Pharmacy Workforce Demographic 2022



Te Pou Whakamana Kaimatū o Aotearoa

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## Introduction

Pharmacy Council | Te Pou Whakamana Kaimatū o Aotearoa is the responsible authority for health practitioners in the pharmacy profession in Aotearoa New Zealand. Some of the key mechanisms we achieve this are by:

- ensuring that intern pharmacists, pharmacists, and pharmacist prescribers are qualified and registered
- ensuring that pharmacists are competent to practise safely
- monitoring education and training programmes.

For further information on our functions please visit our website.

The annual Workforce Demographic report provides an overview of Pharmacy Register movements in the year from 1 July to 30 June. It also provides a point in time (30 June) analysis of the profession's registered practitioners.

Data is provided by practitioners within relevant applications to Council. This includes workforce data declared by pharmacists when applications for recertification are made. In our role as the responsible authority, we provide workforce-related information to the Director-General of Health.<sup>1</sup> This report goes further, providing an overview of the pharmacy workforce for the wider sector and all interested stakeholders.

The data shows that the number of practising pharmacists grew by 1.4 percent over the 12 months to 30 June 2022. The report provides insights into the capacity of the workforce, but at a time when pharmacists continued to navigate the COVID-19 pandemic which saw them deliver new services to their communities. Further work is required by the sector to understand the demands and desired role of the profession to provide high-quality and safe healthcare to New Zealanders over the long-term.



Michael A Pead Chief Executive



Dr Owain George Registrar

<sup>&</sup>lt;sup>1</sup> Health Practitioner Competence Assurance Act (HPCAA) 2003, section 134A.

## **Pharmacy register**

Pharmacists must be registered with Pharmacy Council and hold a current annual practising certificate under the Health Practitioners Competence Assurance Act 2003 to be entitled to practise pharmacy in Aotearoa New Zealand.

On 30 June 2022, there were 4,118 registered, current pharmacists in New Zealand.

Between 1 July 2021 to 30 June 2022, 218 pharmacists registered with the Pharmacy Council for the first time.

Practising status	Scope of practice	Practitioners
	Intern pharmacists	249
Dedictored current <sup>2</sup>	Pharmacists (exclusive of prescribers)	4,072
Registered, current <sup>2</sup>	Pharmacist prescribers	46
	Total	4,118
	Intern pharmacists	40
Registered, inactive <sup>3</sup>	Pharmacists (exclusive of prescribers)	1,106
Registered, mactive	Pharmacist prescribers	3
	Total	1,109
Suspended <sup>4</sup>	Pharmacists	8
	Total	8
Total register		5,524

### Table 1 – Composition of the register on 30 June 2022

The number of *registered, current* pharmacists is Council's most accurate measure for estimating the number of practising pharmacists in New Zealand.

For the remainder of this report the terms '*registered, current* pharmacist' and 'practising pharmacist' are used interchangeably.

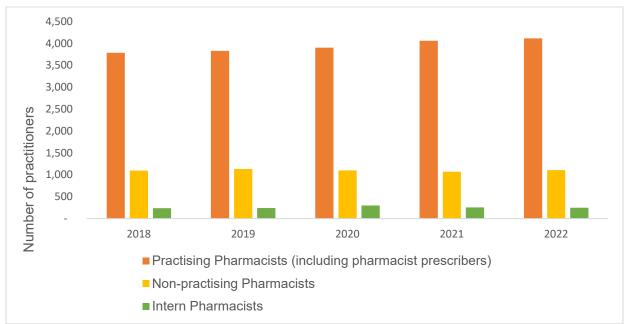
Throughout this document the term 'pharmacist' includes pharmacist prescribers unless otherwise indicated.

For the purpose of this report the terms '*registered, inactive* pharmacist' and non-practising pharmacist are used interchangeably.

<sup>&</sup>lt;sup>2</sup> Registered with the Pharmacy Council and holds, or is deemed to hold, a current practising certificate and is entitled to practise.

<sup>&</sup>lt;sup>3</sup> Registered with the Pharmacy Council, does not hold a practising certificate and is not entitled to practise.

<sup>&</sup>lt;sup>4</sup> Registration or practising certificate is suspended, and the pharmacist is not entitled to practise.



### Figure 1 – Register composition on 30 June 2018-2022

### Table 2 – Register composition on 30 June 2018-2022

	2018	2019	2020	2021	2022
Registered, current					
Intern pharmacists	236	243	300	256	249
Pharmacists	3,787	3,832	3,940	4,062	4,118
Pharmacist prescribers	19	20	34	37	46
Registered, inactive					
Intern pharmacists	16	24	24	30	40
Pharmacists	1,095	1,133	1,100	1,087	1,106
Pharmacist prescribers	2	2	2	2	3
Suspended					
Pharmacists <sup>₅</sup>	7	7	8	9	8
Total register	5,143	5,241	5,374	5,446	5,524

### Number of practising pharmacists

In the 12 months to 30 June 2022, the number of *registered, current* pharmacists in New Zealand grew by 56, or 1.4 percent compared with the same period to 30 June 2021. This

<sup>&</sup>lt;sup>5</sup> At the time of reporting there were no intern pharmacists or pharmacist prescribers with *suspended* practising status.

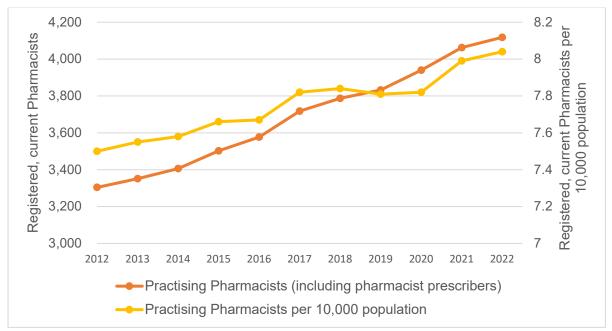
is a smaller increase than the average 2.2 percent per annum growth observed over the previous ten years.<sup>6</sup>

Of the 4,118 pharmacists registered and entitled to practise, 46 were registered pharmacist prescribers. While this represents only 1.1 percent of *registered, current* pharmacists, the nine pharmacists who entered into the Pharmacist Prescriber Scope of Practice in the year to 30 June 2022 represents the greatest annual increase of pharmacist prescribers.

Year	Registered, current pharmacists	Percent change
2022	4,118	1.4%
2021	4,062	3.1%
2020	3,940	2.8%
2019	3,832	1.2%
2018	3,787	

 Table 3 – Number of registered, current pharmacists on 30 June 2018-2022





There were 8.04 practising pharmacists for every 10,000 people in New Zealand on 30 June 2022. The per capita rate has not substantially changed from the previous year (there were 7.99 pharmacists per 10,000 people on 30 June 2021).

The increase in practising pharmacists has broadly matched population growth in New Zealand over the period 1 July 2021 to 20 June 2022. For context, the population growth

<sup>&</sup>lt;sup>6</sup> Pharmacy Council. Workforce Demographic Report 2021. Wellington: Pharmacy Council, 2021. <u>https://pharmacycouncil.org.nz/wp-content/uploads/2021/09/Workforce-Demographic-Report-2021-FINAL.pdf</u>.

rate for New Zealand has been approximately 1.5 percent per annum over the decade 2012 to 2021.<sup>7</sup>

The density of pharmacists in New Zealand is less than what is reported for our most comparable jurisdictions: Australia (8.97), Canada (11.09), Ireland (13.7), United Kingdom (8.43), and United States of America (9.25).<sup>8</sup>

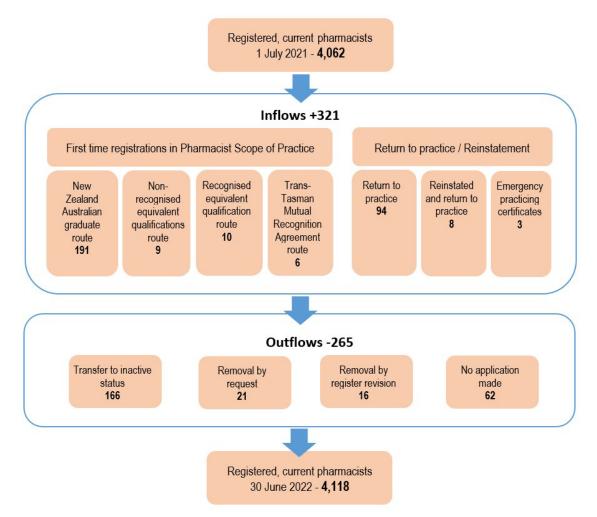


Figure 3 – Summary of changes to the number of *registered, current* pharmacists

Figure 3 illustrates changes to the number of practising pharmacists between 1 July 2021 and 30 June 2022. The number of additions to the pool of practising pharmacists (321) slightly outweighed those not continuing to practise (265).

<sup>&</sup>lt;sup>7</sup> The World Bank. "Population Growth (annual %) - New Zealand." World Bank Open Data. Last modified 2022.

https://data.worldbank.org/indicator/SP.POP.GROW?end=2021&locations=NZ&start=2011&vie w=chart.

<sup>&</sup>lt;sup>8</sup> World Health Organization. "Pharmacists (per 10 000 Population)." World Health Organization. Last modified 2022. <u>https://www.who.int/data/gho/data/indicators/indicator-details/GHO/pharmacists-(per-10-000-population)</u>.

In this period, 191 new pharmacists (59.5 percent of inflow pool) were intern pharmacists entering the Pharmacist Scope of Practice through the New Zealand or Australian graduate route. A further 94 (29.3 percent of inflow pool) were pharmacists returning to practice.

Over the same period, 265 pharmacists who held an annual practising certificate in the 2021/22 APC year did not apply for a practising certificate for the 2022/23 year. Of these, the majority (62.6 percent) applied to retain registration with *inactive* practising status. As at 30 June 2022, a further 62 pharmacists (23.4 percent of outflow pool) had not made an application to maintain their registration or for a practising certificate.

### **Non-practising pharmacists**

When a pharmacist is *registered, inactive* they hold a position on the register but do not hold a current practising certificate. These pharmacists are not permitted to practise pharmacy, but they may use the title 'pharmacist'.

If a pharmacist holds *registered, inactive* status, they must apply for this annually to stay on the register.

Year	Registered, inactive pharmacists	Percent change
2022	1,109	3.5%
2021	1,071	-2.6%
2020	1,100	-2.9%
2019	1,133	3.5%
2018	1,095	

### Table 4 – Number of registered, inactive pharmacists on 30 June 2018 - 2022

Despite growth in the total register over time, the number of *registered, inactive* pharmacists has remained within a tight range (between approximately 900 to 1,100 pharmacists since at least 2005). Of the 1,109 pharmacists with *registered, inactive* practising status, 909 made an application to retain registration, while (as at 30 June 2022) 200 had not submitted an application. These pharmacists are now in the register revision process.

When a pharmacist makes an application to either transfer to or renew their *inactive* practising status, they are asked to provide reason(s) for not practising. Table 5 collates data from all pharmacists applying for *inactive* status. The majority of the data is from pharmacists who were already not practising. Overall, the mix of reasons for not practising has not changed significantly from 2021 or from results observed before the COVID-19 pandemic.

l able 5 –	Pharmacist	reason to	or discont	inuing	practice	

Reason for not practising	2022	Percentage
Overseas - practising	328	32.5%
Overseas - not practising	120	11.9%
Working a non-health role	130	12.9%
Parenting/maternity leave	97	9.6%
Other	101	10.0%

Reason for not practising	2022	Percentage
Retired	91	9.0%
Working in another health profession	87	8.6%
Full time study	22	2.2%
Seeking employment in a non-pharmacy profession	30	3.0%
Seeking employment as a pharmacist	2	0.2%
Total reasons provided	1,008	100%

### Intern pharmacists

Intern pharmacists are registered health practitioners who are actively taking steps towards to meet the requirements to enter the Pharmacist Scope of Practice. Like pharmacists, an intern pharmacist must hold an annual practising certificate (i.e. hold a practising status of *registered, current*) to practise.

There were 249 intern pharmacists registered and holding practising certificate on 30 June 2022. As Table 6 shows, this is consistent with the figures from previous years (except in June 2020 due to the deferral of the May Assessment Centre due to COVID-19 pandemic safety concerns and restrictions).

Year	Intern pharmacists	Percent change
2022	249	-2.7%
2021	256	-14.7%
2020	300	23.5%
2019	243	3.0%
2018	236	

### Table 6 – Intern pharmacists on 30 June 2018-2022

To register in the Intern Pharmacist Scope of Practice, an applicant must either hold a pharmacy degree from New Zealand or Australia or have successfully completed the first three steps of the Non-Recognised Equivalent Qualifications Route (Non-REQR).<sup>9,10</sup>

Of the 249 intern pharmacists on the register at 30 June 2022, the majority entered the Pharmacist Scope of Practice with a pharmacy qualification from a New Zealand university.

It should be noted that the number of intern pharmacists reported in Table 6 is a total of intern pharmacists with a practising certificate on 30 June. This is a mix of pharmacy

<sup>&</sup>lt;sup>9</sup> New Zealand Gazette. "Pharmacy Council Scopes of Practice and Prescribed Qualifications Amendment Notice 2014 - 2014-gs6347." New Zealand Gazette. Last modified October 16, 2014. <u>https://gazette.govt.nz/notice/id/2014-gs6347</u>.

<sup>&</sup>lt;sup>10</sup> The Non-Recognised Equivalent Qualifications Route (Non-REQR) is for overseas registered pharmacists (who qualified in countries other than Australia, Canada, Ireland, the United Kingdom and the USA), who are pursing pharmacist registration in New Zealand.

graduates from a variety of university cohorts. Because of this, the count of intern pharmacists is not a reliable measure of the number of graduates for a given year.

Number of interns by university or country of university						
		2021	2022			
New Zealand and Australian pharmacy graduates	University of Auckland University of Otago Australian universities	90 152 0	65 166 1			
Overseas pharmacists	Non-REQR	14	17			
Total intern pharmacists		256	249			

### Table 7 – Origin of pharmacy qualification for intern pharmacists

### Pharmacists removed from the register

A pharmacist may request to be removed from the register at any time. Once removed they may not practise within any of the scopes of practice specified by the Pharmacy Council, refer to themselves as a pharmacist, or use the designation RegPharmNZ. A reinstatement process is in place should a pharmacist want to return to the register.

If a pharmacist fails to renew their registration status (for either *current* or *inactive* status) in the recertification period, Pharmacy Council will attempt to contact the practitioner. If still no application is made, the pharmacist is removed via the revision of register mechanism provided in section 144 of the Health Practitioners Competence Assurance Act 2003.

### Table 8 – Removed from the register

Removals	2021	2022
Revision of register	51	75
Removed at own request	84	66
Total pharmacists removed	135	141

In the period 1 July 2021 to 30 June 2022, 141 pharmacists were removed from the register. Of these, 104 (73.8 percent) were pharmacists who did not hold a practising certificate.

The remaining 37 pharmacists held a practising certificate in the 2021/22 year, and 21 requested to be removed from the register and 16 were removed by register revision because they did not renew their registration. This year saw slightly fewer pharmacists requesting removal and a slightly greater number removed due to not maintaining registration. However, the net number of pharmacists removed from the register remained comparable to previous years.

### Table 9 – Reason provided by pharmacists requesting removal from the register

Reasons for requesting removal	2022	Percentage
Retired	36	52.1%
Overseas – practising	8	11.6%

Reasons for requesting removal	2022	Percentage
Working in a non-health role	11	15.9%
Overseas – not practising	5	7.3%
Parenting/maternity leave	1	1.5%
Seeking employment in a non-pharmacy profession	3	4.3%
Working in another health profession	1	1.5%
Other	3	4.4%
Full time study	1	1.5%
Total reasons provided	69	100%

When requesting removal from the register, information on the reason (or reasons) for removal is collected. Table 9 shows the reasons provided by pharmacists requesting removal (no data is available for the pharmacists who are removed by register revision).

Consistently, the majority of pharmacists who requested removal were retiring from practice (52.2 percent) or leaving the health sector (15.9 percent).

## Practising pharmacists in detail

### Where pharmacists practise in New Zealand

In this section, the total number of pharmacists reported changes to 4,117 in some cases, from 4,118 as reported in the first part of this report. This is because one pharmacist with an annual practising certificate provided overseas details and was excluded from some of the analyses.

### **By Regional Council**

Aotearoa New Zealand has 16 regional and unitary councils.<sup>11</sup> To understand the distribution of pharmacists, Pharmacy Council assigns each pharmacist to a region based on their reported primary place of work. Failing this, the provided postal address is used. This workforce data is collected at the time of recertification and is retrospective. As such, this data reflects pharmacist practice based on the period 1 April 2021 to 31 March 2022.

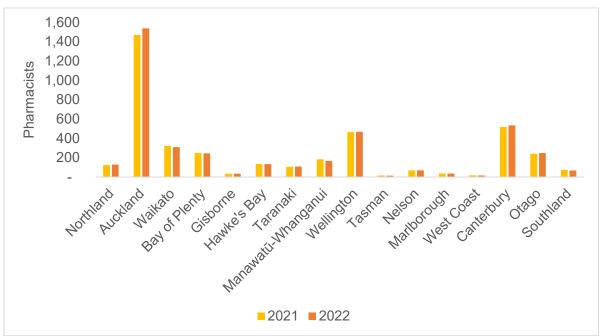




Figure 4 shows that most regions have maintained a similar population of pharmacists when compared to the same period in 2020/2021, except for the Auckland region which increased by 68 pharmacists (4.6 percent). There are also more pharmacists in Canterbury (up 17 pharmacists or 3.3 percent). The number of pharmacists in the Manawatū-Whanganui region decreased by 18, which represents a 9.8 percent reduction in the region's pharmacist workforce.

<sup>&</sup>lt;sup>11</sup> Local Government New Zealand. "Regional and Unitary Councils Aotearoa." Ko Tātou Local Government New Zealand. Last modified 2022. <u>https://www.lgnz.co.nz/regionals/</u>.

		2020/2021		2021/2022			
Regional council	Number of pharmacists	Population of region <sup>12</sup>	Pharmacists per 10,000 population	Number of pharmacists	Population of region <sup>12</sup>	Pharmacists per 10,000 population	
Northland	124	194,600	6.37	129	197,900	6.52	
Auckland	1,471	1,717,500	8.56	1,539	1,715,600	8.97	
Waikato	322	496,700	6.48	309	506,000	6.11	
Bay of Plenty	249	337,300	7.38	244	343,400	7.11	
Gisborne	34	50,700	6.71	34	51,500	6.60	
Hawke's Bay	135	178,600	7.56	134	181,500	7.38	
Taranaki	106	124,600	8.51	108	126,400	8.54	
Manawatū- Whanganui	184	254,300	7.24	166	256,500	6.47	
Wellington	465	542,000	8.58	468	547,000	8.56	
Tasman	16	56,400	2.84	15	57,900	2.59	
Nelson	69	54,600	12.64	69	54,700	12.61	
Marlborough	36	50,200	7.17	36	51,500	6.99	
West Coast	18	32,400	5.56	16	32,700	4.89	
Canterbury	518	645,900	8.02	535	649,800	8.23	
Otago	241	245,300	9.82	248	246,700	10.05	
Southland	72	102,600	7.02	67	102,700	6.52	
Total	4,062	5,083,700	7.99	4,117	5,121,800	8.04	

### Table 10 – Distribution of practising pharmacists by regional council

<sup>12</sup> Statistics New Zealand. "NZ.Stat." Statistics New Zealand. Accessed June 30, 2022. <u>https://nzdotstat.stats.govt.nz/wbos/Index.aspx</u>.

The metric we use (pharmacists per 10,000 population) is used internationally by other health organisations including the World Health Organization.<sup>13</sup> It is a broad proxy for a complex concept. Table 10 should be interpreted accordingly.

Most of the regions maintained a steady per capita population of pharmacists. As noted previously, the Auckland region experienced an increase in pharmacists. Concurrently, the Auckland population decreased slightly leading to the moderate increase of 0.41 pharmacists per 10,000 population from a 2021 base which was already above the national average.

In 2021/22, the West Coast region showed the second to lowest density of pharmacists (after Tasman). The reduction in pharmacists from 18 to 16 returned the greatest decrease in density (-0.67 pharmacists per 10,000 population) calculated this year.

Tasman and Nelson regions respectively returned unexpectedly low- and high-density pharmacist numbers. However, when the regions are combined a more typical figure of 7.46 pharmacists per 10,000 population is calculated.

<sup>&</sup>lt;sup>13</sup> World Health Organization. "Pharmacists (per 10 000 Population)." World Health Organization. Last modified January 24, 2022. <u>https://www.who.int/data/gho/data/indicators/indicator-details/GHO/pharmacists-(per-10-000-population)</u>.

### Figure 5 – Geographical distribution of the pharmacy workforce

Auckland / Tāmaki-makaurau

1,715,600 Estimated Population 2022 1,539 Practising pharmacists 2022 (including 9 pharmacist prescribers) 8.97 Density (pharmacists per 10,000 people)

#### Waikato

506,000 Estimated Population 2022 309 Practising pharmacists 2022 (including 7 pharmacist prescribers) 6.11 Density (pharmacists per 10,000 people)

#### Taranaki

126,400 Estimated Population 2022 108 Practising pharmacists 2022 (including 3 pharmacist prescribers) 8.54 Density (pharmacists per 10,000 people)

Manawatū-Whanganui 256,500 Estimated Population 2022 166 Practising pharmacists 2022 (including 4 pharmacist prescribers) 6.47 Density (pharmacists per 10,000 people)

Tasman / Te Tai-o-Aorere 57,900 Estimated Population 2022 15 Practising pharmacists 2022 2.59 Density (pharmacists per 10,000 people)

#### Nelson / Whakatū 54,700 Estimated Population 2022 69 Practising pharmacists 2022

12.61 Density (pharmacists per 10,000 people)

#### West Coast / Te Tai Poutini 32,700 Estimated Population 2022 16 Practising pharmacists 2022 4.89 Density (pharmacists per 10,000 people)

#### Southland / Murihiku

102,700 Estimated Population 2022 67 Practising pharmacists 2022 6.52 Density (pharmacists per 10,000 people)

### Otago / Ōtākou

246,700 Estimated Population 2022 248 Practising pharmacists 2022 (including 3 pharmacist prescribers) 10.05 Density (pharmacists per 10,000

### Across Aotearoa New Zealand

5,121,800 estimated population 2022 4,118 practising pharmacists 2022 8.04 pharmacists per 10,000 people

#### Northland / Te Tai Tokerau

197,900 Estimated Population 2022 129 Practising pharmacists 2022 (including 1 pharmacist prescriber) 6.52 Density (pharmacists per 10,000 people)

#### Bay of Plenty / Te Moana-a-Toi

343,400 Estimated Population 2022 244 Practising pharmacists 2022 (including 5 pharmacist prescribers) 7.11 Density (pharmacists per 10,000 people)

#### Gisborne / Te Tai Rāwhiti 51,500 Estimated Population 2022

34 Practising pharmacists 2022 6.60 Density (pharmacists per 10,000 (elgoeg

#### Hawke's Bay / Te Matau-a-Māui

181,500 Estimated Population 2022 134 Practising pharmacists 2022 (including 4 pharmacist prescribers) 7.38 Density (pharmacists per 10,000 (elgoeg

#### Wellington / Te Whanga-nui-a-Tara

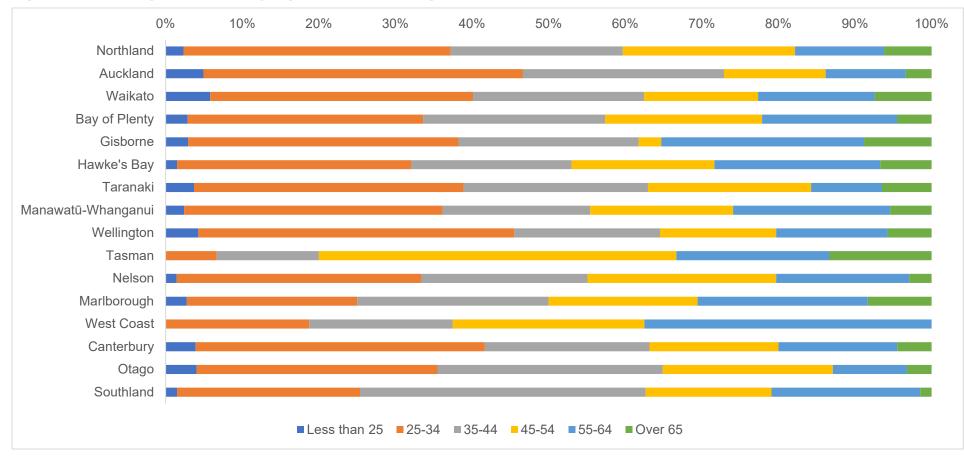
547.000 Estimated Population 2022 468 Practising pharmacists 2022 (including 4 pharmacist prescribers) 8.56 Density (pharmacists per 10,000 people)

#### Marlborough / Te Tau Ihu o te Wakaa-Māui

51,500 Estimated Population 2022 36 Practising pharmacists 2022 (including 1 pharmacist prescriber) 6.99 Density (pharmacists per 10,000 people)

#### **Canterbury / Waitaha**

649,800 Estimated Population 2022 535 Practising pharmacists 2022 (including 5 pharmacist prescribers) 8.02 Density (pharmacists per 10,000 people)



### Figure 6 – Practising pharmacists by regional council and age

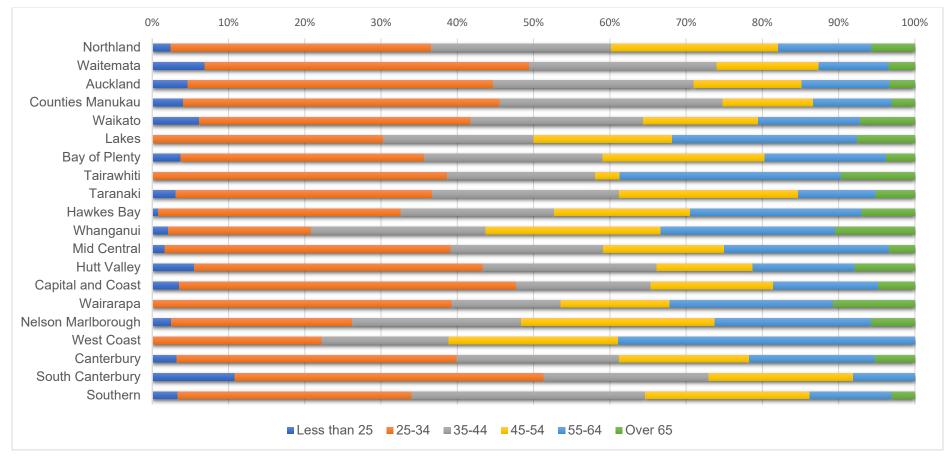
As in 2021, there is a relatively uniform mix of early career and experienced pharmacists across regions. The four regions with the largest metropolitan areas (Auckland, Canterbury, Wellington and Waikato) continue to display a slightly younger age profile.

Region	< 25	25-34	35-44	45-54	55-64	> 65
Northland	3	45	29	29	15	8
Auckland	76	643	404	204	161	52
Waikato	18	106	69	46	47	23
Bay of Plenty	7	75	58	50	43	11
Gisborne	1	12	8	1	9	3
Hawke's Bay	2	41	28	25	29	9
Taranaki	4	38	26	23	10	7
Manawatū-Whanganui	4	56	32	31	34	9
Wellington	20	193	89	71	68	27
Tasman	-	1	2	7	3	2
Nelson	1	22	15	17	12	2
Marlborough	1	8	9	7	8	3
West Coast	-	3	3	4	6	-
Canterbury	21	202	115	90	83	24
Otago	10	78	73	55	24	8
Southland	1	16	25	11	13	1
Total	169	1,538	985	671	565	189

### Table 11 – Distribution of practising pharmacists by regional council and age

### **By District Health Board**

Actearoa New Zealand had 20 District Health Boards until 1 July 2022. This analysis allows a slightly more granular understanding of pharmacist by location. Figure 7 shows even more clearly that urban areas tend to be served by a slightly younger pharmacist workforce, while more rural areas generally have a slightly more experienced workforce.

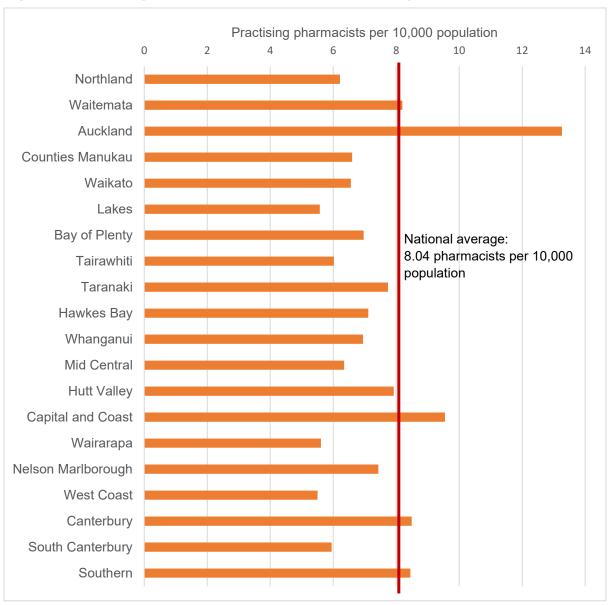


### Figure 7 – Practising pharmacists by District Health Board and age

District Health Board	< 25	25-34	35-44	45-54	55-64	> 65
Northland	3	42	29	27	15	7
Waitemata	36	223	129	70	48	18
Auckland	31	265	174	94	76	22
Counties Manukau	16	165	116	47	41	12
Waikato	18	104	66	44	39	21
Lakes	0	20	13	12	16	5
Bay of Plenty	7	60	44	40	30	7
Tairāwhiti	0	12	6	1	9	3
Taranaki	3	33	24	23	10	5
Hawkes Bay	1	41	26	23	29	9
Whanganui	1	9	11	11	11	5
Mid Central	2	45	24	19	26	4
Hutt Valley	7	48	29	16	17	10
Capital and Coast	11	138	55	50	43	15
Wairarapa	0	11	4	4	6	3
Nelson Marlborough	3	29	27	31	25	7
West Coast	0	4	3	4	7	0
Canterbury	16	183	106	85	82	26
South Canterbury	4	15	8	7	3	0
Southern	10	91	91	64	32	9
Total	169	1,538	985	672	565	188

### Table 12 – Practising pharmacists by district health board and age

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### Figure 8 – Practising pharmacists per 10,000 population by district health board

Analysis of pharmacist density shows a large increase, 8.21 to 13.26 pharmacists per 10,000 population, for the Auckland District Health Board area. Some of this increase is a likely shift from Waitematā District Health Board which decreased from 10.82 to 8.20 pharmacists per 10,000 population. If the three Auckland district health boards are viewed collectively, there was a moderate change in density from 8.51 to 9.10 pharmacists per 10,000 population. This provides similar results to the analysis by regional council.

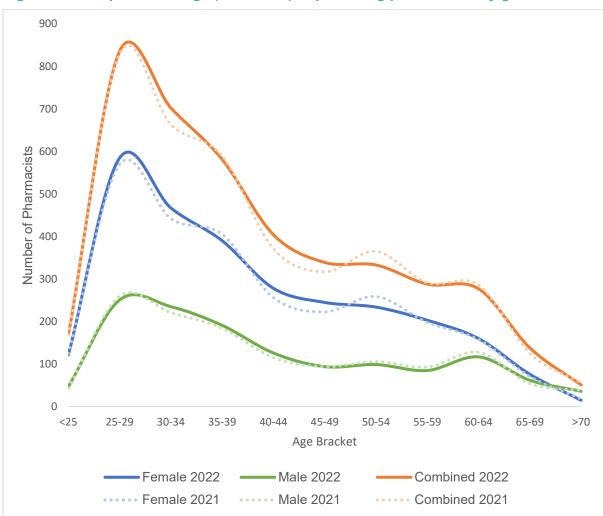
Only five district health boards returned densities above the average (8.04 pharmacists per 10,000 population) and 15 returned densities below the average.

District Health Board	Pharmacists	Population	Pharmacists per 10,000 population
Northland	123	197,900	6.22
Waitematā	524	639,400	8.20
Auckland	662	499,100	13.26
Counties Manukau	397	601,300	6.60
Waikato	292	445,200	6.56
Lakes	66	118,400	5.57
Bay of Plenty	188	269,800	6.97
Tairāwhiti	31	51,500	6.02
Taranaki	98	126,600	7.74
Hawkes Bay	129	181,400	7.11
Whanganui	48	69,100	6.95
Mid Central	120	189,100	6.35
Hutt Valley	127	160,300	7.92
Capital and Coast	312	326,800	9.55
Wairarapa	28	49,900	5.61
Nelson Marlborough	122	164,100	7.43
West Coast	18	32,700	5.50
Canterbury	498	586,400	8.49
South Canterbury	37	62,200	5.95
Southern	297	351,400	8.45

### Table 13 – Practising pharmacists per 10,000 population by district health board

### **Diversity of the workforce**

### Age of pharmacists





In June 2022, the median age of a practising pharmacist in New Zealand is 38.3 years, compared with 37.5 years in June 2021.

Like 2021, Figure 8 shows a concentration of pharmacists aged between their mid-twenties and late-thirties.

### Gender

For practitioner gender, Pharmacy Council uses the taxonomy described by the Ministry of Health.<sup>14</sup> Similar to June 2021, two-thirds of pharmacists identify as female and one-third as a male. No pharmacists have identified as indeterminate or unknown gender. Figure 8 shows that the pharmacist workforce is younger and has greater female representation than the general population.

<sup>&</sup>lt;sup>14</sup> Ministry of Health. "Sex Type Code Table." Ministry of Health. https://www.health.govt.nz/nz-health-statistics/data-references/code-tables/common-code-tables/sex-type-code-table

		202	21			202	22	
Age Group (years)	Female	Percent	Male	Percent	Female	Percent	Male	Percent
< 25	125	3%	44	1%	122	3%	47	1%
25-29	570	14%	260	6%	585	14%	251	6%
30-34	442	11%	221	5%	467	11%	235	6%
35-39	405	10%	184	5%	390	9%	191	5%
40-44	256	6%	115	3%	278	7%	126	3%
45-49	223	5%	94	2%	245	6%	94	2%
50-54	259	6%	106	3%	234	6%	99	2%
55-59	198	5%	93	2%	203	5%	85	2%
60-64	158	4%	128	3%	160	4%	117	3%
65-69	71	2%	54	1%	76	2%	62	2%
> 70	18	0%	38	1%	15	0%	36	1%
Total	2,725	67%	1,337	33%	2,775	67%	1,343	33%

## Table 14 – Comparison of age profiles of practising pharmacists by gender

### **Ethnicity**

This year we have reported to down to Level 2 of the Ethnicity Data Protocols for the health and disability sector.<sup>15</sup> This allows for more granular analysis than Level 1.

This year ethnicity data was collected from all pharmacists to provide a fresh data set. The top three ethnic groups that pharmacists identify as are NZ European (42.9 percent), Chinese (15.0 percent) and other Asian (9.5 percent). A further 8.5 percent of pharmacists identify as "other ethnicity". The proportion of the profession that report Māori (2.1 percent) or Pacific (0.8 percent) as their primary ethnicity remains low. Based on the current number of practising pharmacists (4,118), there would need to be 700 Māori and 329 Pacific practising pharmacists to represent the general population.

Level 1 Ethnic group code description	Level 2 Ethnic group code description	Pharmacists
	European not further defined	13
European	NZ European	1,767
	Other European	209
	Total	1,989
Māori	NZ Māori	87
	Total	87
	Pacific Island not further defined	1
	Samoan	7
	Cook Island Māori	1
	Tongan	6
Pacific	Niuean	1
	Tokelauan	0
	Fijian	14
	Other Pacific Island	3
	Total	33
Asian	Asian not further defined	21
	Southeast Asian	62
	Chinese	617
	Indian	360
	Other Asian	391
	Total	1,451

### Table 15 – Practising pharmacists by primary ethnicity (Level 1 and Level 2)

<sup>&</sup>lt;sup>15</sup> Ministry of Health. 2017. HISO 10001:2017 Ethnicity Data Protocols. Wellington: Ministry of Health.

Level 1 Ethnic group code description	Level 2 Ethnic group code description	Pharmacists
Middle Eastern/ Latin	Middle Eastern	160
American/ African/ Indian	Latin American / Hispanic	1
	African	41
	Total	202
Other	Other ethnicity	352
	Total	356
Grand total		4,118

### Table 16 – Practising pharmacists by primary ethnicity and age

Primary Ethnisity			Age G	iroup			
Ethnicity	Less than 25	25-34	35-44	45-54	55-64	Over 65	Total
European	62	502	386	439	441	159	1,989
Māori	6	37	19	13	9	3	87
Pacific	2	17	12	1	1	0	33
Asian	79	766	407	141	49	9	1,451
MELAA <sup>1</sup>	4	83	73	24	16	2	202
Other	16	133	88	54	49	16	356
Total	169	1,538	985	672	565	189	4,118

<sup>1</sup> MELAA = Middle Eastern, Latin American and African

Table 16 shows relatively young cohorts of Pacific, Middle Eastern/Latin American/African, and Asian pharmacists in current practice (with Asian pharmacists a significantly larger group).

### Requests for a certificate of current professional status

The Pharmacy Council issues Certificates of Current Professional Status on behalf of pharmacists seeking registration with a responsible authority in an overseas jurisdiction. Increasingly, we have observed requests for certificates of current professional status for use within New Zealand. Presumably this is for employment purposes (although the certificates are not designed for this purpose and not well suited to inform employment credentialling).

### Table 17 – Certificates of current professional status issued

Country	Certificates issued
Australia	35
New Zealand	5
Other countries	17
Total	57

Between 1 July 2021 and 30 June 2022, Pharmacy Council issued 57 Certificates of Current Professional Status. This compares to 11 issued in the previous year. The low figure in 2021 is almost certainly due to COVID-19-pandemic-related international travel restrictions. This year's figure is consistent with the number of certificates issued pre-pandemic (64 in the 2020 year and 65 in the 2019 year). The fact that approximately two-thirds of certificates are issued to the Australian Health Practitioner Regulation Authority (AHPRA) is consistent with previous years.

### Transfers to registered, current practising status

### New registrations in the Pharmacist Scope of Practice

Between 1 July 2021 and 30 June 2022, 218 pharmacists registered with the Pharmacy Council for the first time. The majority of these were intern pharmacists who met requirements to register in the Pharmacist Scope of Practice, and also includes overseas pharmacists issued practising certificates. This figure is broadly in-line with the number of registrations in previous years. The large number of registrations in the Pharmacist Scope of Practice in 2021 was a by-product of the deferral of the May 2020 Assessment Centre due to COVID-19 pandemic safety concerns and restrictions.

Year	Pharmacists registering for the first time	Percent change
2022	218	-17.4%
2021	264	32.0%
2020	200	-11.1%
2019	225	-13.1%
2018	259	

### Table 18 – Initial registrations in the Pharmacist Scope of Practice 2018-2022

Table 19 shows the four possible routes to register as a pharmacist in Aotearoa New Zealand:

- New Zealand (and Australian) graduate route
- Trans-Tasman Mutual Recognition Act 1997 (TTMRA) route
- Recognised Equivalent Qualification Route (REQR)
- Non-Recognised Equivalent Qualification Route (Non-REQR).

The route for New Zealand (and Australian) graduates has historically provided approximately 90 percent of pharmacist registrations. This trend continues in the 2021/22 year. This indicates that the pharmacy profession in Aotearoa New Zealand is largely 'self-reliant'. This is in contrast to some other health professions that rely significantly on practitioners from overseas to maintain and grow workforce capacity.

Registration route	2018	2019	2020	2021	2022
Graduates (New Zealand and Australia)	234	200	161	242	191
Trans-Tasman Mutual Recognition Act 1997	15	8	10	2	6
Recognised Equivalent Qualification	8	11	20	10	10
Non-Recognised Equivalent Qualification	2	6	9	10	9
Total	259	225	200	264	216

### Table 19 – Initial registrations by route of registration

Table 20 shows that between 1 July 2021 and 30 June 2022, 200 intern pharmacists met the registration requirements and transferred from the Intern Pharmacist Scope of Practice to the Pharmacist Scope of Practice. New Zealand graduates totalled 191 and 11 overseas pharmacy graduates completed the non-REQR process.

### Table 20 – Transfers from intern to Pharmacist Scope of Practice

Origin of qualification	Number of Transfers
New Zealand or Australia	191
University of Auckland	85
University of Otago	106
Other country	9
Total	200

Table 21 provides further detail on overseas pharmacists who registered as a pharmacist in New Zealand. Between 1 July 2021 and 30 June 2022, the six Australian applicants registered by virtue of by the TTMRA route. Ireland, the United Kingdom, Canada, and the United States of America are the jurisdictions from which a pharmacist may register via the REQR route.

### Table 21 – Registrations granted by country of first registration

Country of first registration	2018	2019	2020	2021	2022
Australia	15	7	10	2	6
Ireland and the United Kingdom	8	8	14	6	9
Canada and the United States of America	0	3	6	2	1
Total	23	18	30	10	16

### **Return to practice**

A registered pharmacist who does not hold an annual practising certificate may apply to return to practice at any time. The return to practice requirements for pharmacists depend on the period they have had away from New Zealand practice and the type of overseas pharmacy practice (if any) in the intervening period.

Years since last practice in New Zealand	2019	2020	2021	2022
Less than three years	88	86	75	82
Three to eight years	12	12	12	11
More than eight years	2	0	1	1
Total	102	98	88	94

### Table 21 – Return to practice applicants by number of years since last practice

The number of pharmacists returning to practice between 1 July 2021 and 30 June 2022 was similar to previous years. After new registrations, pharmacists returning to practice are the greatest inflow into the pool of practising pharmacists. The timeframes above align to the return to practice categories detailed in Council's Return to Practice Policy.<sup>16</sup>

### **Practice settings**

Data on pharmacist type of work is collected at the time of annual practising certificate application in March each year. Pharmacists are asked to retrospectively describe their practice over the previous 12 months. Consequently, this data reflects practice within the period 1 April 2021 to 31 March 2022.

During the 2022 annual practising certificate (APC) application period 4,008 applications for an APC were received. This total differs from the total number of pharmacists on 30 June 2022 (4,118) as further pharmacists gained practising certificates in the new APC year between 1 April and 30 June 2022. This includes intern pharmacists that registered after the May Assessment Centre, overseas pharmacists, and pharmacists who have returned to practice. Because they did not practise as a pharmacist in the previous year, they have no workforce data to declare.

This data is self-reported by pharmacists and Pharmacy Council cannot verify the accuracy of the data provided. However, pharmacists do make a declaration within their application that all supplied information is complete and correct.

Primary type of pharmacist work	Pharmacists	Percentage
Community pharmacy <sup>10</sup>	3,037	76%
DHB (excluding hospital pharmacy work)	71	2%
General practice	49	1%
Hospital pharmacy	551	14%
Other	117	3%
Pharmaceutical industry	38	1%
Pharmacy related organisations	38	1%
Primary Health Organisation	37	1%

### Table 22 – Primary type of pharmacy practice undertaken by practising pharmacists

<sup>&</sup>lt;sup>16</sup> Pharmacy Council. Return to Practice Policy. <u>https://pharmacycouncil.org.nz/wp-content/uploads/2021/06/Return-to-practice-policy.pdf</u>.

Primary type of pharmacist work	Pharmacists	Percentage
Teaching/research	70	2%
Total	4,003	100%

Community pharmacy remains the most common practice setting for pharmacists. Since 2018, the proportion of community pharmacists has remained between 75 and 80 percent. Hospital pharmacy remains the second most common practice setting at 14 percent.

The methodology for this analysis simplifies raw data by categorising a pharmacist within only their primary pharmacy practice setting. For example, a pharmacist whose practice comprises 51 percent "community pharmacy" practice and 49 percent "general practice" will be categorised as a community pharmacist. This means that each category likely has a slightly greater number of practitioners working within the setting.

Hours worked per week	10 or fewer	11-19 hours	20-29 hours	30-39 hours	40-49 hours	50+ hours	Total
Community pharmacy	99	150	324	538	1,538	388	3,037
Hospital pharmacy	12	22	79	60	363	15	551
Other	6	8	21	29	49	4	117
District Health Board <sup>17</sup>	2	3	9	19	34	4	71
Teaching/research	3	6	13	13	25	10	70
General practice	2	5	7	16	19	-	49
Pharmaceutical industry	1	3	1	9	19	5	38
Pharmacy related organisation	2	3	9	4	18	2	38
Primary Health Organisation	-	1	10	13	13	-	37
Total	127	201	473	701	2,078	428	4,008

### Table 23 – Average hours per week worked in scope by practising pharmacists

### Table 24 – Number of weeks worked in scope by practising pharmacists

Weeks worked per year	10 or fewer	11-19 weeks	20-29 weeks	30-39 weeks	40-49 weeks	50-52 weeks	Total
Community pharmacy	101	79	99	116	1,224	1,418	3,037
Hospital pharmacy	17	14	8	28	318	166	551
Other	4	3	3	3	80	24	117
District Health Board	0	-	1	1	44	25	71

<sup>17</sup> This excludes hospital pharmacy work.

Weeks worked per year	10 or fewer	11-19 weeks	20-29 weeks	30-39 weeks	40-49 weeks	50-52 weeks	Total
Teaching/research	0	3	3	6	43	15	70
General practice	0	1	3	1	30	14	49
Pharmaceutical industry	0	-	4	2	21	11	38
Pharmacy related organisation	0	1	-	2	26	9	38
Primary Health Organisation	0	-	1	-	26	10	37
Total	122	101	122	159	1,812	1,692	4,008

### Hours worked

The full-time equivalent analysis is calculated by multiplying each practitioner's total weeks practised by average hours practised per week to give the total number of hours practised in the year. Part-time is defined as 1,440 hours or less in a year, full-time is defined as more than 1,440 hours and up to 1,920 hours, and more than full-time is defined as more than 1,920 hours.

This analysis also categorises each pharmacist into just one practice setting (i.e. their primary practice setting). Nevertheless, this provides a slightly more nuanced perspective of workforce capacity than headcount only. This analysis suggests that almost half of all pharmacists are working/practising more than full-time hours.

Full-time equivalents	Part-time ≤ 1,440 hours per year	Fulltime > 1,440 and ≤ 1,920 hours per year	> Fulltime > 1,920 hours per year	Total
Community pharmacy	812	716	1,509	3,037
Hospital pharmacy	151	198	202	551
Other	43	46	28	117
District Health Board	20	27	24	71
Teaching/research	30	20	20	70
General practice	16	21	12	49
Pharmaceutical industry	9	15	14	38
Pharmacy related organisation	15	11	12	38
Primary Health Organisation	14	18	5	37
Total	1,110	1,072	1,826	4,003

Table 25 - Full-time equivalents worked by worked in scope by practising pharmacists