourish underneath.

Jim Fraser
New Zealand Health Information Service
April 2003



Acknowledgements

Many people were involved in the production of this publication. In particular, the New Zealand Health Information Service would like to acknowledge the contributions of Rebecca Kay, who managed the project, produced the tables and drafted the publication.

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 2002 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). A health workforce survey was included with each invoice sent out in February 2002.

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 in New Zealand.



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 or the Physiotherapists Board. The invoices were sent in February 2002 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.

In 2002 a new survey form was introduced for all professions in this book except physiotherapists. The new form incorporated the APC or AL renewal form and the workforce survey form in the same document – previously they had been two separate documents posted in the same envelope. This new surveying method has seen the response rate increase dramatically over previous years.



The data is based on surveys that have varying response rates, so 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 *Selected Health Professional Workforce in New Zealand 2000*, *New Zealand Medical Practitioners 2000* and *New Zealand Nurses and Midwives 2000*.

Optometrists

There were 538 optometrists who purchased Annual Practising Certificates (APCs) in 2002. A health workforce survey was included with each invoice sent out in February 2002.

These statistics are based on the 405 active (working) optometrists who responded to the health workforce survey. This represents 75.3 percent of optometrists who were invoiced. A further 11.3 percent of optometrists responded to the 2002 survey but did not report that they were actively working. It is not known if those invoiced who did not respond to the survey (13.4 percent) are actively working as optometrists.

Table 1 shows the number of APCs purchased by optometrists each year. Although not all of those invoiced for APCs are actively working in the profession, this is an indicator of the size of the optometrist workforce.

Table 1: Number of Annual Practising Certificates purchased by optometrists, 1993/94–2002/03

Year	Number of APCs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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
2001/02	490	353	72.0
2002/03	538*	405	75.3

** In 2002/03 this figure was changed to the number of optometrists invoiced rather than the number of licences sold.*

Demographic data

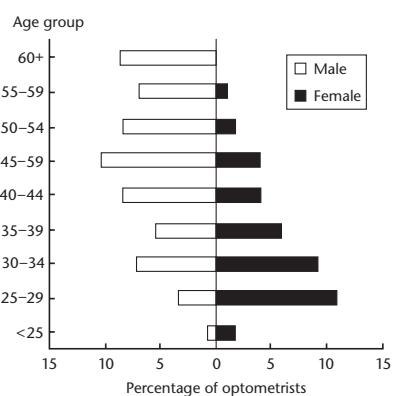
The active optometrist workforce was predominantly male in 2002. Males accounted for 60.0 percent of optometrists, as depicted in Table 2 and Figure 1.

Table 2: Age and sex distribution of active optometrists, 2002

Sex	Age group									Not reported	Total
	<25	25–	30–	35–	40–	45–	50–	55–	60+		
Male	3	14	29	22	34	42	34	28	35	2	243
Female	7	44	37	24	16	16	7	4	0	2	157
Not reported	0	0	0	0	0	0	0	0	1	4	5
Total	10	58	66	46	50	58	41	32	36	8	405

Fig 1:
Age and sex distribution of active optometrists, 2002

(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, page 84). The majority of the active optometrists (71.4 percent) identified themselves as belonging to the New Zealand European ethnic group.

Table 3: Prioritised ethnicity of optometrists, 2002

Ethnic group	Number	Percentage
New Zealand European	289	71.4
Other European	51	12.6
Māori	3	0.7
Samoan	1	0.2
South East Asian	3	0.7
Chinese	26	6.4
Indian	10	2.5
Other Asian	5	1.2
Other Pacific	1	0.2
Other	8	2.0
Not reported	8	2.0
Total	405	100.0

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

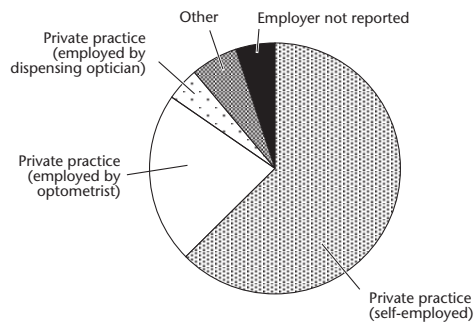
Employment setting

Table 4 illustrates the main employment setting of both male and female active optometrists. Figure 2 (page 14) shows that the majority (62.5 percent) of active optometrists were self-employed in private practice. There were only six optometrists who reported that their main employment was with a DHB (District Health Board).

Table 4: Main employment setting of active optometrists, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	5	1	0	6	1.5
Private practice (self-employed)	180	71	2	253	62.5
Private practice (employed by optometrist)	27	61	1	89	22.0
Private practice (employed by dispensing optician)	10	8	0	18	4.4
University	8	4	0	12	3.0
Other	1	6	0	7	1.7
Not reported	12	6	2	20	4.9
Total	243	157	5	405	100.0

Fig 2:
Main employment setting of active optometrists, 2002



Work type

General optometry was reported as the work type for 58.3 percent of respondents when working in their main employment setting (see Table 5). Management was the second most frequently reported work type, at 26.4 percent.

Table 5: Work type of active optometrists in main employment setting, by sex, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
General optometry	233	148	3	384	58.3
Teaching	12	5	0	17	2.6
Study/research	50	13	0	63	9.6
Management	123	51	0	174	26.4
Other	9	5	0	14	2.1
Not reported	3	2	2	7	1.1
Total	430	224	5	659	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 405 active optometrists who responded to the 2002 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, 2002

Employment setting by work type	General optometry	Teaching	Study/research	Management	Other	Not reported	Total
DHB	6	1	3	1	1	0	12
Private practice (self-employed)	247	3	47	147	10	2	456
Private practice (employed by an optometrist)	89	1	2	10	0	0	102
Private practice (employed by a dispensing optician)	18	0	0	1	0	0	19
University	4	11	8	5	1	0	29
Other	5	0	1	2	1	0	9
Not reported	15	1	2	8	1	5	32
Total	384	17	63	174	14	7	659

Country of qualification

Table 7 shows that most of the active optometrists in New Zealand (79.3 percent) were New Zealand graduates. Most overseas graduates qualified in the United Kingdom (12.6 percent) or South Africa (3.5 percent).

Table 7: Country of qualification of active optometrists, 2002

Country	Number	Percentage
New Zealand	321	79.3
United Kingdom	51	12.6
Australia	12	3.0
South Africa	14	3.5
Ireland	1	0.2
India	1	0.2
Not reported	5	1.2
Total	405	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 9.8 active optometrists per 100 000 estimated population. Bay of Plenty and Otago had the highest rates and Northland and Southland the lowest.

Table 8: Geographic distribution of active optometrists by hours, FTE, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	259.0	6.5	4.5
Auckland	5252.5	131.3	10.4
Waikato	1209.0	30.2	8.5
Bay of Plenty	1423.5	35.6	14.0
Tairāwhiti	116.0	2.9	6.4
Hawke's Bay	497.0	12.4	8.4
Taranaki	251.0	6.3	5.9
Manawatu-Wanganui	1025.0	25.6	9.4
Wellington	1658.5	41.5	10.3
Nelson-Marlborough	461.5	11.5	9.0
West Coast	82.5	2.1	6.7
Canterbury	1958.0	49.0	9.7
Otago	847.5	21.2	11.0
Southland	205.0	5.1	5.5
Not reported	192.0	4.8	-
Total	15 438.0	386.0	9.8

Table 9 shows the number of FTE optometrists across main employment setting by work type for 2002. This shows that general optometry was reported to account for 87.7 percent of working time. On average, optometrists reported that they worked approximately 38.2 hours per week.

Table 9: Work type of active optometrists at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
General optometry	13 531.5	338.3	87.7
Teaching	230.0	5.8	1.5
Study/research	365.0	9.1	2.4
Management	1161.5	29.0	7.5
Other	150.0	3.8	1.0
Not reported	0.0	0.0	0.0
Total	15 438.0	386.0	100.0

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

Dispensing opticians

There were 117 dispensing opticians who were sent an invoice for their Annual Practising Certificates (APCs). A health workforce survey was included with each invoice sent out in February 2002.

These statistics are based on the 75 active (working) dispensing opticians who responded to the health workforce survey. This represents 64.1 percent of dispensing opticians who were invoiced. A further 3.4 percent of dispensing opticians responded to the 2002 survey but did not report that they were actively working. It is not known if those invoiced who did not respond to the survey (32.5 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 invoiced for APCs are actively working in the profession, this is an indicator of the size of the dispensing optician workforce.

Table 10: Number of Annual Practising Certificates purchased by dispensing opticians, 1993/94–2002/03

Year	Number of APCs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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
2001/02	98	55	56.1
2002/03	117*	75	64.1

* In 2002/03 this figure was changed to the number of dispensing opticians invoiced rather than the number of licences sold.

Demographic data

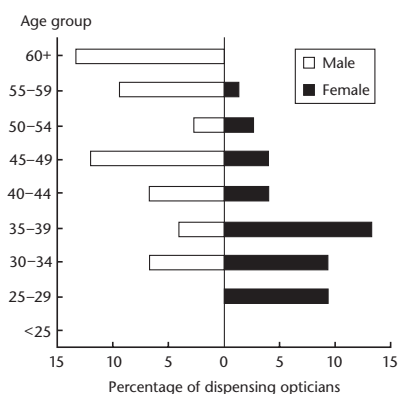
The active dispensing optician workforce was predominantly male. Males accounted for 56.0 percent of dispensing opticians, as depicted in Table 11 and Figure 3.

Table 11: Age and sex distribution of active dispensing opticians, 2002

Sex	Age group									Not reported	Total
	<25	25–	30–	35–	40–	45–	50–	55–	60+		
Male	0	0	5	3	5	9	2	7	10	1	42
Female	0	7	7	10	3	3	2	1	0	0	33
Total	0	7	12	13	8	12	4	8	10	1	75

Fig 3:
Age and sex distribution of active dispensing opticians, 2002

(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 84). The majority of the active dispensing opticians identified themselves as belonging to the New Zealand European ethnic group (61.3 percent).

Table 12: Prioritised ethnicity of active dispensing opticians, 2002

Ethnic group	Number	Percentage
New Zealand European	46	61.3
Other European	24	32.0
Māori	1	1.3
Samoan	1	1.3
Indian	1	1.3
Other	1	1.3
Not reported	1	1.3
Total	75	100.0

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

Employment setting

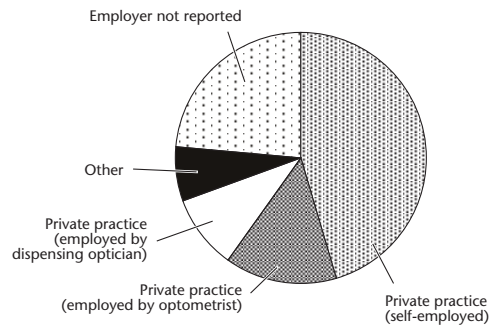
Table 13 illustrates the main employment setting of both male and female active dispensing opticians. Figure 4 shows that the majority of active dispensing opticians were employed in one of two settings, either self-employed in private practice (30.7 percent) or employed by an optometrist in private practice (also 30.7 percent).

Table 13: Main employment setting of active dispensing opticians, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	0	0	0	0	0.0
Private practice (self-employed)	19	4	0	23	30.7
Private practice (employed by optometrist)	6	17	0	23	30.7
Private practice (employed by dispensing optician)	4	7	0	11	14.7
Other	3	4	0	7	9.3
Not reported	10	1	0	11	14.7
Total	42	33	0	75	100.0

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

Fig 4:
Main employment setting of active
dispensing opticians, 2002



Work type

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

The most common work type for dispensing opticians was general dispensing (57.7 percent) when working in their main employment setting. Management was the second most frequently reported work type, at 26.0 percent.

Table 15 (page 22) shows the main employment setting by work type of the 75 active dispensing opticians who responded to the 2002 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, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
General dispensing	38	33	0	71	57.7
Teaching	10	0	0	10	8.1
Study/research	4	1	0	5	4.1
Management	20	12	0	32	26.0
Other	1	1	0	2	1.6
Not reported	3	0	0	3	2.4
Total	76	47	0	123	100.0

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

Table 15: Work type of active dispensing opticians by main employment setting, 2002

Employment setting by work type	General dispensing	Teaching	Study/research	Management	Other	Not reported	Total
DHB	0	0	0	0	0	0	0
Private practice (self-employed)	22	5	4	15	0	1	47
Private practice (employed by an optometrist)	23	1	1	6	1	0	32
Private practice (employed by a dispensing optician)	11	1	0	2	0	0	14
Other	7	2	0	4	0	0	13
Not reported	8	1	0	5	1	2	17
Total	71	10	5	32	2	3	123

Country of qualification

Table 16 shows that the majority of active dispensing opticians who practise in New Zealand also qualified here (60.0 percent). Most overseas graduates qualified in Australia (18.7 percent) or the United Kingdom (12.0 percent).

Table 16: Country of qualification of active dispensing opticians, 2002

Country	Number	Percentage
New Zealand	45	60.0
United Kingdom	9	12.0
Australia	14	18.7
South Africa	1	1.3
Austria	1	1.3
Germany	2	2.7
Not reported	3	4.0
Total	75	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 1.6 FTE dispensing opticians reported per 100 000 population. Tairāwhiti had the highest reported ratio per 100 000 population, and no dispensing opticians were reported for either West Coast or Southland.

Table 18 (page 24) shows the number of FTE dispensing opticians at their main employment setting by work type for 2002. General dispensing was reported to account for 80.1 percent of working time. On average, dispensing opticians reported that they worked approximately 35.1 hours per week.

Table 17: Geographic distribution of active dispensing opticians by hours, FTE, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	135.0	3.4	2.3
Auckland	1005.0	25.1	2.0
Waikato	239.0	6.0	1.7
Bay of Plenty	77.0	1.9	0.8
Tairāwhiti	120.0	3.0	6.6
Hawke's Bay	40.0	1.0	0.7
Taranaki	37.0	0.9	0.9
Manawatu-Wanganui	30.0	0.8	0.3
Wellington	387.0	9.7	2.4
Nelson-Marlborough	40.0	1.0	0.8
West Coast	0.0	0.0	0.0
Canterbury	291.3	7.3	1.5
Otago	82.0	2.1	1.1
Southland	0.0	0.0	0.0
Not reported	40.0	1.0	-
Total	2523.3	63.1	1.6

Table 18: Work type of active dispensing opticians at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
General dispensing	2020.8	50.5	80.1
Teaching	73.0	1.8	2.9
Study/research	7.0	0.2	0.3
Management	397.5	9.9	15.8
Other	25.0	0.6	1.0
Not reported	0.0	0.0	0.0
Total	2523.3	63.1	100.0

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

Chiropractors

There were 254 chiropractors who were sent an invoice for their Annual Practising Certificates (APCs) in 2002. A health workforce survey was included with each invoice sent out in February 2002.

These statistics are based on the 185 active (working) chiropractors who responded to the health workforce survey. This represents 72.8 percent of those who were invoiced. A further 6.3 percent responded to the 2002 survey but did not report that they were actively working. It is not known if those invoiced who did not respond to the survey (20.9 percent) are actively working as chiropractors.

Table 19 shows the number of APCs purchased by chiropractors each year. Although not all of those invoiced for APCs are actively working in the profession, this is an indication of the size of the chiropractor workforce.

Table 19: Number of Annual Practising Certificates purchased by chiropractors, 1993/94–2002/03

Year	Number of APCs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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
2001/02	217	143	65.9
2002/03	254*	185	72.8

* In 2002/03 this figure was changed to the number of chiropractors invoiced rather than the number of licences sold.

Demographic data

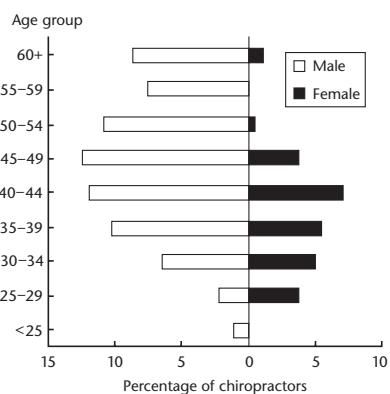
The active chiropractic workforce was predominantly male (71.9 percent), as shown in Table 20 and Figure 5.

Table 20: Age and sex distribution of active chiropractors, 2002

Sex	Age group									Not reported	Total
	<25	25–	30–	35–	40–	45–	50–	55–	60+		
Male	2	4	12	19	22	23	20	14	16	1	133
Female	0	7	9	10	13	7	1	0	2	1	50
Not reported	0	0	0	0	0	0	0	0	0	2	2
Total	2	11	21	29	35	30	21	14	18	4	185

Fig 5:
Age and sex distribution of active chiropractors, 2002

(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 84). The majority of the active chiropractors identified themselves as belonging to the New Zealand European ethnic group (73.0 percent).

Table 21: Prioritised ethnicity of active chiropractors, 2002

Ethnic group	Number	Percentage
New Zealand European	135	73.0
Other European	23	12.4
Māori	5	2.7
South East Asian	1	0.5
Indian	2	1.1
Other Asian	1	0.5
Other	16	8.6
Not reported	2	1.1
Total	185	100.0

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

Employment setting

Table 22 illustrates the main employment setting of active chiropractors. Figure 6 shows that the majority (74.6 percent) of active chiropractors were self-employed in a private practice.

Table 22: Main employment setting of active chiropractors, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
Private practice (self-employed)	99	38	1	138	74.6
Private practice (employed)	14	4	0	18	9.7
Other	4	5	0	9	4.9
Not reported	16	3	1	20	10.8
Total	133	50	2	185	100.0

Fig 6:
Main employment setting of active chiropractors, 2002



Work type

Table 23 shows that general chiropractic practice was reported as the work type for 42.9 percent of respondents when working in their main employment setting. Management was the second most frequently reported work type, at 27.3 percent.

Table 24 shows the main employment setting by work type of the 185 active chiropractors who responded to the 2002 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, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
General chiropractic	127	44	2	173	42.9
Study/research	67	29	2	98	24.3
Management	77	32	1	110	27.3
Other	11	3	1	15	3.7
Not reported	4	3	0	7	1.7
Total	286	111	6	403	100.0

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

Table 24: Work type of active chiropractors by main employment setting, 2002

Employment setting by work type	General chiropractic	Study/research	Management	Other	Not reported	Total
Private practice (self-employed)	136	77	96	10	1	320
Private practice (employed)	18	8	5	0	0	31
Other	4	4	2	4	0	14
Not reported	15	9	7	1	6	38
Total	173	98	110	15	7	403

Country of qualification

Table 25 shows where chiropractors received their qualifications. In 2002, the majority (42.2 percent) of respondents to the workforce survey obtained their chiropractic qualifications in the United States of America, followed by Australia (28.6 percent). New Zealand graduates accounted for 19.5 percent of all respondents.

Table 25: Country of qualification of active chiropractors, 2002

Country	Number	Percentage
New Zealand	36	19.5
United Kingdom	9	4.9
USA	78	42.2
Canada	7	3.8
Australia	53	28.6
Not reported	2	1.1
Total	185	100.0

Note: because of rounding errors, percentages do not add to 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 4.4 FTEs per 100 000 population. The highest concentration of chiropractors was in the Bay of Plenty region, where there were 7.6 FTEs per 100 000 population. The lowest concentrations were in the Manawatu-Wanganui, West Coast and Otago, where there were 2.8 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 140.5 FTEs. On average, chiropractors reported that they worked approximately 37.0 hours per week.

Table 26: Geographic distribution of active chiropractors by hours, FTE, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	361.0	9.0	6.2
Auckland	2501.0	62.5	4.9
Waikato	425.0	10.6	3.0
Bay of Plenty	770.0	19.3	7.6
Tairāwhiti	88.0	2.2	4.9
Hawke's Bay	280.0	7.0	4.7
Taranaki	152.0	3.8	3.6
Manawatu-Wanganui	303.0	7.6	2.8
Wellington	595.0	14.9	3.7
Nelson-Marlborough	277.0	6.9	5.4
West Coast	34.0	0.9	2.8
Canterbury	694.0	17.4	3.5
Otago	212.0	5.3	2.8
Southland	121.0	3.0	3.2
Not reported	111.0	2.8	-
Total	6924.0	173.1	4.4

Table 27: Work type of active chiropractors at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
General chiropractic	5618.0	140.5	81.1
Study/research	555.0	13.9	8.0
Management	601.0	15.0	8.7
Other	150.0	3.8	2.2
Not reported	0.0	0.0	0.0
Total	6924.0	173.1	100.0

Dietitians

There were 394 dietitians who were sent an invoice for their Annual Practising Certificates (APCs) in 2002. A health workforce survey was included with each invoice sent out in February 2002.

These statistics are based on the 320 active (working) dietitians who responded to the health workforce survey. This represents 81.2 percent of those invoiced. A further 7.9 percent did not report that they were actively working. It is not known if those invoiced who did not respond to the survey (10.9 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.

Table 28: Number of Annual Practising Certificates purchased by dietitians, 1993/94–2002/03

Year	Number of APCs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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
2001/02	349	254	72.8
2002/03	394*	320	81.2

* In 2002/03 this figure was changed to the number of dietitians invoiced rather than the number of licences sold.

Demographic data

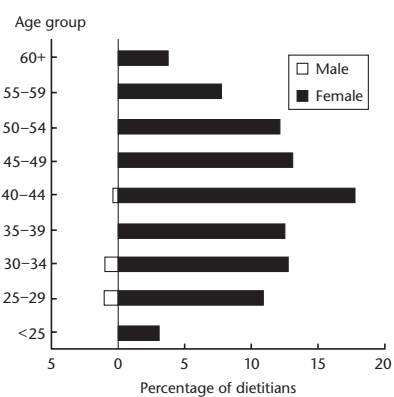
The active dietitian workforce was predominantly female (96.3 percent), as illustrated in Figure 7 and Table 29.

Table 29: Age and sex distribution of active dietitians, 2002

Sex	Age group									Not reported	Total
	<25	25–	30–	35–	40–	45–	50–	55–	60+		
Male	0	3	3	0	1	0	0	0	0	0	7
Female	10	35	41	40	57	42	39	25	12	7	308
Not reported	0	0	0	1	1	0	0	0	0	3	5
Total	10	38	44	41	59	42	39	25	12	10	320

Fig 7:
Age and sex distribution of active dietitians, 2002

(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 84). The majority (83.4 percent) of the active dietitians identified themselves as belonging to the New Zealand European ethnic group.

Table 30: Prioritised ethnicity of active dietitians, 2002

Ethnic group	Number	Percentage
New Zealand European	267	83.4
Other European	19	5.9
Māori	10	3.1
Samoan	1	0.3
Niuean	1	0.3
Fijian	2	0.6
South East Asian	1	0.3
Chinese	11	3.4
Indian	2	0.6
Other Asian	1	0.3
Other	2	0.6
Not reported	3	0.9
Total	320	100.0

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

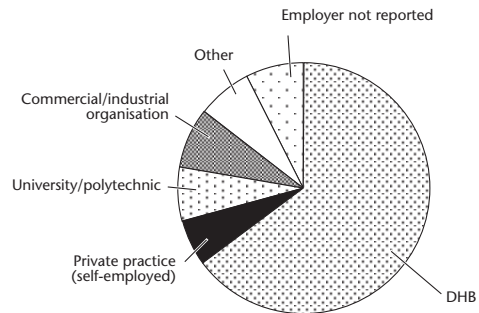
Employment setting

Table 31 shows the breakdown of males and females in each main employment setting. Figure 8 (page 34) shows that the majority (64.7 percent) of active dietitians were working for District Health Boards (DHBs).

Table 31: Main employment setting of active dietitians, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	4	200	3	207	64.7
Private practice (self-employed)	0	19	0	19	5.9
Private practice (group practice)	0	6	0	6	1.9
University / polytechnic	0	22	1	23	7.2
Government dept / Crown agency	1	2	0	3	0.9
Commercial/industrial organisation	0	25	0	25	7.8
Other	2	11	0	13	4.1
Not reported	0	23	1	24	7.5
Total	7	308	5	320	100.0

Fig 8:
Main employment setting of active dietitians, 2002



Work type

Table 32 shows the number of dietitians in each work type for 2002. Clinical outpatients (21.2 percent) and clinical inpatients (18.9 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, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
Clinical inpatients	1	122	1	124	18.9
Clinical outpatients	3	134	2	139	21.2
Community/district/domiciliary	1	38	0	39	6.0
Food service management	0	25	0	25	3.8
Health promotion	3	43	1	47	7.2
Consultancy/advisory	0	40	1	41	6.3
Sports nutrition	0	11	0	11	1.7
Administration	0	56	1	57	8.7
General management	1	37	1	39	6.0
Teaching	0	44	1	45	6.9
Study/research	0	33	1	34	5.2
Education	0	23	1	24	3.7
Other	1	23	0	24	3.7
Not reported	0	6	0	6	0.9
Total	10	635	10	655	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 320 active dietitians who responded to the 2002 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, 2002

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	Education	Other	Not reported	Total
DHB	111	118	34	14	29	8	0	29	21	16	14	12	7	2	415
Private practice (self-employed)	1	5	1	2	4	13	5	7	2	1	3	0	1	0	45
Private practice (group practice)	0	3	1	0	1	2	1	2	0	0	0	0	0	0	10
University / polytechnic	0	0	0	2	0	2	2	6	5	18	9	5	0	0	49
Government dept / Crown agency	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
Commercial/industrial organisation	3	2	0	1	2	9	0	7	6	4	2	3	7	3	49
Other	2	2	1	1	7	2	1	3	1	4	1	2	4	0	31
Not reported	7	9	2	5	4	5	2	3	4	2	5	2	2	1	53
Total	124	139	39	25	47	41	11	57	39	45	34	24	24	6	655

Country of qualification

Most active dietitians (91.3 percent) qualified in New Zealand (Table 34, page 36), followed by South Africa (1.9 percent).

Hours worked

Table 35 (page 36) shows the number of full-time equivalent (FTE) dietitians by geographic region. The national average was 6.0 per 100 000 population. The Otago and Tairāwhiti had the highest average ratios while Hawke's Bay had the lowest ratio.

Table 34: Country of qualification of active dietitians, 2002

Country	Number	Percentage
New Zealand	292	91.3
United Kingdom	2	0.6
Netherlands	1	0.3
South Africa	6	1.9
USA	4	1.3
Canada	1	0.3
Australia	1	0.3
Sweden	1	0.3
India	1	0.3
Europe	1	0.3
Scotland	2	0.6
Wales	1	0.3
Not reported	7	2.2
Total	320	100.0

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

Table 35: Geographic distribution of active dietitians by hours, FTE, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	289.0	7.2	5.0
Auckland	3363.0	84.1	6.6
Waikato	757.0	18.9	5.3
Bay of Plenty	337.2	8.4	3.3
Tairāwhiti	148.0	3.7	8.2
Hawke's Bay	94.0	2.4	1.6
Taranaki	262.0	6.6	6.2
Manawatu-Wanganui	302.0	7.6	2.8
Wellington	1136.0	28.4	7.1
Nelson-Marlborough	230.0	5.8	4.5
West Coast	80.0	2.0	6.5
Canterbury	1557.5	38.9	7.8
Otago	759.0	19.0	9.9
Southland	107.0	2.7	2.9
Not reported	64.0	1.6	-
Total	9485.7	237.1	6.0

Table 36 shows the number of FTE dietitians in each type of work. Clinical inpatients and clinical outpatients accounted for 28.0 percent and 20.6 percent respectively of all work undertaken. On average, dietitians reported that they worked approximately 31.4 hours per week.

Table 36: Work type of active dietitians at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
Clinical inpatients	2655.0	66.4	28.0
Clinical outpatients	1949.5	48.7	20.6
Commercial/district/ domiciliary	703.5	17.6	7.4
Food service management	506.0	12.7	5.3
Health promotion	820.0	20.5	8.6
Consultancy/advisory	494.0	12.4	5.2
Sports nutrition	87.0	2.2	0.9
Administration	376.0	9.4	4.0
General management	545.0	13.6	5.7
Teaching	399.5	10.0	4.2
Study/research	269.5	6.7	2.8
Education	142.5	3.6	1.5
Other	453.0	11.3	4.8
Not reported	85.2	2.1	0.9
Total	9485.7	237.1	100.0

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

Medical laboratory technologists

There were 1365 medical laboratory technologists who were sent an invoice for their Annual Licences (AL) in 2002. A health workforce survey was included with each invoice sent in February 2002.

These statistics are based on the 835 active (working) medical laboratory technologists who responded to the health workforce survey. This represents 61.2 percent of those who were invoiced. A further 4.0 percent responded to the 2002 survey but did not report that they were actively working. It is not known if those invoiced who did not respond to the survey (34.9 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.

Table 37: Number of Annual Licences purchased by medical laboratory technologists, 1993/94–2002/03

Year	Number of ALs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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	686	53.1
2001/02	1274	631	49.5
2002/03	1365*	835	61.2

* In 2002/03 this figure was changed to the number of medical laboratory technologists invoiced rather than the number of licences sold.

Demographic data

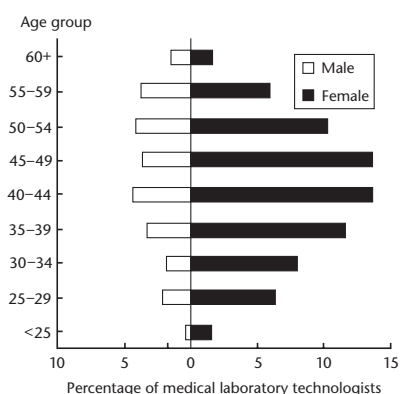
In 2002 the active medical laboratory technology workforce was predominantly female (73.4 percent), as shown in Table 38 and Figure 9.

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

Sex	Age group									Not reported	Total
	20–	25–	30–	35–	40–	45–	50–	55–	60+		
Male	3	17	15	27	36	30	34	31	12	2	207
Female	13	53	67	97	114	114	86	50	14	5	613
Not reported	0	1	0	0	0	0	0	1	1	12	15
Total	16	71	82	124	150	144	120	82	27	19	835

Fig 9:
Age and sex distribution of active medical laboratory technologists, 2002

(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 84). The majority (79.4 percent) of the active medical laboratory technologists identified themselves as belonging to the New Zealand European ethnic group.

Table 39: Prioritised ethnicity of active medical laboratory technologists, 2002

Ethnic group	Number	Percentage
New Zealand European	663	79.4
Other European	68	8.1
Māori	11	1.3
Tongan	1	0.1
Fijian	4	0.5
South East Asian	5	0.6
Chinese	20	2.4
Indian	19	2.3
Other Asian	5	0.6
Other	24	2.9
Not reported	15	1.8
Total	835	100.0

Employment setting

Table 40 shows the breakdown of males and females in each main employment setting. Figure 10 shows that the majority (62.0 percent) of medical laboratory technologists worked for DHBs in their main employment setting. Working in a private practice (group practice) was the second most common reported main employment setting (24.4 percent).

Table 40: Main employment setting of active medical laboratory technologists, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	116	396	6	518	62.0
Private practice (self-employed)	3	10	0	13	1.6
Private practice (group practice)	59	138	7	204	24.4
University / polytechnic	1	6	0	7	0.8
Government dept / Crown agency	3	18	1	22	2.6
Commercial/industrial organisation	11	9	0	20	2.4
Other	5	11	0	16	1.9
Not reported	9	25	1	35	4.2
Total	207	613	15	835	100.0

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

Fig 10:
Main employment setting of active medical laboratory technologists, 2002

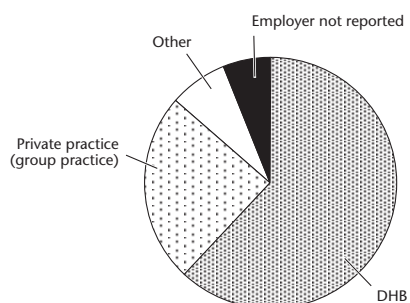


Table 41: Work type of active medical laboratory technologists in main employment setting, by sex, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
Clinical biochemistry	55	161	3	219	17.7
Haematology	58	171	4	233	18.9
Microbiology	54	181	3	238	19.3
Transfusion science	31	110	0	141	11.4
Immunology	16	27	3	46	3.7
Histology	10	18	0	28	2.3
Cytology	6	28	1	35	2.8
Virology	2	10	0	12	1.0
Cytogenetics	1	9	0	10	0.8
Nuclear medicine	0	2	0	2	0.2
Serology	4	13	2	19	1.5
General medical laboratory technology	22	31	1	54	4.4
Teaching	6	16	0	22	1.8
Study/research	1	10	0	11	0.9
Management	46	57	0	103	8.3
Other	13	43	2	58	4.7
Not reported	0	4	1	5	0.4
Total	325	891	20	1236	100.0

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



Work type

Microbiology was reported as the work type for 19.3 percent of respondents when working in their main employment setting (see Table 41, page 41). Haematology and clinical biochemistry were the next most frequently reported work type, at 18.9 percent and 17.7 percent respectively.

Table 42 shows the main employment setting by work type of the 835 active medical laboratory technologists who responded to the 2002 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 (88.7 percent) of active medical laboratory technologists who responded to the survey in 2002 were trained in New Zealand. Most overseas graduates gained their qualifications in the United Kingdom (3.1 percent); however, 4.3 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 835 medical laboratory technologists who responded to the survey. On average in New Zealand there were 18.8 FTE medical laboratory technologists per 100 000 population. In 2002, Tairāwhiti and Otago reported the highest ratio per capita, while West Coast and Manawatu-Wanganui reported the lowest ratios.

Table 45 (page 45) shows the number of FTE medical laboratory technologists in each type of work across their main employers. Microbiology accounted for 22.0 percent of all work undertaken, followed by haematology (19.2 percent). On average, medical laboratory technologists reported that they worked 35.1 hours per week.

Table 42: Work type of active medical laboratory technologists by main employment setting, 2002

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
DHB	142	152	145	102	20	18	10	11	9	2	11	41	11	6	57	42	4	783
Private practice (self-employed)	4	4	1	2	2	1	2	0	1	0	0	0	0	0	2	0	0	19
Private practice (group practice)	52	56	64	10	18	5	19	0	0	0	8	8	7	0	33	5	1	286
University / polytechnic	1	2	1	1	0	1	0	0	0	0	0	0	2	3	2	1	0	14
Government dept / Crown agency	0	0	2	16	0	0	0	1	0	0	0	0	0	0	3	2	0	24
Commercial/industrial organisation	6	3	7	0	2	0	0	0	0	0	0	2	0	0	2	3	0	25
Other	5	5	6	7	2	0	0	0	0	0	0	0	1	2	2	3	0	33
Not reported	9	11	12	3	2	3	4	0	0	0	0	3	1	0	2	2	0	52
Total	219	233	238	141	46	28	35	12	10	2	19	54	22	11	103	58	5	1236

Table 43: Country of qualification of active medical laboratory technologists, 2002

Country	Number	Percentage
New Zealand	741	88.7
United Kingdom	26	3.1
Netherlands	2	0.2
South Africa	11	1.3
Canada	1	0.1
Australia	7	0.8
Rhodesia	1	0.1
Croatia	1	0.1
Hong Kong	1	0.1
India	1	0.1
Ireland	2	0.2
Kuwait	1	0.1
Zimbabwe	2	0.2
Yugoslavia	1	0.1
USA	1	0.1
Not reported	36	4.3
Total	835	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, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	1112.0	27.8	19.1
Auckland	9134.0	228.4	18.0
Waikato	2239.5	56.0	15.8
Bay of Plenty	1988.0	49.7	19.6
Tairāwhiti	453.0	11.3	25.1
Hawke's Bay	818.0	20.5	13.8
Taranaki	744.0	18.6	17.6
Manawatu-Wanganui	1020.0	25.5	9.4
Wellington	3507.5	87.7	21.9
Nelson-Marlborough	1269.0	31.7	24.8
West Coast	85.0	2.1	6.9
Canterbury	4708.5	117.7	23.4
Otago	1914.5	47.9	24.9
Southland	473.0	11.8	12.7
Not reported	101.0	2.5	-
Total	29 567.0	739.2	18.8

Table 45: Work type of active medical laboratory technologists at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
Clinical biochemistry	5389.7	134.7	18.2
Haematology	5683.2	142.1	19.2
Microbiology	6505.7	162.6	22.0
Transfusion science	3294.7	82.4	11.1
Immunology	1054.7	26.4	3.6
Histology	804.0	20.1	2.7
Cytology	1185.5	29.6	4.0
Virology	407.5	10.2	1.4
Cytogenetics	390.0	9.8	1.3
Nuclear medicine	47.0	1.2	0.2
Serology	302.5	7.6	1.0
General medical laboratory technology	951.0	23.8	3.2
Teaching	87.0	2.2	0.3
Study/research	104.5	2.6	0.4
Management	2161.0	54.0	7.3
Other	1159.0	29.0	3.9
Not reported	40.0	1.0	0.1
Total	29 567.0	739.2	100.0

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

Medical radiation technologists

There were 1593 medical radiation technologists who were sent an invoice for their Annual Licences (ALs) in 2002. A health workforce survey was included with each invoice sent in February 2002.

These statistics are based on the 1060 active (working) medical radiation technologists who responded to the health workforce survey. This represents 66.5 percent of those invoiced. A further 8.0 percent responded to the 2002 survey but did not report that they were actively working. It is not known if those invoiced who did not respond to the survey (25.5 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.

Table 46: Number of Annual Licences purchased by medical radiation technologists, 1993/94–2002/03

Year	Number of ALs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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	955	65.5
2001/02	1469	841	57.2
2002/03	1593*	1060	66.5

* In 2002/03 this figure was changed to the number of medical radiation technologists invoiced rather than the number of licences sold.

Demographic data

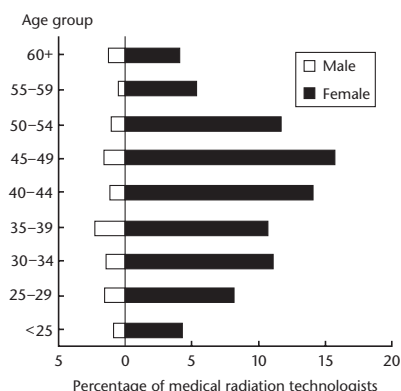
The active medical radiation technologist workforce was predominantly female (86.2 percent), as illustrated by Table 47 and Figure 11.

Table 47: Age and sex distribution of active medical radiation technologists, 2002

Sex	Age group									Not reported	Total
	20–	25–	30–	35–	40–	45–	50–	55–	60+		
Male	9	16	15	24	12	17	11	5	13	2	124
Female	45	87	118	114	150	167	124	57	43	9	914
Not reported	0	1	3	1	3	2	0	0	1	11	22
Total	54	104	136	139	165	186	135	62	57	22	1060

Fig 11:
Age and sex distribution of active medical radiation technologists, 2002

(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 84). As in previous years the majority (76.8 percent) of active medical radiation technologists identified themselves as belonging to the New Zealand European ethnic group.

Table 48: Prioritised ethnicity of active medical radiation technologists, 2002

Ethnic group	Number	Percentage
New Zealand European	814	76.8
Other European	126	11.9
Māori	25	2.4
Samoan	1	0.1
Tongan	1	0.1
Fijian	6	0.6
Other Pacific	1	0.1
South East Asian	1	0.1
Chinese	11	1.0
Indian	17	1.6
Other Asian	4	0.4
Other	28	2.6
Not reported	25	2.4
Total	1060	100.0

Note: because of rounding errors, percentages do not add to 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 DHBs (53.8 percent) or in private practice (group practice) (34.3 percent).

Table 49: Main employment setting of active medical radiation technologists, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	84	479	7	570	53.8
Private practice (self-employed)	5	19	2	26	2.5
Private practice (group practice)	25	331	8	364	34.3
Private hospital or rest home	0	6	0	6	0.6
University / polytechnic	1	21	0	22	2.1
Government dept / Crown agency	0	4	0	4	0.4
Other	3	11	0	14	1.3
Not reported	6	43	5	54	5.1
Total	124	914	22	1060	100.0

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

Fig 12:
Main employment setting of active
medical radiation technologists, 2002



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 imaging (48.2 percent). Diagnostic ultrasound (9.1 percent) and computerised tomography (8.6 percent) were the next most significant work types.

Table 50: Work type of active medical radiation technologists in main employment setting, by sex, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
Diagnostic imaging	72	577	15	664	48.2
Radiation therapy	12	82	0	94	6.8
Diagnostic ultrasound	13	109	3	125	9.1
Computerised tomography	13	104	2	119	8.6
Radionuclide imaging	7	16	0	23	1.7
Magnetic resonance imaging	5	43	0	48	3.5
Breast screening	0	79	2	81	5.9
Teaching	3	31	0	34	2.5
Study/research	2	8	0	10	0.7
Management	18	65	3	86	6.2
Other	7	51	1	59	4.3
Not reported	6	27	3	36	2.6
Total	158	1192	29	1379	100.0

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

Table 51 shows the main employment setting by work type of the 1060 active medical radiation technologists who responded to the 2002 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 radiation technologists by main employment setting, 2002

Employment setting by work type	Diagnostic imaging	Radiation therapy	Diagnostic ultrasound	Computerised tomography	Radionuclide imaging	Magnetic resonance imaging	Breast screening	Teaching	Study/research	Management	Other	Not reported	Total
DHB	347	88	68	80	17	20	16	13	2	38	23	9	721
Private practice (self-employed)	13	0	8	1	1	1	1	0	0	4	1	1	31
Private practice (group practice)	265	2	44	32	4	22	55	4	3	35	24	10	500
Private hospital or rest home	4	0	1	0	0	1	0	0	0	2	0	1	9
University / polytechnic	6	0	0	0	0	0	0	16	4	3	1	2	32
Government dept / Crown agency	2	0	1	0	0	0	1	0	0	0	0	0	4
Other	6	0	0	1	0	0	2	0	1	2	7	0	19
Not reported	21	4	3	5	1	4	6	1	0	2	3	13	63
Total	664	94	125	119	23	48	81	34	10	86	59	36	1379

Country of qualification

New Zealand was the country of qualification for 77.0 percent of medical radiation technologists (see Table 52). Medical radiation technologists who qualified in the United Kingdom accounted for 9.8 percent of those surveyed, and South Africa ranked third with 4.0 percent.

Table 52: Country of qualification of active medical radiation technologists, 2002

Country	Number	Percentage
New Zealand	816	77.0
United Kingdom	104	9.8
Netherlands	4	0.4
South Africa	42	4.0
Canada	3	0.3
Australia	35	3.3
Colombia	1	0.1
India	1	0.1
Scotland	6	0.6
USA	8	0.8
Zimbabwe	1	0.1
Fiji	4	0.4
Ireland	3	0.3
Hungary	1	0.1
Malaysia	1	0.1
Wales	1	0.1
Not reported	29	2.7
Total	1060	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, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	1137.3	28.4	19.6
Auckland	10 536.8	263.4	20.8
Waikato	3238.0	81.0	22.8
Bay of Plenty	1585.0	39.6	15.6
Tairāwhiti	264.0	6.6	14.6
Hawke's Bay	1027.0	25.7	17.3
Taranaki	645.0	16.1	15.2
Manawatu-Wanganui	1873.2	46.8	17.3
Wellington	2924.0	73.1	18.2
Nelson-Marlborough	730.0	18.3	14.2
West Coast	56.0	1.4	4.5
Canterbury	4344.3	108.6	21.6
Otago	1897.0	47.4	24.7
Southland	526.0	13.2	14.1
Not reported	322.5	8.1	-
Total	31 106.0	777.6	19.7

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 (24.7 and 22.8 FTEs respectively per 100 000 population) and the lowest was in West Coast (4.5 FTEs per 100 000 population). On average there were 19.7 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 imaging accounted for 51.3 percent of all work undertaken. On average, medical radiation technologists reported that they worked 30.4 hours per week.

Table 54: Work type of active medical radiation technologists at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
Diagnostic imaging	15 958.9	399.0	51.3
Radiation therapy	3368.5	84.2	10.8
Diagnostic ultrasound	3636.0	90.9	11.7
Computerised tomography	1793.5	44.8	5.8
Radionuclide imaging	578.8	14.5	1.9
Magnetic resonance imaging	1127.0	28.2	3.6
Breast screening	1321.0	33.0	4.2
Teaching	617.1	15.4	2.0
Study/research	95.0	2.4	0.3
Management	1429.5	35.7	4.6
Other	1023.0	25.6	3.3
Not reported	157.8	3.9	0.5
Total	31 106.0	777.6	100.0

Occupational therapists

There were 1535 occupational therapists who were sent an invoice for their Annual Practising Certificates (APCs) in 2002. A health workforce survey was included with each invoice sent out in February 2002.

These statistics are based on the 1100 active (working) occupational therapists that responded to the health workforce survey. This represents 71.7 percent of those who were invoiced. A further 9.5 percent responded to the 2002 survey but did not report that they were actively working. It is not known if those invoiced who did not respond to the survey (18.8 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.

Table 55: Number of Annual Practising Certificates purchased by occupational therapists, 1993/94–2002/03

Year	Number of APCs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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	895	65.2
2001/02	1391	835	60.0
2002/03	1535*	1100	71.7

* In 2002/03 this figure was changed to the number of occupational therapists invoiced rather than the number of licences sold.

Demographic data

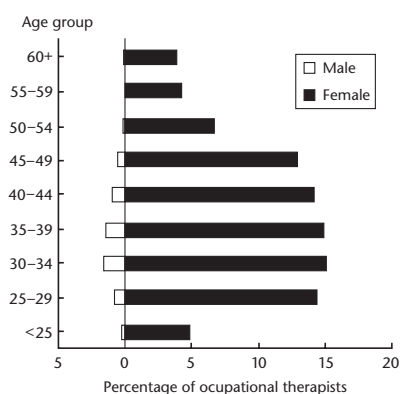
The active occupational therapy workforce was predominantly female (92.5 percent), as shown in Table 56 and Figure 13.

Table 56: Age and sex distribution of active occupational therapists, 2002

Sex	Age group									Not reported	Total
	20–	25–	30–	35–	40–	45–	50–	55–	60+		
Male	3	9	18	16	11	6	2	0	1	0	66
Female	53	158	166	164	156	142	73	46	42	18	1018
Not reported	0	2	0	0	1	0	1	0	0	12	16
Total	56	169	184	180	168	148	76	46	43	30	1100

Fig 13:
Age and sex distribution of active occupational therapists, 2002

(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 84). The majority (75.9 percent) of active occupational therapists identified themselves as belonging to the New Zealand European ethnic group.

Table 57: Prioritised ethnicity of active occupational therapists, 2002

Ethnic group	Number	Percentage
New Zealand European	835	75.9
Other European	159	14.5
Māori	26	2.4
Cook Island Maori	2	0.2
Tongan	1	0.1
Niuean	1	0.1
Fijian	2	0.2
Other Pacific	2	0.2
South East Asian	5	0.5
Chinese	5	0.5
Indian	6	0.5
Other Asian	1	0.1
Other	39	3.5
Not reported	16	1.5
Total	1100	100.0

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

Employment setting

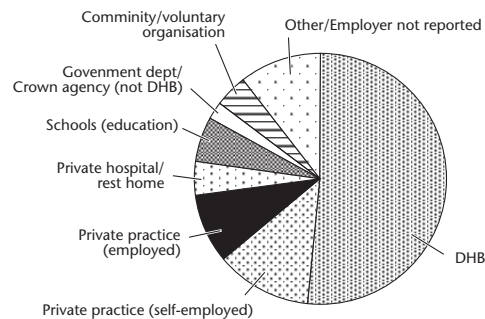
Table 58 shows the breakdown of males and females in each main employment setting for active occupational therapists. Figure 14 (page 56) shows the majority (51.6 percent) worked for DHBs in their main employment setting.

Table 58: Main employment setting of active occupational therapists, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	32	530	6	568	51.6
Private practice (self-employed)	5	128	1	134	12.2
Private practice (employed)	5	92	1	98	8.9
Private hospital or rest home	2	46	1	49	4.5
Schools (education)	4	62	0	66	6.0
Government dept / Crown agency (not DHB)	3	20	0	23	2.1
Community/voluntary organisation	7	40	0	47	4.3
Other	4	39	2	45	4.1
Not reported	4	61	5	70	6.4
Total	66	1018	16	1100	100.0

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

Fig 14:
Main employment setting of active occupational therapists, 2002



Work type

Table 59 shows the proportion of occupational therapists working in each work type classification within their main employment setting. Rehabilitation (19.0 percent) and community/domiciliary (13.9 percent) were the most reported work types.

Table 60 (page 58) shows the main employment setting by work type of the 1100 active occupational therapists who responded to the 2002 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 (81.4 percent), with a further 9.0 percent gaining their qualification in the United Kingdom.

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 1100 active occupational therapists who responded to the survey. On average in New Zealand, there were 21.5 FTE occupational therapists per 100 000 population. In 2002, Otago and Tairāwhiti reported the highest FTEs per 100 000 population, while the West Coast reported the lowest FTEs per 100 000 population.

Table 59: Work type of active occupational therapists in main employment setting, by sex, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
Rehabilitation	17	259	3	279	19.0
Medical/surgical	3	75	0	78	5.3
Paediatric	4	149	1	154	10.5
Adolescent	1	21	1	23	1.6
Geriatric	0	65	0	65	4.4
Continuing care (non-psychiatric)	0	21	2	23	1.6
Community/domiciliary	7	193	3	203	13.9
Acute/intensive care	1	20	0	21	1.4
Intellectual disability	6	27	0	33	2.3
Education	6	74	1	81	5.5
Study/research	2	20	2	24	1.6
Management	6	102	1	109	7.4
Mental health	16	178	3	197	13.4
Driver assessment	1	23	0	24	1.6
Other	10	115	1	126	8.6
Not reported	3	17	5	25	1.7
Total	83	1359	23	1465	100.0

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

Table 63 (page 60) shows the number of FTE occupational therapists in each type of work. Rehabilitation (20.5 percent) and mental health (19.1 percent) were the areas where the most time was spent. Occupational therapists reported that they worked 31.8 hours per week on average.

Table 60: Work type of active occupational therapists by main employment setting, 2002

Employment setting by work type	Rehabilitation	Medical/surgical	Paediatric	Adolescent	Geriatric	Continuing care (non-psychiatric)	Community/domiciliary	Acute/intensive care	Intellectual disability	Education	Study/research	Management	Mental Health	Driver assessment	Other	Not reported	Total
DHB	119	63	65	5	25	2	136	17	9	8	4	51	151	8	44	8	715
Private practice (self-employed)	61	5	29	4	7	7	32	1	2	9	5	21	4	11	30	2	230
Private practice (employed)	62	5	6	2	4	0	14	1	3	3	1	8	4	4	15	2	134
Private hospital or rest home	13	2	0	0	23	12	4	1	0	1	1	8	4	1	1	1	72
Schools (education)	0	0	27	6	0	0	1	0	5	36	7	2	1	0	2	1	88
Government dept / Crown agency (not DHB)	2	0	7	0	0	0	1	0	0	9	0	2	1	0	2	0	24
Community/voluntary organisation	4	0	6	3	1	0	5	0	10	3	3	9	16	0	4	0	64
Other	5	0	5	1	0	0	3	0	2	5	3	4	5	0	21	1	55
Not reported	13	3	9	2	5	2	7	1	2	7	0	4	11	0	7	10	83
Total	279	78	154	23	65	23	203	21	33	81	24	109	197	24	126	25	1465

Table 61: Country of qualification of active occupational therapists, 2002

Country	Number	Percentage
New Zealand	895	81.4
United Kingdom	99	9.0
USA	2	0.2
Canada	12	1.1
Australia	17	1.5
South Africa	20	1.8
Germany	7	0.6
Scotland	11	1.0
Sweden	3	0.3
Netherlands	4	0.4
India	2	0.2
Ireland	3	0.3
Philippines	1	0.1
Wales	2	0.2
Denmark	1	0.1
Zimbabwe	1	0.1
Not reported	20	1.8
Total	1100	100.0

Table 62: Geographic distribution of active occupational therapists by hours, FTE, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	1232.0	30.8	21.2
Auckland	10 638.0	266.0	21.0
Waikato	2629.0	65.7	18.5
Bay of Plenty	2074.0	51.9	20.5
Tairāwhiti	469.0	11.7	25.9
Hawke's Bay	860.0	21.5	14.5
Taranaki	711.0	17.8	16.8
Manawatu-Wanganui	1560.0	39.0	14.4
Wellington	3664.0	91.6	22.9
Nelson-Marlborough	974.0	24.4	19.0
West Coast	145.0	3.6	11.8
Canterbury	4715.0	117.9	23.5
Otago	3275.5	81.9	42.6
Southland	617.0	15.4	16.5
Not reported	314.0	7.9	-
Total	33 877.5	846.9	21.5

Table 63: Work type of active occupational therapists at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
Rehabilitation	6933.0	173.3	20.5
Medical/surgical	1830.5	45.8	5.4
Paediatric	3929.0	98.2	11.6
Adolescent	437.5	10.9	1.3
Geriatric	1196.5	29.9	3.5
Continuing care (non-psychiatric)	241.0	6.0	0.7
Community/domiciliary	4514.0	112.9	13.3
Acute/intensive care	435.0	10.9	1.3
Intellectual disability	679.5	17.0	2.0
Education	1639.0	41.0	4.8
Study/research	135.0	3.4	0.4
Management	2017.0	50.4	6.0
Mental health	6472.0	161.8	19.1
Driver assessment	380.0	9.5	1.1
Other	2958.5	74.0	8.7
Not reported	80.0	2.0	0.2
Total	33 877.5	846.9	100.0

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

Podiatrists

There were 233 podiatrists who were sent an invoice for their Annual Licences (ALs) in 2002. A health workforce survey was included with each invoice sent out in February 2002.

These statistics are based on the 161 active (working) podiatrists who responded to the health workforce survey. This represents 69.1 percent of those who were invoiced. A further 2.1 percent responded to the 2002 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 (28.8 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.

Table 64: Number of Annual Licences purchased by podiatrists, 1993/94–2002/03

Year	Number of ALs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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
2001/02	224	140	62.5
2002/03	233*	161	69.1

* In 2002/03 this figure was changed to the number of podiatrists invoiced rather than the number of licences sold.

Demographic data

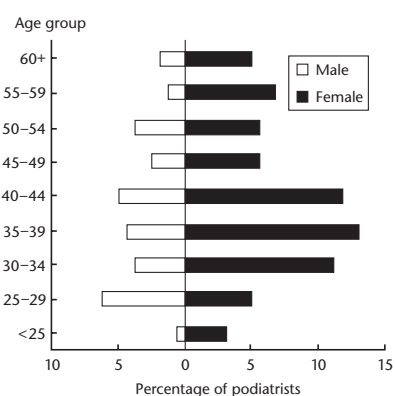
The active podiatry workforce was predominantly female (68.9 percent), as illustrated in Table 65 and Figure 15.

Table 65: Age and sex distribution of active podiatrists, 2002

Sex	Age group									Not reported	Total
	20–	25–	30–	35–	40–	45–	50–	55–	60+		
Male	1	10	6	7	8	4	6	2	3	0	47
Female	5	8	18	21	19	9	9	11	8	3	111
Not reported	0	0	0	0	0	0	1	0	0	2	3
Total	6	18	24	28	27	13	16	13	11	5	161

Fig 15:
Age and sex distribution of active podiatrists, 2002

(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 84). The majority (80.7 percent) of the active podiatrists identified themselves as belonging to the New Zealand European ethnic group.

Table 66: Prioritised ethnicity of active podiatrists, 2002

Ethnic group	Number	Percentage
New Zealand European	130	80.7
Other European	13	8.1
Māori	5	3.1
Chinese	1	0.6
Indian	2	1.2
Other	3	1.9
Not reported	7	4.3
Total	161	100.0

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

Employment setting

Table 67 shows the breakdown of males and females in each main employment setting. Figure 16 shows that the majority (71.4 percent) of active podiatrists were self-employed in a private practice.

Table 67: Main employment setting of active podiatrists, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	1	5	1	7	4.3
Private practice (self-employed)	37	78	0	115	71.4
Private practice (employed)	5	18	0	23	14.3
Private hospital or rest home	0	5	0	5	3.1
University / polytechnic	1	0	0	1	0.6
Orthotic laboratory representative	0	0	0	0	0.0
Shoe manufacturer's technical representative	0	1	0	1	0.6
Other	0	1	0	1	0.6
Not reported	3	3	2	8	5.0
Total	47	111	3	161	100.0

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

Fig 16:
Main employment setting of active podiatrists, 2002



Work type

Table 68 shows the number of male and female podiatrists in each work type for 2002. It shows that general podiatry was reported as a work type for 43.5 percent of respondents when working in their main employment setting. Sports medicine (19.7 percent) and diabetes podiatry (16.2 percent) were the next most common work types reported.

Table 68: Work type of active podiatrists in main employment setting, by sex, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
General podiatry	40	106	2	148	43.5
Sports medicine	25	42	0	67	19.7
Diabetes podiatry	19	35	1	55	16.2
Teaching	2	0	0	2	0.6
Study/research	6	12	0	18	5.3
Management	15	22	0	37	10.9
Technical representative	0	4	0	4	1.2
Other	4	4	0	8	2.4
Not reported	0	1	0	1	0.3
Total	111	226	3	340	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 161 active podiatrists who responded to the 2002 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, 2002

Employment setting by work type	General podiatry	Sports medicine	Diabetes podiatry	Teaching	Study/research	Management	Technical representative	Other	Not reported	Total
DHB	2	0	6	0	0	0	0	0	0	8
Private practice (self-employed)	113	56	42	1	15	32	2	6	1	268
Private practice (employed)	21	8	4	0	1	1	0	0	0	35
Private hospital or rest home	5	0	1	0	0	0	0	0	0	6
University / polytechnic	0	0	0	1	0	0	0	0	0	1
Orthotic laboratory representative	0	0	0	0	0	0	0	0	0	0
Shoe manufacturer's technical rep.	1	1	1	0	0	0	1	0	0	4
Other	0	0	0	0	0	1	1	1	0	3
Not reported	6	2	1	0	2	3	0	1	0	15
Total	148	67	55	2	18	37	4	8	1	340

Country of qualification

Table 70 shows the majority of podiatrists surveyed in 2002 qualified in New Zealand (85.7 percent), followed by the United Kingdom (8.1 percent).

Table 70: Country of qualification of active podiatrists, 2002

Country	Number	Percentage
New Zealand	138	85.7
Australia	1	0.6
South Africa	1	0.6
United Kingdom	13	8.1
USA	1	0.6
Not reported	7	4.3
Total	161	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 2.9 active podiatrists per 100 000 estimated population. Wellington had the highest rate at 5.9 per 100 000 population, and no podiatrists were reported for the West Coast.

Table 72 shows the number of FTE podiatrists in each type of work. General podiatry accounted for 65.5 percent of all work types. On average, podiatrists reported that they worked in podiatry 31.2 hours per week.

Table 71: Geographic distribution of active podiatrists by hours, FTE, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	55.0	1.4	0.9
Auckland	1204.0	30.1	2.4
Waikato	329.0	8.2	2.3
Bay of Plenty	225.0	5.6	2.2
Tairāwhiti	12.0	0.3	0.7
Hawke's Bay	172.0	4.3	2.9
Taranaki	143.0	3.6	3.4
Manawatu-Wanganui	316.0	7.9	2.9
Wellington	938.0	23.5	5.9
Nelson-Marlborough	164.0	4.1	3.2
West Coast	0.0	0.0	0.0
Canterbury	744.0	18.6	3.7
Otago	171.0	4.3	2.2
Southland	65.0	1.6	1.7
Not reported	39.0	1.0	-
Total	4577.0	114.4	2.9

Table 72: Work type of active podiatrists at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
General podiatry	3042.0	76.1	66.5
Sports medicine	748.0	18.7	16.3
Diabetes podiatry	344.0	8.6	7.5
Teaching	41.0	1.0	0.9
Study/research	45.0	1.1	1.0
Management	168.0	4.2	3.7
Technical representative	17.0	0.4	0.4
Other	172.0	4.3	3.8
Not reported	0.0	0.0	0.0
Total	4577.0	114.4	100.0

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

Physiotherapists

There were 2621 physiotherapists who were sent an invoice for their Annual Practising Certificates (APCs) in 2002. A health workforce survey was included with each invoice sent in February 2002.

These statistics are based on the 1448 active (working) physiotherapists who responded to the health workforce survey. This represents 55.2 percent of those who were invoiced. A further 5.2 percent responded to the 2002 survey but did not report that they were active. It is not known if those invoiced who did not respond to the survey (39.5 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.

Table 73: Number of Annual Practising Certificates purchased by physiotherapists, 1993/94–2002/03

Year	Number of APCs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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
2001/02	2420	1442	59.6
2002/03	2621*	1448	55.2

* In 2002/03 this figure was changed to the number of physiotherapists invoiced rather than the number of licences sold.

Demographic data

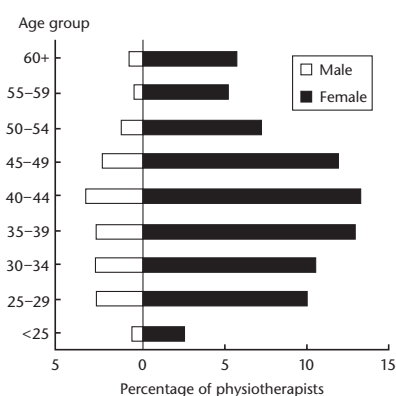
The active physiotherapy workforce was predominantly female (80.6 percent), as illustrated in Table 74 and Figure 17.

Table 74: Age and sex distribution of active physiotherapists, 2002

Sex	Age group									Not reported	Total
	20–	25–	30–	35–	40–	45–	50–	55–	60+		
Male	9	41	42	41	50	36	19	8	12	4	262
Female	38	146	153	188	193	174	105	76	83	11	1167
Not reported	0	0	3	0	2	1	1	0	0	12	19
Total	47	187	198	229	245	211	125	84	95	27	1448

Fig 17:
Age and sex distribution of active physiotherapists, 2002

(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 84). The majority (74.8 percent) of the active physiotherapists identified themselves as belonging to the New Zealand European ethnic group.

Table 75: Prioritised ethnicity of active physiotherapists, 2002

Ethnic group	Number	Percentage
New Zealand European	1083	74.8
Other European	215	14.8
Māori	38	2.6
Samoan	5	0.3
Cook Island Maori	2	0.1
Tongan	1	0.1
Niuean	1	0.1
Fijian	1	0.1
Other Pacific	2	0.1
Chinese	20	1.4
Indian	10	0.7
South East Asian	1	0.1
Other Asian	2	0.1
Other	46	3.2
Not reported	21	1.5
Total	1448	100.0

Employment setting

Table 76 shows the main employment setting of both male and female physiotherapists. Figure 18 shows the majority (37.3 percent) of active physiotherapists were self-employed in private practice. A further 27.1 percent worked for a DHB.

Table 76: Main employment setting of active physiotherapists, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	28	363	2	393	27.1
Private practice (self-employed)	150	383	7	540	37.3
Private practice (employed)	39	155	1	195	13.5
Private hospital or rest home	1	54	1	56	3.9
University / polytechnic	10	48	1	59	4.1
Schools (education service)	4	46	2	52	3.6
Government dept / Crown agency	1	6	0	7	0.5
Commercial/industrial organisation	4	4	0	8	0.6
Voluntary agency	0	5	0	5	0.3
Other	3	26	0	29	2.0
Not reported	22	77	5	104	7.2
Total	262	1167	19	1448	100.0

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

Fig 18:
Main employment setting of active physiotherapists, 2002

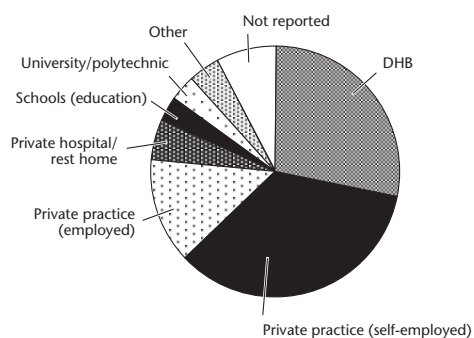


Table 77: Work type of active physiotherapists in main employment setting, by sex, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
Musculoskeletal inpatient	38	111	4	153	5.1
Musculoskeletal outpatient	166	500	5	671	22.5
Sports physiotherapy	136	294	4	434	14.5
Care of elderly	12	171	5	188	6.3
Mental health	2	19	1	22	0.7
Paediatric neurology	6	97	2	105	3.5
Adult neurology	21	144	0	165	5.5
Other paediatric	5	58	1	64	2.1
Medical/surgical cardiorespiratory	6	86	2	94	3.2
Community/domiciliary	10	114	0	124	4.2
Specialist Education Services	2	17	0	19	0.6
Women's health/obstetrics	2	75	0	77	2.6
Continuing care	2	13	0	15	0.5
Occupational health	20	79	2	101	3.4
Teaching	28	85	0	113	3.8
Study/research	37	94	1	132	4.4
Management	76	251	3	330	11.1
Other	14	121	0	135	4.5
Not reported	8	31	3	42	1.4
Total	591	2360	33	2984	100.0

Note: because of rounding errors, percentages do not add to 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 22.5 percent of respondents when working in their main employment setting. Sports physiotherapy was the second most frequently reported work type, at 14.5 percent.

Table 78 shows the main employment setting by work type of the 1448 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 (79.2 percent), with a further 9.3 percent gaining their qualification in the United Kingdom.

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 29.2 physiotherapists per 100 000 population. Taranaki and Manawatu-Wanganui had fewer reported physiotherapists than the national average, while Otago and Canterbury 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. On average, physiotherapists reported that they worked in physiotherapy for 32.9 hours per week.

Table 78: Work type of active physiotherapists by main employment setting, 2002

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
DHB	53	100	5	58	8	35	81	27	62	69	0	40	1	11	16	10	59	50	5	690
Private practice (self-employed)	60	371	285	61	11	24	52	10	14	36	0	26	8	61	37	75	209	46	4	1390
Private practice (employed)	16	145	103	11	1	4	9	3	1	10	1	5	3	11	6	13	19	10	3	374
Private hospital or rest home	11	1	0	44	1	0	8	0	5	1	0	0	0	2	3	1	4	4	1	86
University/polytechnic	2	11	3	2	0	0	3	0	5	0	0	1	0	1	42	23	12	1	2	108
Schools (education service)	0	0	0	0	0	29	0	17	0	0	15	0	0	0	2	2	4	1	0	70
Government dept / Crown agency	0	0	0	0	0	1	1	0	0	1	2	0	0	0	0	0	1	3	0	9
Commercial/industrial organisation	1	0	1	0	0	0	0	0	0	1	0	0	0	4	0	0	2	2	0	11
Voluntary agency	0	0	0	0	0	2	4	1	0	0	0	0	0	0	0	1	1	1	0	10
Other	1	5	5	2	1	4	6	2	2	1	0	1	1	2	2	1	3	6	2	47
Not reported	9	38	32	10	0	6	1	4	5	5	1	4	2	9	5	6	16	11	25	189
Total	153	671	434	188	22	105	165	64	94	124	19	77	15	101	113	132	330	135	42	2984

Table 79: Country of qualification of active physiotherapists, 2002

Country	Number	Percentage
New Zealand	1147	79.2
United Kingdom	135	9.3
Netherlands	29	2.0
Australia	33	2.3
South Africa	26	1.8
Canada	13	0.9
USA	7	0.5
Germany	5	0.3
Switzerland	2	0.1
Egypt	1	0.1
India	3	0.2
Ireland	11	0.8
Norway	1	0.1
Russia	1	0.1
Wales	2	0.1
Scotland	9	0.6
Fiji	1	0.1
Not reported	22	1.5
Total	1448	100.0

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

Table 80: Geographic distribution of active physiotherapists by hours, FTE, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	1816.0	45.4	31.2
Auckland	13 955.5	348.9	27.6
Waikato	3489.3	87.2	24.6
Bay of Plenty	2956.0	73.9	29.2
Tairāwhiti	488.0	12.2	27.0
Hawke's Bay	1668.0	41.7	28.1
Taranaki	870.0	21.8	20.6
Manawatu-Wanganui	2261.0	56.5	20.8
Wellington	3978.5	99.5	24.8
Nelson-Marlborough	1410.0	35.3	27.5
West Coast	341.0	8.5	27.7
Canterbury	7830.5	195.8	39.0
Otago	3403.0	85.1	44.3
Southland	1127.0	28.2	30.2
Not reported	482.0	12.1	-
Total	46 075.8	1151.9	29.2

Table 81: Work type of active physiotherapists at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
Musculoskeletal inpatient	3504.0	87.6	7.6
Musculoskeletal outpatient	15 008.0	375.2	32.6
Sports physiotherapy	6236.0	155.9	13.5
Care of elderly	2253.5	56.3	4.9
Mental health	296.0	7.4	0.6
Paediatric neurology	1998.0	50.0	4.3
Adult neurology	2442.5	61.1	5.3
Other paediatric	808.3	20.2	1.8
Medical/surgical cardiorespiratory	1530.0	38.3	3.3
Community/domiciliary	1982.5	49.6	4.3
Specialist Education Services	489.0	12.2	1.1
Women's health/obstetrics	632.3	15.8	1.4
Continuing care	72.5	1.8	0.2
Occupational health	1099.5	27.5	2.4
Teaching	1273.8	31.8	2.8
Study/research	1061.0	26.5	2.3
Management	3011.5	75.3	6.5
Other	2322.5	58.1	5.0
Not reported	55.0	1.4	0.1
Total	46 075.8	1151.9	100.0

Registered psychologists

There were 1270 registered psychologists who were sent an invoice for their Annual Practising Certificates (APCs) in 2002. A health workforce survey was included with each invoice sent out in February 2002.

These statistics are based on the 907 active (working) registered psychologists who responded to the health workforce survey. This represents 71.4 percent of those who were invoiced. A further 4.8 percent responded to the 2002 survey but did not report they were actively working. It is not known if the APC holders who did not respond to the survey (23.8 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.

Table 82: Number of Annual Practising Certificates purchased by registered psychologists, 1993/94–2002/03

Year	Number of APCs purchased	Completed surveys from respondents who were active	Response rate (percentage)
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	699	62.2
2001/02	1128	665	59.0
2002/03	1270*	907	71.4

* In 2002/03 this figure was changed to the number of registered psychologists invoiced rather than the number of licences sold.

Demographic data

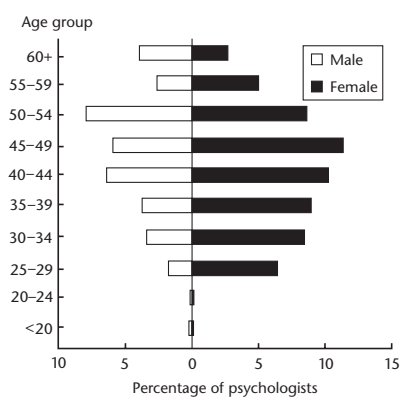
The active registered psychologist workforce was predominantly female (62.6 percent), as depicted in Table 83 and Figure 19.

Table 83: Age and sex distribution of active registered psychologists, 2002

Sex	Age group										Not reported	Total
	<20	20–	25–	30–	35–	40–	45–	50–	55–	60+		
Male	1	0	15	30	33	57	53	71	23	35	3	321
Female	1	1	59	77	81	93	103	79	46	25	3	568
Not reported	0	0	0	2	0	0	0	1	1	0	14	18
Total	2	1	74	109	114	150	156	151	70	60	20	907

Fig 19:
Age and sex distribution of active registered psychologists, 2002

(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 84). The majority (70.0 percent) of the active registered psychologists identified themselves as belonging to the New Zealand European ethnic group.

Table 84: Prioritised ethnicity of active registered psychologists, 2002

Ethnic group	Number	Percentage
New Zealand European	635	70.0
Other European	144	15.9
Māori	43	4.7
Tongan	1	0.1
South East Asian	2	0.2
Chinese	4	0.4
Indian	12	1.3
Other Asian	2	0.2
Other	41	4.5
Not reported	23	2.5
Total	907	100.0

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

Employment setting

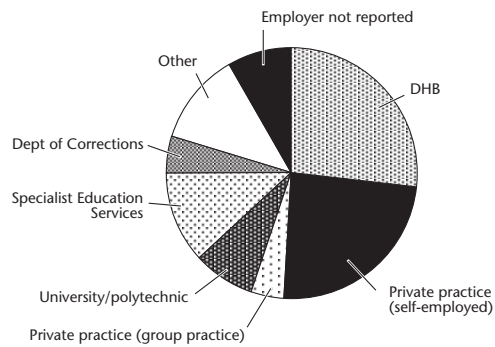
Table 85 shows the breakdown of males and females in the main employment settings. The largest employment setting of registered psychologists was in a DHB. This made up 26.9 percent of the workforce, followed by 24.1 percent for self-employment in private practice (see Figure 20).

Table 85: Main employment setting of active registered psychologists, by sex, 2002

Employment setting	Male	Female	Not reported	Total	
				Number	Percentage
DHB	83	158	3	244	26.9
Private practice (self-employed)	79	138	2	219	24.1
Private practice (group practice)	11	28	0	39	4.3
University / polytechnic	28	38	3	69	7.6
Specialist Education Services	40	64	2	106	11.7
Child, Youth & Family Service	2	11	0	13	1.4
Department of Corrections	20	25	1	46	5.1
Other government department	8	15	0	23	2.5
Commercial/industrial organisation	11	13	0	24	2.6
Voluntary agency	3	12	0	15	1.7
Consultant to public sector employer	0	3	0	3	0.3
Other	14	17	0	31	3.4
Not reported	23	46	6	75	8.3
Total	322	568	17	907	100.0

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

Fig 20:
Main employment setting of active registered psychologists, 2002



Work type

Table 86 shows the number of male and female psychologists in each work type for 2002. Clinical psychology was reported as the work type for 32.6 percent of respondents when working in their main employment setting.

Table 86: Work type of active registered psychologists in main employment setting, by sex, 2002

Work type	Male	Female	Not reported	Total	
				Number	Percentage
Clinical psychology	178	333	8	519	32.6
Educational psychology	59	90	1	150	9.4
Industrial/organisational psychology	34	36	0	70	4.4
Personnel management	19	28	0	47	2.9
Rehabilitation	20	27	2	49	3.1
Psychotherapy	38	62	1	101	6.3
Counselling	52	67	1	120	7.5
Teaching	43	69	2	114	7.2
Study	23	26	0	49	3.1
Research	53	65	2	120	7.5
Service management	57	65	2	124	7.8
Other	42	61	1	104	6.5
Not reported	9	12	6	27	1.7
Total	627	941	26	1594	100.0

Table 87 shows the main employment setting by work type of the 907 active registered psychologists who responded to the 2002 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, 2002

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
DHB	225	3	2	4	9	22	10	12	4	17	25	17	1	351
Private practice (self-employed)	139	22	23	6	25	58	72	27	26	17	23	54	4	496
Private practice (group practice)	21	1	5	3	3	8	8	0	1	2	4	4	0	60
University / polytechnic	20	3	3	0	0	5	1	52	7	48	8	5	1	153
Specialist Education Services	4	91	2	2	2	1	7	1	2	2	17	3	2	136
Child, Youth & Family Service	13	0	0	2	0	0	0	0	0	3	4	2	0	24
Dept of Corrections	37	0	1	7	0	0	0	3	2	7	10	1	3	71
Other government departments	8	4	11	6	0	0	3	5	2	9	4	1	1	54
Commercial/industrial organisation	2	0	16	6	2	0	1	0	0	1	2	1	1	32
Voluntary agency	7	1	0	2	2	1	4	3	1	5	6	3	0	35
Consultant to public sector employer	1	0	0	1	1	0	0	1	0	0	1	0	1	6
Other	12	4	3	5	1	2	7	6	0	4	9	6	1	60
Not reported	30	21	4	3	4	4	7	4	4	5	11	7	12	116
Total	519	150	70	47	49	101	120	114	49	120	124	104	27	1594

Country of qualification

Table 88 shows that the majority of registered psychologists who practise in New Zealand also trained in New Zealand (77.5 percent), followed by South Africa (6.2 percent).

Table 88: Country of qualification of active registered psychologists, 2002

Country	Number	Percentage
New Zealand	703	77.5
United Kingdom	31	3.4
Germany	7	0.8
South Africa	56	6.2
Canada	8	0.9
Australia	26	2.9
USA	25	2.8
Yugoslavia	1	0.1
Scotland	2	0.2
Croatia	2	0.2
India	4	0.4
Sweden	1	0.1
Switzerland	1	0.1
France	1	0.1
Ireland	2	0.2
Belgium	3	0.3
Serbia	2	0.2
Czechoslovakia	1	0.1
Greece	1	0.1
Netherlands	2	0.2
Israel	1	0.1
Macedonia	1	0.1
Philippines	1	0.1
Poland	1	0.1
Wales	1	0.1
Zimbabwe	1	0.1
Not reported	22	2.4
Total	907	100.0

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

Hours worked

Table 89 shows the number of full-time equivalent (FTE) registered psychologists in each geographic region, based on the distribution of the 907 registered psychologists who responded to the survey. On average in New Zealand, there were 19.1 registered psychologists per 100 000 population. In 2002, West Coast and Tairāwhiti reported fewer registered psychologists than the national average, whereas Otago and Wellington reported much higher ratios per capita.

Table 90 shows the number of FTE registered psychologists in each work type. Clinical psychology (45.2 percent) and educational psychology (12.8 percent) were the areas where registered psychologists spent most of their time. On average, registered psychologists reported that they worked approximately 35.5 hours per week.

Table 89: Geographic distribution of active registered psychologists by hours, FTE, 2002

Geographic region	Hours	FTE	Rate per 100 000 population
Northland	751.0	18.8	12.9
Auckland	9018.0	225.5	17.8
Waikato	2714.0	67.9	19.1
Bay of Plenty	1568.0	39.2	15.5
Tairāwhiti	117.0	2.9	6.5
Hawke's Bay	677.0	16.9	11.4
Taranaki	630.0	15.8	14.9
Manawatu-Wanganui	1392.0	34.8	12.8
Wellington	4811.0	120.3	30.0
Nelson-Marlborough	1167.0	29.2	22.8
West Coast	38.0	1.0	3.1
Canterbury	4530.0	113.3	22.6
Otago	2067.7	51.7	26.9
Southland	448.0	11.2	12.0
Not reported	188.0	4.7	-
Total	30 116.7	752.9	19.1

Table 90: Work type of active registered psychologists at their main employment setting by hours, FTE, 2002

Work type	Hours	FTE	Percentage
Clinical psychology	13 604.0	340.1	45.2
Educational psychology	3841.0	96.0	12.8
Industrial/organisational psychology	2022.0	50.6	6.7
Personnel management	613.0	15.3	2.0
Rehabilitation	695.0	17.4	2.3
Psychotherapy	1148.5	28.7	3.8
Counselling	1214.0	30.4	4.0
Teaching	1389.0	34.7	4.6
Study	288.0	7.2	1.0
Research	1509.0	37.7	5.0
Service management	2070.8	51.8	6.9
Other	1509.5	37.7	5.0
Not reported	213.0	5.3	0.7
Total	30 116.7	752.9	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 ethnic groups chosen were then prioritised. The prioritisation system used is shown 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 below details the ethnic categories included in the survey results and the order of prioritisation.

Ethnicity	Prioritisation order
New Zealand European	15
Other European	14
Māori	1
Samoan	7
Cook Island Maori	6
Tongan	5
Niuean	4
Tokelauan	2
Fijian	3
Other Pacific	8
South East Asian	9
Indian	10
Chinese	11
Other Asian	12
Other	13
Not reported	0

Appendix 2

Employer

The workforce survey asks each selected health professional 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)
- DHB
- 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)
- DHB
- Other employer
- Employment setting not reported

Chiropractors

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

Dietitians

- DHB
- 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

- DHB
- 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

- DHB
- 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

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

Podiatrists

DHB

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

Physiotherapists

DHB

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

Registered psychologists

DHB

- 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
- Education
- 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
- Radiation therapy
- 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)
- Community/domiciliary
- Acute/intensive care
- Intellectual disability
- Education
- Study/research
- Management
- Mental health
- Driver assessment
- 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

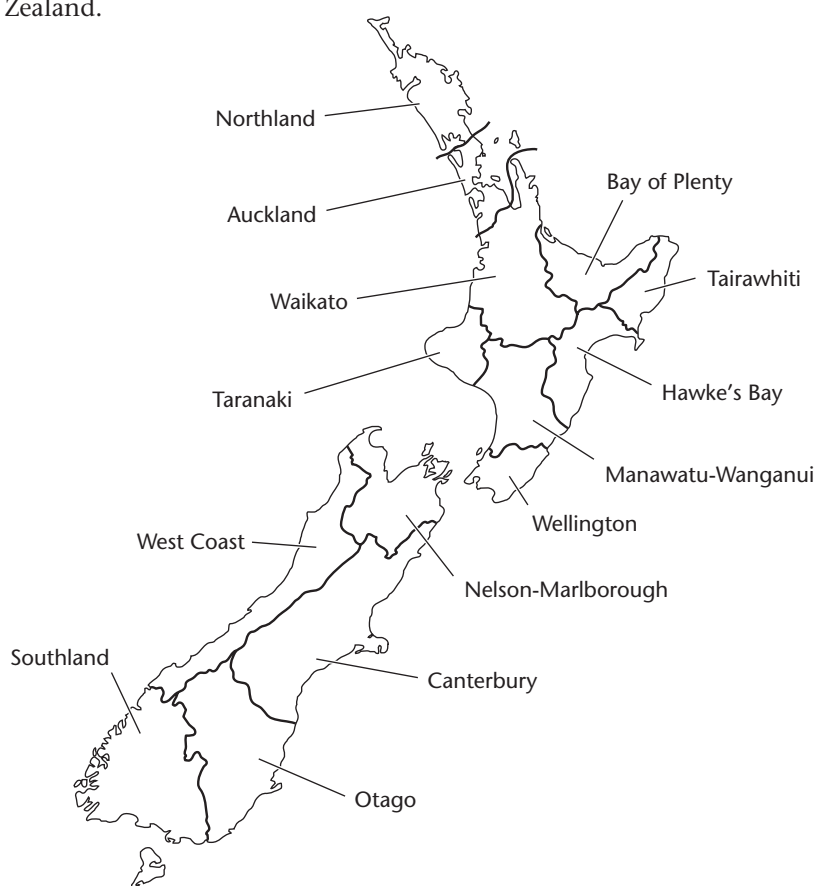
Registered psychologists

- 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 on page 90 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
Tairāwhiti	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	Porirua, Upper Hutt, Lower Hutt, Wellington, Masterton, Carterton, South Wairarapa, Kapiti Coast
Nelson-Marlborough	Tasman, Nelson, Marlborough
West Coast	Buller, Greymouth, 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 2002 (source – Statistics New Zealand).

Area Health Board	Population
Northland	145 400
Auckland	1 266 300
Waikato	354 720
Bay of Plenty	253 390
Tairāwhiti	45 200
Hawke's Bay	148 570
Taranaki	105 740
Manawatu-Wanganui	271 300
Wellington	400 770
Nelson-Marlborough	128 100
West Coast	30 800
Canterbury	502 150
Otago	192 200
Southland	93 350
New Zealand	3 938 800

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,

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