New Zealand Veterinary Workforce Report 2023-24

December 2024

VETERINARY COUNCIL OF NEW ZEALAND

Contents

Overview

This report summarises data from the Veterinary Council of New Zealand (VCNZ) Register of Veterinarians and 2023-2024 Workforce Survey. The Register of Veterinarians contains the contact details as well as information on the demographic profile (age, gender, and ethnicity) and professional qualifications of all registered veterinarians in New Zealand. The Workforce Survey is a short questionnaire that veterinarians can voluntarily choose to complete at the same time they apply for their Annual Practicing Certificate (APC) between January and June each year. The Workforce Survey asks veterinarians to provide information on up to 3 employment roles that they held over the previous calendar year including details about the work type, employer type, work focus areas, and total hours worked in each role. Veterinarians who report a significant change in their normal work pattern such as leaving practice, returning to practice, or working less than full time are also asked to voluntarily provide a reason why.

Key Findings

- There were 4,036 individuals listed on the Register of Veterinarians at the beginning of the APC renewal period for the 2023 calendar year. Of these, 3,114 individuals were believed to be actively working as veterinarians in New Zealand from 01 January 2023 through 31 December 2023. Of the 3,098 individuals who also subsequently provided information on their employment role(s) during this time period, 2,228 worked in clinical roles only, 664 worked in non-clinical roles only, and 206 veterinarians held both clinical and non-clinical roles.
- The mean age of the New Zealand veterinary workforce was 45.2 years (min: 23.2, Q1: 34.4, median: 44.1, Q3: 54.8, max: 88.6). The distribution by gender was 1,988 (64.2%) female, 1,042 (33.6%) male, and 8 (0.3%) gender diverse with an additional 60 (1.9%) individuals who preferred not to respond. There were 3 individuals who identified as both male and transgender, 1 individual who identified as both female and transgender, and 1 individual who identified as both gender diverse and transgender. The distribution of veterinarians by ethnicity was 2,145 (69.2%) New Zealand European/Pākehā, 653 (21.1%) Other European, 191 (6.2%) Other Non-European, 89 (2.9%) Chinese, 85 (2.7%) Māori, 55 (1.8%) Indian, 16 (0.5%) Pacific Island (Pasifika).
- There were 2,091 (67.5%) individuals who completed their veterinary degree in New Zealand and 1,007 (32.5%) who qualified overseas. The distribution of practicing veterinarians by continent and country of qualification is shown in Table 3. The top five countries of origin for veterinarians who qualified overseas were the United Kingdom (436/1,007: 43.3%), Australia (165/1,007: 16.4%), South Africa (136/1,003: 13.5%), United States (79/1,007: 7.8%), and Ireland (33/1,007: 3.3%).
- Overall, the workforce of 3,098 practicing veterinarians contributed approximately 3,580.4 FTEs across their 3,470 recorded employment roles. The average number of FTEs worked per veterinarian was 1.19. The count and FTEs of veterinarians by area of practice and role type are shown in Table 7. The distribution of FTEs by area of practice was 1,615 (41.4%) companion animal, 527.6 (14.7%) mixed animal, 640.4 (17.9%) farm animal, 295.4 (8.3%) equine, 50.8 (1.4%) other animal species, 313.4 (8.6%) regulatory, and 225.1 (6.3%) miscellaneous.
- There is an uneven distribution of clinical veterinary FTEs across the 66 main Territorial Authorities in New Zealand relative to the size of the animal and human populations.
- Overall, the 2,546 veterinarians in clinical practice were responsible for the care of over 72 million owned animals.

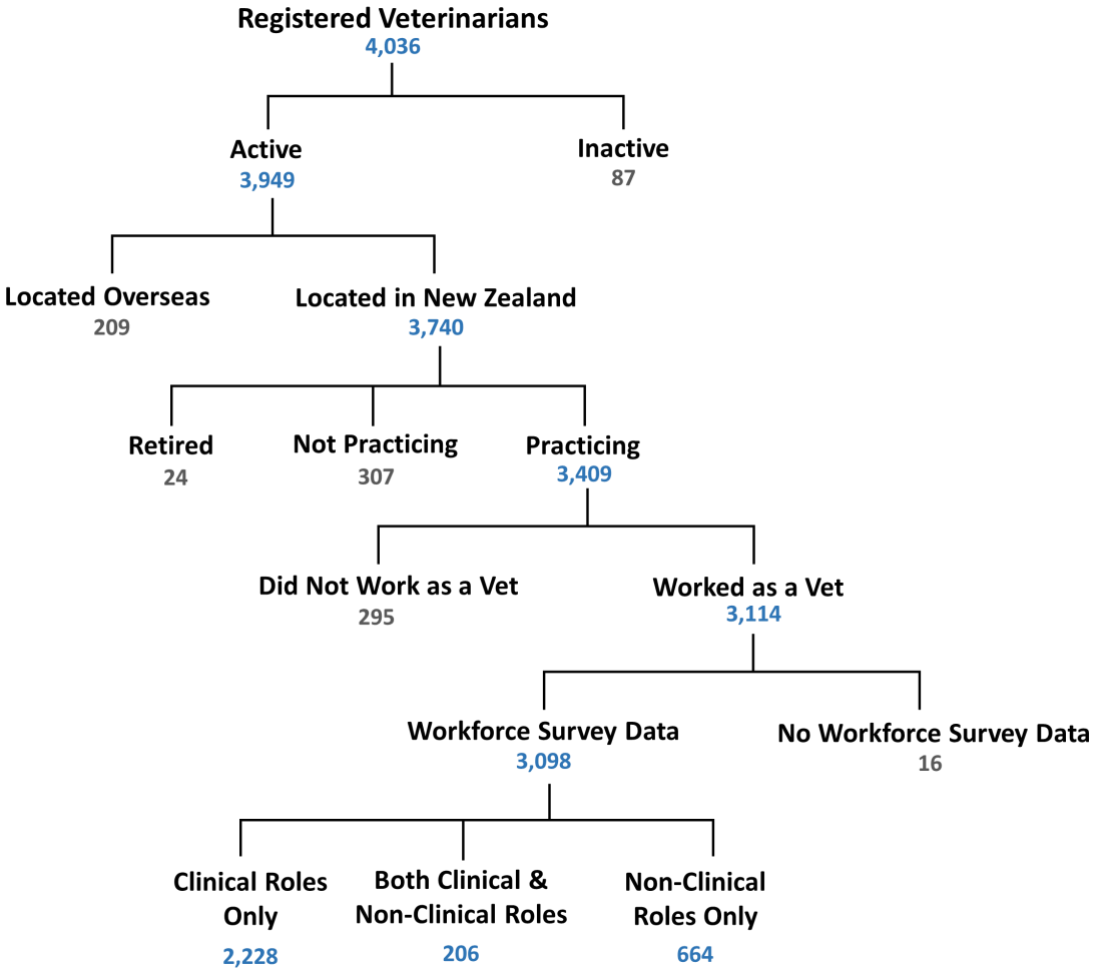
Results

Workforce Dynamics

Overview of Registered Veterinary Workforce

Figure 1 provides a summary of the status for the 4,036 individuals listed on the Register of Veterinarians at the beginning of the APC renewal period for the 2024 calendar year. Of these, 87 veterinarians did not hold a current APC for 2023 and/or did not renew their APC for 2024 and were therefore assumed not to have been actively practicing veterinary medicine in New Zealand during this time. A further 209 were believed to be located overseas. Of the 3,740 active veterinarians located in New Zealand, there were 3,409 veterinarians registered as practicing, 307 registered as non-practicing, and 24 retired veterinarians. Based on the responses to the Workforce Survey, 295 veterinarians indicated that they did not work as a veterinarian from 01 January 2023 through 31 December 2023. Of the remaining 3,114 veterinarians, 3,098 provided information on the Workforce Survey about their employment roles during this time period. There were 2,228 veterinarians who worked as clinicians only, 664 veterinarians who worked in non-clinical roles only, and 206 veterinarians who held both clinical and non-clinical roles.

Figure 1: Status of veterinarians listed on the Register of Veterinarians in New Zealand for the 2024 APC renewal period



Reasons for Not Practicing as a Veterinarian

There were 55 individuals who listed a reason why they were not intending to practice as a veterinarian during the year commencing 1 April 2024 (Table 1). The most common reasons were casual work (14/55; 25.5%), work overseas (9/55; 16.4%), parental leave (6/55; 10.9%), and other reasons (6/55; 10.9%).

Table 1: Reasons for not intending to practice as a veterinarian in the year commencing 1 April 2024

Description	N	%
Casual Work	14	25.5%
Difficulty Obtaining Work	0	0%
Family Care	1	1.8%
Health	3	5.5%
Work Overseas	9	16.4%
Other	6	10.9%
Parental Leave	6	10.9%
Personal Preference	4	7.3%
Working Part-Time	4	7.3%
Retired or Semi-Retired	4	7.3%
Study	3	5.5%
Total	**55**	**100%**

First Time Registrations

There were 264 veterinarians who registered with VCNZ for the first time over the period from 01 January 2023 through 31 December 2023. The distribution by time since qualification and country of qualification is shown in (Table 2).

Table 2: Distribution of new registrations for 2023 by time since first qualification and country of first qualification

	Domestic	International	**Total**
<1 year from qualification	101	21	**122**
>1 year from qualification	11	131	**142**
Total	**112**	**142**	**264**

The remaining statistics on the New Zealand veterinary workforce are based on the 3,098 individuals who worked as veterinarians in New Zealand over the 2022-23 period and provided information on their employment role(s) on the Workforce Survey. This represents approximately 99.4% of all individuals who were known to have worked as veterinarians in New Zealand during this time period.

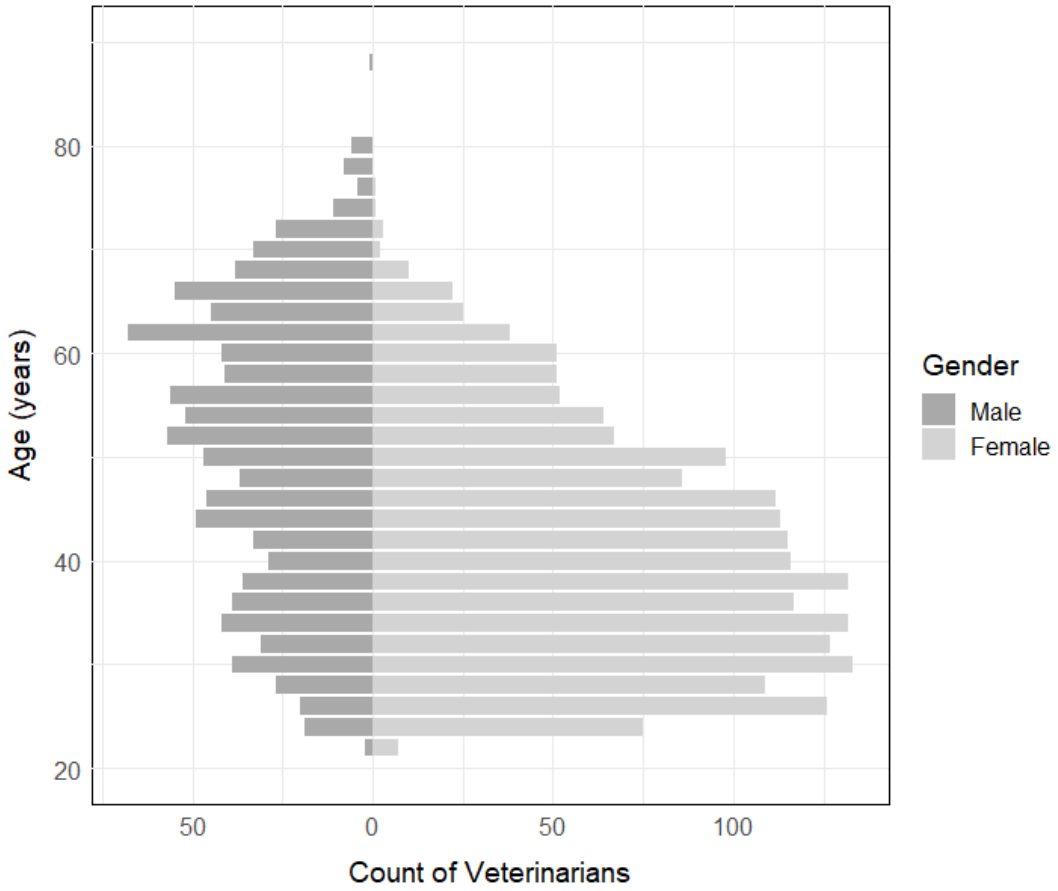
Workforce Demographics

Age and Gender

The mean age of the New Zealand veterinary workforce was 45.2 years (min: 23.2, Q1: 34.4, median: 44.1, Q3: 54.8, max: 88.6). The distribution by gender was 1,988 (64.2%) female, 1,042 (33.6%) male, and 8 (0.3%) gender diverse with an additional 60 (1.9%) individuals who preferred not to respond. There were 3 individuals who identified as both male and transgender, 1 individual who identified as both female and transgender, and 1 individual who identified as both gender diverse and transgender.

Figure 2 is a population pyramid comparing the age distribution of female and male veterinarians in New Zealand in 2023. The mean age of female veterinarians was 40.6 years (min: 23.2, Q1: 32.6, median: 40.6, Q3: 49.7, max: 77.7) and the mean age of male veterinarians was 51.8 years (min: 23.3, Q1: 40.4, median: 52.4, Q3: 63.2, max: 88.6). The percentage of female veterinarians under 40 years of age was 48.1% while the percentage of male veterinarians under 40 years of age was 24.4%.

Figure 2: Population pyramid comparing counts of male and female veterinarians in 2-year age groupings in 2023



Ethnicity

For the questions regarding ethnicity on the Workforce Survey, there were 2,792 (90.1%) individuals who listed one primary ethnicity, 221 (7.1%) individuals who listed two ethnicities, and 85 (2.7%) individuals who preferred not to respond. The distribution of veterinarians by ethnicity was 2,145 (69.2%) New Zealand European/Pākehā, 653 (21.1%) Other European, 191 (6.2%) Other Non-European, 89 (2.9%) Chinese, 85 (2.7%) Māori, 55 (1.8%) Indian, 16 (0.5%) Pacific Island (Pasifika).

Qualifications

Country of Qualification

There were 2,091 (67.5%) individuals who completed their veterinary degree in New Zealand and 1,007 (32.5%) who qualified overseas. The distribution of practicing veterinarians by continent and country of qualification is shown in Table 3. The top five countries of origin for veterinarians who qualified overseas were the United Kingdom (436/1,007: 43.3%), Australia (165/1,007: 16.4%), South Africa (136/1,003: 13.5%), United States (79/1,007: 7.8%), and Ireland (33/1,007: 3.3%).

Table 3: Counts of veterinarians practicing in New Zealand in 2023 by continent and country of primary veterinary qualification

Oceania	**2,215 (72.8%)**
New Zealand	2,091 (92.7%)
Australia	165 (7.3%)

North America	**119 (3.9%)**
United States	79 (65.3%)
Canada	26 (21.5%)
Mexico	7 (5.8%)
West Indies	6 (5.0%)
Costa Rica	1 (0.8%)
Trinidad and Tobago	1 (0.8%)
Cayman Islands	1 (0.8%)

South America	**6 (0.3%)**
Brazil	4 (40.0%)
Argentina	3 (30.0%)
Chile	2 (20.0%)
Paraguay	1 (10.0%)

Europe	**509 (17.4%)**
United Kingdom	436 (80.7%)
Ireland	33 (6.1%)
Germany	28 (5.2%)
Serbia	9 (1.7%)
Belgium	7 (1.3%)
Poland	6 (1.1%)
Denmark	5 (0.9%)
Romania	4 (0.7%)
Hungary	3 (0.6%)
Czechoslovakia	2 (0.4%)
Austria	1 (0.2%)
Bulgaria	1 (0.2%)
Croatia	1 (0.2%)
Italy	1 (0.2%)
Spain	1 (0.2%)
Switzerland	1 (0.2%)
Ukraine	1 (0.2%)

Asia	**29 (0.9%)**
India	14 (48.3%)
Japan	4 (13.8%)
Iraq	3 (10.3%)
Malaysia	2 (6.9%)
China	1 (3.4%)
Israel	1 (3.4%)
Jordan	1 (3.4%)
Nepal	1 (3.4%)
Philippines	1 (3.4%)
Turkey	1 (3.4%)

Africa	**142 (4.6%)**
South Africa	136 (95.8%)
Zimbabwe	6 (4.2%)

Total	**3,098 (100%)**

Veterinary Specialists

There were 97 practicing veterinarians registered as specialists in New Zealand representing 25 different specialties (Table 4). Of these, 53 specialists (54.6%) completed their primary veterinary qualification in New Zealand. The most common specialties were small animal surgery (16; 16.4%), small animal internal medicine (13; 13.4%), and large animal surgery (11; 11.3%).

Table 4: Count of registered veterinary specialists practicing in New Zealand in 2023 by specialty

Speciality	N
Anaesthesia & Analgesia	2
Animal Welfare	2
Cardiology	2
Cattle Medicine	1
Dermatology	3
Emergency Medicine & Critical Care - Small Animal	4
Epidemiology	2
Equine Medicine	4
Feline Medicine	1
Internal Medicine - Large Animal	1
Internal Medicine - Small Animal	13
Neurology	2
Nutrition	1

Specialty	N
Oncology	1
Ophthalmology	1
Pathology - Anatomic	8
Pathology - Clinical	5
Pharmacology	1
Pig Medicine	1
Radiology	8
Sports Medicine and Rehabilitation - Equine	2
Surgery - Large Animal	11
Surgery - Small Animal	16
Theriogenology	4
Zoological Medicine	1

Veterinary Employment Roles

Number of Employment Roles

The majority of practicing veterinarians in New Zealand (2,755; 88.9%) held only one primary employment role in 2023 with 314 (8.8%) holding two employment roles, and 29 (0.9%) holding three employment roles (Table 5). Information was therefore subsequently provided for a total of 3,470 employment roles.

Table 5: Count of veterinarians by number of employment roles in New Zealand in 2023

Primary Employment	Secondary Employment	Tertiary Employment	N (%)
Yes	No	No	2,755 (88.9%)
Yes	Yes	No	274 (8.8%)
Yes	No	Yes	40 (1.3%)
Yes	Yes	Yes	29 (0.9%)

Employer Types

The count of veterinarians by employer type and role type is shown in Table 6. There were a total of 2,216 (63.8%) veterinarians working in clinical practices, 343 (9.9%) working for government or state owned organisations, 137 (3.9%) working in industry or diagnostic laboratories, 136 (3.9%) working at universities, and 453 (13.1%) self-employed.

Table 6: Count of veterinarians by employer type and role code in New Zealand in 2023

	Clinician	Consultant	Education	Management	Technical	Other	No Data	Total
Solo Private Practice	410	10	0	7	0	4	0	**431**
Group Private Practice	1,423	30	3	35	2	3	2	**1,498**
Club Practice	273	3	1	9	0	1	0	**287**
MPI	2	4	0	17	266	5	0	**294**
Other Government	4	4	0	1	13	3	0	**25**
SOE or CRI	6	3	0	0	12	3	0	**24**
Industry	10	16	4	14	50	10	0	**104**
Diagnostic Laboratory	5	4	1	2	20	4	0	**36**
University or Tertiary	50	8	59	8	1	10	0	**136**
Self-Employed	319	87	12	6	5	24	0	**453**
Other	40	15	7	12	8	91	1	**174**
No Data	4	0	0	0	1	0	3	**8**
Total	**2,546**	**184**	**87**	**111**	**378**	**158**	**6**	**3,470**

Counts and FTEs of Veterinarians by Area of Practice

Overall, the workforce of 3,098 practicing veterinarians contributed approximately 3,580.4 FTEs across their 3,470 recorded employment roles. The average number of FTEs worked per veterinarian was 1.19. The count and FTEs of veterinarians by area of practice and role type are shown in Table 7. The distribution of FTEs by area of practice was 1,615 (41.4%) companion animal, 527.6 (14.7%) mixed animal, 640.4 (17.9%) farm animal, 295.4 (8.3%) equine, 50.8 (1.4%) other animal species, 313.4 (8.6%) regulatory, and 225.1 (6.3%) miscellaneous.

The areas of practice with the three highest ratio of FTEs per veterinarian were practice management (1.41), equine (1.32), and mixed animal (1.21). The areas of practice with the three lowest ratio of FTEs per veterinarian were deer (0.69), research (0.84), and export certification (0.88).

Table 7: Count (and FTEs) of veterinarians in New Zealand by area of practice and role type in 2023

	Clinician	Consultant	Education	Management	Technical	Other	No Data	Total	Ratio FTEs per Vet
Companion Animal	**1,472 (1,350.0)**	**55 (48.6)**	**25 (20.6)**	**34 (32.8)**	**14 (13.3)**	**14 (16.2)**	**1 (1.1)**	**1,615 (1,482.6)**	0.92
Mixed Animal	**407 (500.8)**	**11 (6.7)**	**2 (2.1)**	**8 (11.1)**	**6 (6.9)**	**1 (0)**	**0 (0)**	**435 (527.6)**	1.21
Farm Animal	**405 (499.1)**	**54 (39.4)**	**12 (13.2)**	**16 (15.6)**	**36 (35.3)**	**38 (38.8)**	**0 (0)**	**561 (640.4)**	1.14
Dairy Cattle	317 (400.8)	33 (25.0)	5 (5.5)	13 (11.8)	16 (16.1)	18 (20.0)	0 (0)	402 (479.2)	1.19
Beef Cattle	13 (10.9)	2 (2.1)	1 (1.0)	0 (0)	6 (5.9)	4 (4.7)	0 (0)	26 (24.6)	0.95
Production Animal	46 (59.0)	11 (6.9)	2 (2.4)	2 (2.6)	11 (11.1)	8 (7.5)	0 (0)	80 (89.5)	1.12
Small Ruminant	10 (11.8)	4 (3.8)	2 (2.2)	1 (1.2)	1 (1.1)	3 (1.7)	0 (0)	21 (21.8)	1.04
Deer	11 (7.7)	4 (1.6)	1 (0.9)	0 (0)	2 (1.1)	4 (3.9)	0 (0)	22 (15.2)	0.69
Lifestyle Block	8 (8.9)	0 (0)	1 (1.2)	0 (0)	0 (0)	1 (1.0)	0 (0)	10 (10.1)	1.01
Equine	**194 (268.9)**	**14 (12.5)**	**7 (6.5)**	**1 (0.9)**	**1 (0.6)**	**6 (6.0)**	**0 (0)**	**223 (295.4)**	1.32
Other Species	**20 (23.9)**	**10 (7.6)**	**2 (4.8)**	**3 (3.8)**	**5 (5.3)**	**7 (5.4)**	**0 (0)**	**47 (50.8)**	1.08
Pigs	1 (1.5)	5 (5.4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	6 (6.9)	1.15
Poultry	3 (4.0)	2 (2.2)	0 (0)	1 (1.4)	1 (1.0)	2 (1.4)	0 (0)	9 (10.0)	1.11
Avian	2 (1.4)	0 (0)	0 (0)	1 (1.8)	1 (1.4)	0 (0)	0 (0)	4 (4.6)	1.15
Wildlife	14 (17.0)	3 (0)	2 (4.8)	1 (0.6)	3 (2.9)	5 (4.0)	0 (0)	28 (29.3)	1.05
Regulatory	**23 (21.9)**	**12 (10.4)**	**4 (4)**	**19 (20.6)**	**245 (238.3)**	**20 (18.2)**	**0 (0)**	**323 (313.4)**	0.97
Animal Welfare	12 (11.6)	4 (4.0)	4 (4.0)	4 (3.5)	11 (10.8)	9 (9.2)	0 (0)	44 (43.1)	0.98
Compliance	3 (2.7)	2 (2.1)	0 (0)	2 (2.8)	27 (27.2)	2 (2.4)	0 (0)	36 (37.2)	1.03
Disease Control	4 (5.3)	2 (1.0)	0 (0)	2 (2.1)	18 (17.2)	3 (3.2)	0 (0)	29 (28.8)	0.99
Export Certification	3 (1.3)	1 (0.8)	0 (0)	2 (2.2)	37 (35.5)	3 (0.8)	0 (0)	46 (40.6)	0.88
Meat Inspection	0 (0)	0 (0)	0 (0)	1 (1.0)	31 (31.9)	1 (1.6)	0 (0)	33 (34.5)	1.05
Regulatory	1 (1.0)	3 (2.5)	0 (0)	8 (9.0)	121 (115.7)	2 (1.0)	0 (0)	135 (129.2)	0.96
Miscellaneous	**19 (18.8)**	**26 (24.2)**	**33 (33.3)**	**29 (35.4)**	**67 (70.4)**	**45 (43)**	**0 (0)**	**219 (225.1)**	1.03
Epidemiology	1 (1.4)	8 (8.4)	2 (1.2)	1 (1.0)	25 (29.7)	1 (0.8)	0 (0)	38 (42.5)	1.12
Pathology	5 (5.0)	4 (4.0)	9 (9.6)	1 (1.0)	18 (14.2)	4 (3.3)	0 (0)	41 (37.1)	0.90
Pharmaceutical	1 (0.9)	6 (4.2)	0 (0)	0 (0)	8 (9.6)	1 (1.1)	0 (0)	16 (15.8)	0.99
Practice Management	1 (1.2)	1 (1.2)	0 (0)	13 (17.9)	0 (0)	1 (0.9)	0 (0)	15 (21.2)	1.41
Research	0 (0)	1 (0.6)	4 (2.9)	2 (2.4)	1 (0.9)	4 (3.3)	0 (0)	12 (10.1)	0.84
Teaching	0 (0)	0 (0)	15 (16.0)	3 (2.5)	0 (0)	1 (1.1)	0 (0)	19 (19.6)	1.03
Other	11 (10.3)	6 (5.8)	3 (3.6)	9 (10.6)	15 (16.0)	33 (32.5)	0 (0)	77 (78.8)	1.02
No Data	**1 (0.7)**	**2 (1.6)**	**1 (0.9)**	**0 (0)**	**0 (0)**	**25 (26.0)**	**5 (5.7)**	**34 (34.9)**	1.03
Total	**2,546 (2,684.1)**	**184 (151.0)**	**87 (85.4)**	**111 (120.2)**	**378 (370.1)**	**158 (152.6)**	**6 (6.8)**	**3,470 (3,580.4)**	1.03

Counts of Veterinarians by Area of Practice and Gender

Veterinarians working in farm animal practice and practice with other species were more likely to be male than the general population of veterinarians while veterinarians working in companion animal practice were more likely to be female (Table 8).

Table 8: Count (%) of veterinarians in New Zealand by aggregated area of practice and gender

	Female	Male	Gender Diverse	No Data	Total
Companion Animal	1,181 (73.1%)	397 (24.6%)	5 (0.3%)	32 (2.0%)	1,615 (100%)
Mixed Animal	284 (65.3%)	140 (32.2%)	0 (0%)	11 (2.5%)	435 (100%)
Farm Animal	272 (48.5%)	281 (50.1%)	0 (0%)	8 (1.4%)	561 (100%)
Equine	134 (60.1%)	83 (37.2%)	0 (0%)	6 (2.7%)	223 (100%)
Other Species	26 (55.3%)	20 (42.6%)	1 (2.1%)	0 (0%)	47 (100%)
Regulatory	183 (56.7%)	132 (40.9%)	2 (0.6%)	6 (1.9%)	323 (100%)
Miscellaneous	132 (60.3%)	80 (36.5%)	0 (0%)	7 (3.2%)	219 (100%)
No Data	25 (53.2%)	19 (40.4%)	0 (0%)	3 (6.4%)	47 (100%)
Total	2,212 (63.7%)	1,133 (32.7%)	8 (0.2%)	73 (2.1%)	3,470 (100%)

Figure 3 and Table 9 provide a summary of the age distribution of veterinarians by aggregated area of practice and gender. Veterinarians working in mixed animal practice were significantly younger than the average population of veterinarians while those working in regulatory and miscellaneous roles were significantly older.

Figure 3: Age distribution of veterinarians in New Zealand by aggregated area of practice and gender

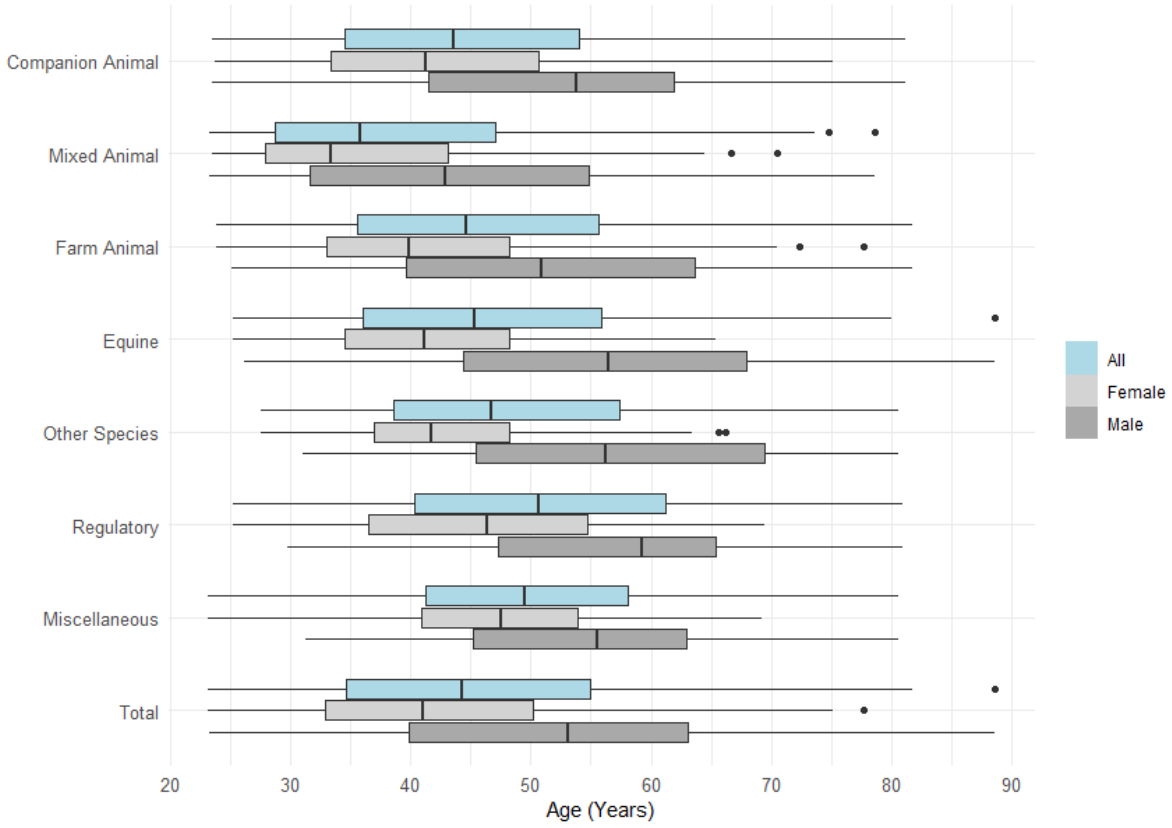


Table 9: Age distribution of veterinarians in New Zealand by aggregated area of practice

	Mean	Min	Q1	Median	Q3	Max
Companion Animal	44.6	23.5	34.3	43.5	53.9	81.2
Mixed Animal	39.2	23.3	28.9	35.9	47.3	78.6
Farm Animal	46.4	23.8	35.5	44.8	55.1	81.8
Equine	47.2	24.1	35.9	45.3	56.4	88.6
Other Species	49.5	27.5	38.7	46.8	57.4	80.6
Regulatory	50.3	25.2	39.9	50.6	61.0	80.9
Miscellaneous	50.3	23.2	41.1	49.6	58.3	80.6
Total	**45.2**	**23.2**	**34.4**	**44.1**	**54.8**	**88.6**

Counts of Veterinarians by Area of Practice and Country of Veterinary Qualification

Individuals working in equine practice or practice with other species were more likely to have completed their primary veterinary qualification overseas compared with other practice areas (Table 10).

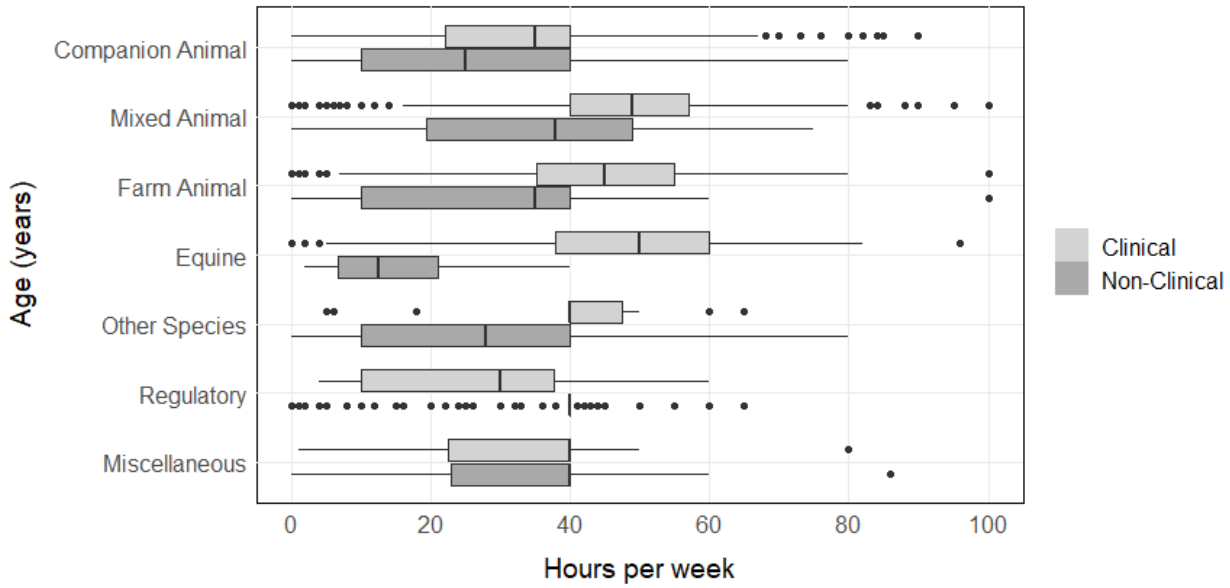
Table 10: Count (%) of veterinarians in New Zealand by aggregated area of practice and location of primary veterinary qualification

	New Zealand	Overseas	Total
Companion Animal	1,113 (68.9%)	502 (31.1%)	1,615 (100%)
Mixed Animal	306 (70.3%)	129 (29.7%)	435 (100%)
Farm Animal	419 (74.7%)	142 (25.3%)	561 (100%)
Equine	125 (56.1%)	98 (43.9%)	223 (100%)
Other Species	21 (44.7%)	26 (55.3%)	47 (100%)
Regulatory	195 (60.4%)	128 (39.6%)	323 (100%)
Miscellaneous	137 (62.6%)	82 (37.4%)	219 (100%)
Total	**2,350 (67.7%)**	**1,120 (32.3%)**	**3,470** (100%)

Hours Worked by Area of Practice and Role Type

For any given species, veterinarians who were working in clinical roles worked significantly more hours per week than veterinarians who were working in non-clinical roles on the same species (Figure 4). There was significantly less variation in the total work hours of veterinarians in non-clinical regulatory roles. Veterinarians working clinical roles in companion animal only practice worked fewer hours per week than those working in mixed animal, farm animal, or equine practice.

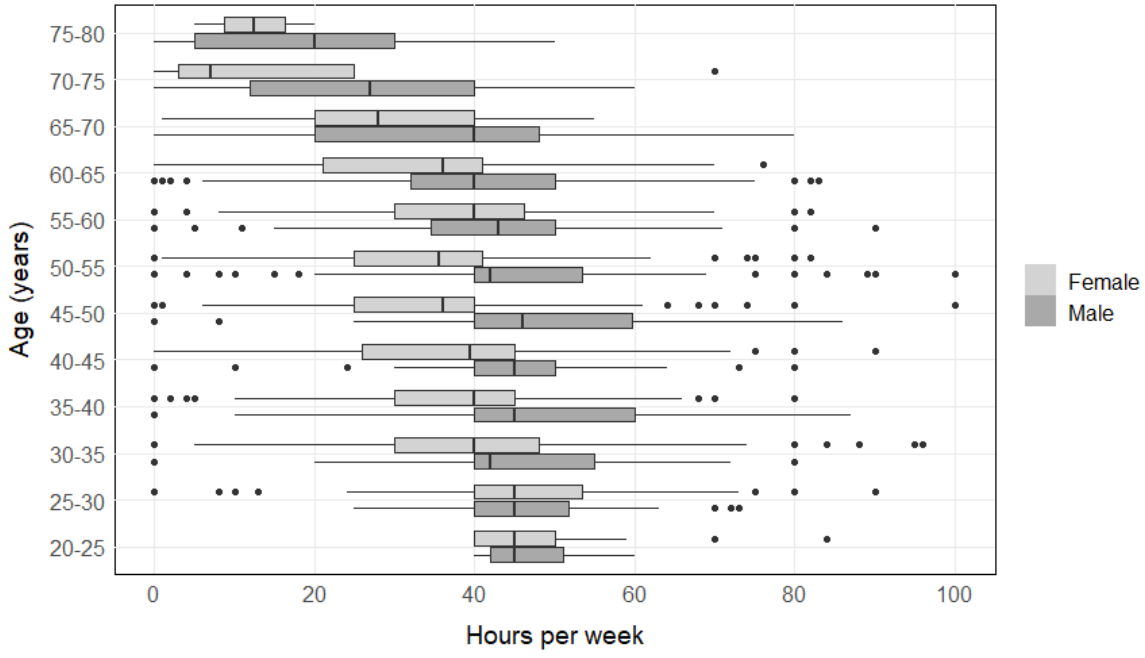
Figure 4: Distribution of total hours worked per week by veterinarians in New Zealand in 2023 stratified by aggregated area of practice and role type



Hours Worked by Age and Gender

The mean total number of hours worked per week by female veterinarians in New Zealand was 39.6 (min: 0, Q1: 30.0, median: 40, Q3: 47.3, max: 168) while the mean total number of hours worked per week by male veterinarians in New Zealand was 43.9 (min: 0, Q1: 36.0, median: 42.0, Q3: 50.0, max: 168). Figure 5 shows the stratification of total hours worked per week by gender and age category. Between the ages of 30 and 65, female veterinarians worked significantly fewer hours per week than male veterinarians.

Figure 5: Distribution of total hours worked per week by veterinarians in New Zealand in 2023 stratified by gender and age category



Population Coverage of Clinical Veterinarians

The following analyses on the population coverage of clinical veterinarians in New Zealand are based on data from 2,434 veterinarians working in 2,546 employment roles as clinicians in companion animal practice, mixed animal practice, farm animal practice, equine practice, and/or practice with other species.

National Coverage

Estimates of the population size of different owned animal species in New Zealand as well as the estimated counts and FTEs of veterinarians engaged in clinical work on these species is presented in Table 11. Overall, the 2,546 veterinarians in clinical practice were responsible for the care of over 72 million owned animals.

Table 11: Estimate of the population size of owned animals in New Zealand and veterinary coverage in 2023

Species	Estimated Population Size	Data Source	Estimated Count of Vets	Estimated Vet FTEs
Farm Animal			804[a]	743[b]
Dairy Cattle	6,175,505	Agribase		
Beef Cattle	4,669,299	Agribase		
Sheep	32,733,779	Agribase		
Goats	176,780	Agribase		
Deer	1,041,425	Agribase		
Buffalo	345	Agribase		
Bison	281	Agribase		
Camelids	13,603	Agribase		
Horses	33,551	Census	223	295.4
Pigs	292,262	Agribase	6	6.9
Poultry	24,913,972	Agribase	9	10.0
Companion Animal			1,860[c]	1,586.2[d]
Cats	1,219,000	CANZ		
Dogs	851,000	CANZ		
Rabbits	121,000	CANZ		
Small Mammals	101,000	CANZ		

[a] *The estimated counts of veterinarians engaged in farm animal clinical work was calculated as number of farm animal veterinarians + number of mixed-animal veterinarians*

[b] *The estimated FTEs of veterinarians engaged in farm animal clinical work was calculated as FTEs of farm animal veterinarians + (0.5 x FTEs of mixed-animal veterinarians)*

[c] *The estimated counts of veterinarians engaged in companion animal clinical work was calculated as number of companion animal veterinarians + number of mixed-animal veterinarians*

[d] *The estimated FTEs of veterinarians engaged in companion animal clinical work was calculated as FTEs of companion animal veterinarians + (0.5 x FTEs of mixed-animal veterinarians)*

Veterinary Demographics by Territorial Authority

The demographic characteristics of veterinarians by Territorial Authority in New Zealand is summarised in Table 12.

Animal Populations and Veterinarians by Territorial Authority

The veterinary coverage of animal populations by Territorial Authority in New Zealand is summarised in Table 13.

Table 12: Demographic profile of veterinary clinicians by Territorial Authority in New Zealand

Territory	Human Population	Veterinary Livestock Units	Number of Clinical Vets	Gender		Age (years)		Country of Vet Qualification	
				Female	Male	Median	Mean	Domestic	International
Ashburton District	36,800	428,116	42	24 (57.1%)	18 (42.9%)	41.9	41.7	19 (45.2%)	23 (54.8%)
Auckland	1,739,300	142,608	453	308 (69.5%)	135 (30.5%)	40.8	43.3	309 (68.2%)	144 (31.8%)
Buller District	9,670	58,310	10	9 (90%)	1 (10%)	52.6	50.9	6 (60%)	4 (40%)
Carterton District	10,250	46,794	14	7 (50%)	7 (50%)	36	41.5	11 (78.6%)	3 (21.4%)
Central Hawke's Bay District	16,000	139,617	16	13 (81.2%)	3 (18.8%)	38.2	40.6	11 (68.8%)	5 (31.2%)
Central Otago District	26,000	131,614	20	16 (80%)	4 (20%)	39.2	41.8	11 (55%)	9 (45%)
Christchurch City	396,200	21,674	142	112 (79.4%)	29 (20.6%)	42.1	43.1	92 (64.8%)	50 (35.2%)
Clutha District	18,900	280,418	23	11 (47.8%)	12 (52.2%)	45.1	46.1	17 (73.9%)	6 (26.1%)
Dunedin City	134,600	71,883	48	37 (78.7%)	10 (21.3%)	39	43.1	34 (70.8%)	14 (29.2%)
Far North District	74,700	145,541	32	21 (67.7%)	10 (32.3%)	46.4	45.6	21 (65.6%)	11 (34.4%)
Gisborne District	52,600	151,698	20	14 (70%)	6 (30%)	44.7	47.7	11 (55%)	9 (45%)
Gore District	13,050	96,738	6	3 (50%)	3 (50%)	47.4	47.2	3 (50%)	3 (50%)
Grey District	14,250	49,785	8	6 (75%)	2 (25%)	35.9	38.1	2 (25%)	6 (75%)
Hamilton City	185,300	5,584	53	35 (66%)	18 (34%)	45.4	45.2	37 (69.8%)	16 (30.2%)
Hastings District	91,900	124,961	43	28 (65.1%)	15 (34.9%)	45.3	46.7	35 (81.4%)	8 (18.6%)
Hauraki District	22,400	129,694	19	14 (73.7%)	5 (26.3%)	41.6	42.9	15 (78.9%)	4 (21.1%)
Horowhenua District	37,500	64,491	17	10 (58.8%)	7 (41.2%)	38.1	46.8	13 (76.5%)	4 (23.5%)
Hurunui District	13,800	184,964	30	20 (71.4%)	8 (28.6%)	34.8	38.7	17 (56.7%)	13 (43.3%)
Invercargill City	57,900	20,250	29	22 (75.9%)	7 (24.1%)	39.7	42.5	17 (58.6%)	12 (41.4%)
Kaikoura District	4,230	20,458	5	2 (40%)	3 (60%)	42.5	42.5	3 (60%)	2 (40%)
Kaipara District	27,300	158,944	13	5 (41.7%)	7 (58.3%)	52.5	48.6	10 (76.9%)	3 (23.1%)
Kapiti Coast District	58,400	8,204	29	21 (75%)	7 (25%)	48.6	47	23 (79.3%)	6 (20.7%)
Kawerau District	7,820	331	0	0 (0%)	0 (0%)	0	0	0 (0%)	0 (0%)
Lower Hutt City	114,000	686	31	23 (79.3%)	6 (20.7%)	46.6	44.5	25 (80.6%)	6 (19.4%)
Mackenzie District	5,690	105,243	5	2 (40%)	3 (60%)	32.4	41.3	5 (100%)	0 (0%)
Manawatu District	33,900	161,045	20	14 (73.7%)	5 (26.3%)	47.2	47.1	18 (90%)	2 (10%)
Marlborough District	52,200	61,042	29	17 (58.6%)	12 (41.4%)	49.4	47.3	19 (65.5%)	10 (34.5%)
Masterton District	29,100	70,604	17	14 (82.4%)	3 (17.6%)	45.9	44.1	13 (76.5%)	4 (23.5%)
Matamata-Piako District	37,700	304,909	75	46 (62.2%)	28 (37.8%)	38.4	41.9	45 (60%)	30 (40%)
Napier City	67,500	986	19	13 (72.2%)	5 (27.8%)	43.6	46.7	10 (52.6%)	9 (47.4%)
Nelson City	55,600	1,660	26	19 (73.1%)	7 (26.9%)	42.9	46.2	13 (50%)	13 (50%)
New Plymouth District	88,900	139,450	45	24 (53.3%)	21 (46.7%)	46.1	47	34 (75.6%)	11 (24.4%)
Opotiki District	10,550	29,912	0	0 (0%)	0 (0%)	0	0	0 (0%)	0 (0%)
Otorohanga District	10,900	170,480	7	6 (85.7%)	1 (14.3%)	46.2	44.7	3 (42.9%)	4 (57.1%)

Palmerston North City	91,800	19,684	82	55 (68.8%)	25 (31.2%)	38.6	40.7	58 (70.7%)	24 (29.3%)
Porirua City	62,400	2,351	13	9 (69.2%)	4 (30.8%)	44.8	47.3	12 (92.3%)	1 (7.7%)
Queenstown-Lakes District	52,800	37,804	26	20 (76.9%)	6 (23.1%)	41.6	44	15 (57.7%)	11 (42.3%)
Rangitikei District	16,300	145,936	25	15 (62.5%)	9 (37.5%)	45.3	47	23 (92%)	2 (8%)
Rotorua District	78,200	151,460	47	27 (57.4%)	20 (42.6%)	43.5	44.4	33 (70.2%)	14 (29.8%)
Ruapehu District	13,050	116,820	11	10 (90.9%)	1 (9.1%)	31.6	37.6	9 (81.8%)	2 (18.2%)
Selwyn District	81,300	235,962	68	43 (65.2%)	23 (34.8%)	43.2	43.8	35 (51.5%)	33 (48.5%)
South Taranaki District	29,600	353,739	51	29 (56.9%)	22 (43.1%)	36.7	41.1	44 (86.3%)	7 (13.7%)
South Waikato District	26,000	173,634	30	13 (43.3%)	17 (56.7%)	39.1	40.2	20 (66.7%)	10 (33.3%)
South Wairarapa District	11,900	75,685	9	7 (77.8%)	2 (22.2%)	46.5	46	7 (77.8%)	2 (22.2%)
Southland District	33,000	777,433	68	52 (78.8%)	14 (21.2%)	37.4	38.4	37 (54.4%)	31 (45.6%)
Stratford District	10,300	91,955	2	1 (50%)	1 (50%)	57.5	57.5	1 (50%)	1 (50%)
Tararua District	19,200	223,377	24	20 (87%)	3 (13%)	33.1	37.1	18 (75%)	6 (25%)
Tasman District	59,400	85,735	25	16 (64%)	9 (36%)	49.1	48.4	18 (72%)	7 (28%)
Taupo District	42,000	154,075	22	12 (57.1%)	9 (42.9%)	39.9	41.2	17 (77.3%)	5 (22.7%)
Tauranga City	161,800	3,134	45	27 (60%)	18 (40%)	46	45.1	36 (80%)	9 (20%)
Thames-Coromandel District	33,700	30,968	11	6 (60%)	4 (40%)	39.7	42.4	9 (81.8%)	2 (18.2%)
Timaru District	48,900	163,685	36	26 (76.5%)	8 (23.5%)	40.9	40.6	24 (66.7%)	12 (33.3%)
Upper Hutt City	48,300	2,221	11	9 (81.8%)	2 (18.2%)	36.1	38.6	8 (72.7%)	3 (27.3%)
Waikato District	90,100	308,884	36	25 (69.4%)	11 (30.6%)	39.5	43.1	28 (77.8%)	8 (22.2%)
Waimakariri District	69,000	105,823	55	34 (65.4%)	18 (34.6%)	43.1	43.5	38 (69.1%)	17 (30.9%)
Waimate District	8,400	165,057	11	8 (72.7%)	3 (27.3%)	39.1	38.8	10 (90.9%)	1 (9.1%)
Waipa District	61,100	211,449	104	67 (66.3%)	34 (33.7%)	43.4	44	71 (68.3%)	33 (31.7%)
Wairoa District	9,290	62,905	5	3 (60%)	2 (40%)	31.3	37.1	2 (40%)	3 (60%)
Waitaki District	24,300	184,095	25	20 (83.3%)	4 (16.7%)	38.6	38.1	21 (84%)	4 (16%)
Waitomo District	9,720	104,362	12	11 (91.7%)	1 (8.3%)	33.8	39.9	8 (66.7%)	4 (33.3%)
Wellington City	216,200	2,205	56	32 (61.5%)	20 (38.5%)	44.6	44	39 (69.6%)	17 (30.4%)
Western Bay of Plenty District	60,800	90,340	20	15 (75%)	5 (25%)	42	43.9	16 (80%)	4 (20%)
Westland District	8,940	62,544	9	7 (77.8%)	2 (22.2%)	34.4	37.6	5 (55.6%)	4 (44.4%)
Whakatane District	38,800	115,499	22	15 (68.2%)	7 (31.8%)	45.4	46.6	17 (77.3%)	5 (22.7%)
Whanganui District	48,900	50,148	17	10 (62.5%)	6 (37.5%)	46.7	47.9	14 (82.4%)	3 (17.6%)
Whangarei District	101,900	127,602	46	29 (67.4%)	14 (32.6%)	42.9	45	34 (73.9%)	12 (26.1%)

Table 13:Farm animal and companion animal population coverage of veterinarians by Territorial Authority in New Zealand

Territory	Veterinary Livestock Units (VLU)	Number of Farm Animal Vets	Farm Animal Vet FTEs	Farm Animal VLU per Vet FTE	Human Population Count	Number of Companion Animal Vets	Companion Animal Vet FTEs	Human Population per Vet FTE
Ashburton District	428,116	31	32	13,431	36,800	23	16	2,237
Auckland	142,608	37	36	4,002	1,739,300	421	370	4,706
Buller District	58,310	7	7	8,591	9,670	7	5	2,108
Carterton District	46,794	6	8	6,117	10,250	8	6	1,767
Central Hawke's Bay District	139,617	9	9	15,364	16,000	10	9	1,770
Central Otago District	131,614	10	9	15,020	26,000	16	13	1,968
Christchurch City	21,674	13	8	2,829	396,200	136	115	3,453
Clutha District	280,418	18	20	14,109	18,900	13	11	1,684
Dunedin City	71,883	7	6	12,235	134,600	44	42	3,236
Far North District	145,541	13	10	15,180	74,700	30	27	2,733
Gisborne District	151,698	6	4	33,711	52,600	20	16	3,293
Gore District	96,738	6	5	17,832	13,050	4	4	3,222
Grey District	49,785	4	4	12,525	14,250	5	5	3,098
Hamilton City	5,584	13	15	383	185,300	40	32	5,768
Hastings District	124,961	14	10	12,296	91,900	34	28	3,272
Hauraki District	129,694	13	11	12,207	22,400	16	12	1,821
Horowhenua District	64,491	5	4	14,615	37,500	14	12	3,009
Hurunui District	184,964	21	18	10,094	13,800	17	11	1,208
Invercargill City	20,250	6	7	3,057	57,900	19	24	2,459
Kaikoura District	20,458	2	5	4,472	4,230	4	6	664
Kaipara District	158,944	10	11	14,717	27,300	9	8	3,592
Kapiti Coast District	8,204	1	0	21,879	58,400	27	23	2,534
Kawerau District	331	0	0	-	7,820	0	0	-
Lower Hutt City	686	1	1	1,098	114,000	31	27	4,218
Mackenzie District	105,243	5	4	27,247	5,690	2	1	5,355
Manawatu District	161,045	7	7	23,859	33,900	15	12	2,897
Marlborough District	61,042	8	7	8,895	52,200	23	20	2,560
Masterton District	70,604	6	9	8,222	29,100	12	12	2,443
Matamata-Piako District	304,909	46	45	6,707	37,700	28	23	1,640
Napier City	986	1	0	9,856	67,500	17	17	4,012
Nelson City	1,660	1	2	1,037	55,600	25	19	2,873
New Plymouth District	139,450	19	19	7,216	88,900	32	30	2,976
Opotiki District	29,912	0	0	-	10,550	0	0	Inf
Otorohanga District	170,480	6	5	37,675	10,900	5	4	2,831

Palmerston North City	19,684	20	23	866	91,800	58	60	1,530
Porirua City	2,351	0	0	-	62,400	14	14	4,555
Queenstown-Lakes District	37,804	10	7	5,519	52,800	25	19	2,816
Rangitikei District	145,936	13	11	12,972	16,300	12	9	1,863
Rotorua District	151,460	21	20	7,480	78,200	32	30	2,596
Ruapehu District	116,820	8	4	28,320	13,050	12	8	1,535
Selwyn District	235,962	25	29	8,200	81,300	47	36	2,243
South Taranaki District	353,739	33	33	10,591	29,600	26	24	1,214
South Waikato District	173,634	26	32	5,403	26,000	12	9	2,755
South Wairarapa District	75,685	2	2	33,638	11,900	4	4	3,376
Southland District	777,433	56	38	20,499	33,000	43	28	1,179
Stratford District	91,955	1	1	91,955	10,300	0	0	-
Tararua District	223,377	17	13	16,795	19,200	23	18	1,074
Tasman District	85,735	10	8	10,424	59,400	19	15	4,090
Taupo District	154,075	11	9	17,410	42,000	16	13	3,347
Tauranga City	3,134	5	4	716	161,800	44	40	4,094
Thames-Coromandel District	30,968	4	4	7,202	33,700	8	9	3,663
Timaru District	163,685	21	18	9,132	48,900	26	22	2,230
Upper Hutt City	2,221	2	2	1,269	48,300	11	11	4,209
Waikato District	308,884	16	12	25,929	90,100	31	27	3,348
Waimakariri District	105,823	14	15	7,096	69,000	40	34	2,048
Waimate District	165,057	8	6	28,831	8,400	7	4	1,920
Waipa District	211,449	46	51	4,116	61,100	53	39	1,552
Wairoa District	62,905	5	6	11,085	9,290	5	6	1,674
Waitaki District	184,095	16	12	14,937	24,300	22	17	1,453
Waitomo District	104,362	12	7	15,694	9,720	9	5	2,046
Wellington City	2,205	3	2	1,020	216,200	58	50	4,289
Western Bay of Plenty District	90,340	9	8	11,292	60,800	14	11	5,696
Westland District	62,544	5	4	14,461	8,940	7	7	1,259
Whakatane District	115,499	12	10	11,492	38,800	17	11	3,457
Whanganui District	50,148	4	2	21,115	48,900	17	14	3,518
Whangarei District	127,602	17	13	9,540	101,900	41	33	3,102

Methods

The following sections describe the data sources and analyses that were used to generate the statistics in this report. Limitations in the data are also discussed.

Data Sources

Register of Veterinarians (Veterinary Demographics and Qualifications)

The Register of Veterinarians captures information about the demographics, professional qualifications, practicing status, and contact details for all veterinarians who are registered with VCNZ. A summary of the core data fields available for analysis in this report is presented in Table 14.

Table 14: Overview of data fields in the Register of Veterinarians maintained by VCNZ

Data Field	Description
Registration Number	Unique identification number assigned to each veterinarian
Registration Status	Current registration status of the veterinarian • Registered • Limited Registration • Removed
Year	Most recent year that the veterinarian applied for an APC
Registration Date	Date the most recent APC was submitted
Practicing Status	Current practicing status of the veterinarian • Practicing • Non-practicing • Retired
Postal District	Postal district of the veterinarian's primary contact address
Practice Name	Name of the primary practice or employer where the veterinarian works (recorded as free text)
Practice Address	Street address, town, and post code of the primary practice or employer where the veterinarian works (recorded as free text)
Registration Year	Year that the veterinarian first registered with VCNZ
Qualification List	List of degrees held by the veterinarian (recorded as free text abbreviations i.e. BVSc, DVM, BVM&S)
Qualification Place	University where primary veterinary qualification was obtained (recorded as free text)
Qualification Country	Country where primary veterinary qualification was obtained (recorded as free text)
Qualification Year*	Year when primary veterinary qualification was awarded
Qualification Final Year*	Year when veterinarian completed their final year of clinical rotations
Specialties	List of specialist qualifications (if any) held by the veterinarian (recorded as free text)
Date of Birth	Veterinarian's date of birth in dd/mm/YYYY format
Gender	Gender of the veterinarian at time of initial registration with VCNZ • Female • Male • Non-binary

** These two fields are included because Massey University graduates complete their final year rotations in November and are eligible to work as veterinarians in New Zealand starting in December, but are not formally awarded their degree until May the following year.*

Workforce Survey (Veterinary Employment Data)

The Workforce Survey is carried out from January to June every year as part of the process for a registered veterinarian in New Zealand to renew their annual practising certificate (APC). The eligible population for the Workforce Survey includes all practicing, non-practicing, and retired veterinarians (i) whose contact details appear on the Register of Veterinarians and (ii) who elect to complete the APC renewal process through the VCNZ web portal where the survey is hosted. The survey asks respondents to provide details about their work as veterinarians from the previous calendar year. This period included 01 January 2023 to 31 December 2023 for the 2024 Workforce Survey.

Table 15 lists the questions that were included on the 2024 Workforce Survey with the codes for employer type, role type, and area of practice presented in in Table 16 and reasons for either not working as a veterinarian or not working full-time as a veterinarian (defined as working <40 hours per week) presented in Table 17.

Table 15: Questions included on the 2023 Workforce Survey

Working as a Veterinarian

- Were you engaged in veterinary practice (which includes non-clinical work) in New Zealand during the year ending 31 December 2023?
- If you're thinking about not working as a veterinarian during the year commencing 1 April 2024, please select a reason.

Primary Employment

- What was your main (Primary) employment type?
- What was your main (Primary) role type?
- What was your main (primary) area of practice?
- Hours worked per week (including hours on call)?

Secondary Employment

- Do you have secondary employment?
- What was your main (Secondary) employment type?
- What was your main (Secondary) role type?
- What was your main (Secondary) area of practice?
- Secondary Hours worked per week (including hours on call)?

Other (Tertiary) Employment

- Do you have another employment?
- What was the employer type?
- What was your main role in that employment?
- What was your main area of practice in that role?

Total Workload

- Additional hours worked per week in any other work types?
- Hours on call per week
- Total number of hours worked for the week

Demographics

- Which ethnic group do you belong to?
- Second ethnic group?
- What is your gender?
- Do you consider yourself transgender?

*Table 16: Codes for employer type, role type, and area of practice included on the 2023 Workforce Survey**

Employer Type Codes

Code	Description	Categorisation
CP	Club Practice	Clinical Practice
IN	Industry	Industry
LA	Diagnostic Laboratory	Industry
MP	MPI	Government or SOE
OG	Other Government	Government or SOE
OT	Other (Please Specify)	Other
PP	Group Private Practice	Clinical Practice
SE	Self-Employed	Self-Employed
SO	SOE or Crown Institute	Government or SOE
SP	Solo Private Practice	Clinical Practice
UN	University or Tertiary	University

Role Type Codes

Code	Description	Categorisation
CL	Clinician	Clinical
CO	Consultant	Non-Clinical
ED	Education	Non-Clinical
MN	Management	Non-Clinical
OT	Other	Non-Clinical
TE	Technical	Non-Clinical

Area of Practice Codes

Code	Description	Categorisation
AV	Avian	Other Species
AW	Animal Welfare	Regulatory
BC	Beef Cattle	Farm Animal
CA	Companion Animal	Companion Animal
CO	Compliance	Regulatory
DC	Dairy Cattle	Farm Animal
DE	Deer	Farm Animal
DI	Disease Control	Regulatory
EC	Export Certification	Regulatory
EP	Epidemiology	Miscellaneous
EQ	Equine	Equine
LI	Lifestyle Block	Farm Animal
MI	Meat Inspection	Regulatory
MX	Mixed Practice	Mixed Animal
OT	Other	Miscellaneous
PA	Production Animal	Farm Animal
PH	Pharmaceutical	Miscellaneous
PI	Pigs	Other Species
PM	Practice Management	Miscellaneous
PO	Poultry	Other Species
PT	Pathology	Miscellaneous
RE	Research	Miscellaneous
RG	Regulatory	Regulatory
SR	Small Ruminants	Farm Animal
TE	Teaching	Miscellaneous
WI	Wildlife	Other Species

**The codes were further grouped into categories to allow for higher-level reporting of trends.*

Table 17: Codes for reasons why individuals were not working as a veterinarian or were working less than full-time

Code	Description
CO	Contract Requirement
CW	Casual Work
DI	Difficulty Obtaining Work
FA	Family Care
HE	Health
OE	Work Overseas
OT	Other
PL	Parental Leave
PP	Personal Preference
PT	Working Part-Time
RE	Retired or Semi-Retired
ST	Study

The list of choices for the multiple-choice questions on primary ethnic group and secondary ethnic group were derived from those included in the New Zealand Census of Population and Dwellings. In alphabetical order, the categories were Chinese, Indian, NZ European/Pākehā, NZ Māori, Other European, Other Non-European, and Pacific Island (Pasifika). Veterinarians were also given the option of writing in their ethnicity as free text. These responses were re-categorised as Other Non-European.

As show in Table 16, the Area of Practice codes were further categorised into Companion Animal, Mixed Animal, Farm Animal, Equine, Other Species, Regulatory, and Miscellaneous to facilitate easier reporting of trends in the data.

There was an error in the 2024 Workforce Survey for capturing and recording the Hours on Call per week and these data were therefore excluded from the 2023-24 Workforce Report.

Agribase (Farm Animal Population Counts)

Agribase is a database maintained by AsureQuality that spatially maps the locations of food-producing farms in New Zealand and stores information on the total counts of livestock species on each location including dairy cattle, beef cattle, sheep, goats, deer, pigs, chickens, horses, camelids, buffalo, and bison. It is entirely voluntary for farmers to register their locations in Agribase and to provide AsureQuality with annual updates about changes in the total number of animals on each location. An extract of data from Agribase was provided by AsureQuality on 19 July 2022. This was used to generate estimates of the total counts of animals by species in each of the 67 Territorial Authorities of New Zealand for 2022.

Census (Human Population Counts)

Estimates of human population counts for each of the 67 Territorial Authorities in New Zealand were obtained from the StatsNZ website under the *Populations Estimates* > *Subnational populations estimates (TA, subdivision) by age and sex at 30 June 2018 – 2023 (2023 boundaries)* table. These data were used as a proxy for companion animal ownership in New Zealand. Statistics on the number of households owning companion animals and the estimated size of companion animal populations was obtained from the Companion Animals in New Zealand 2020 report.

Data Analysis

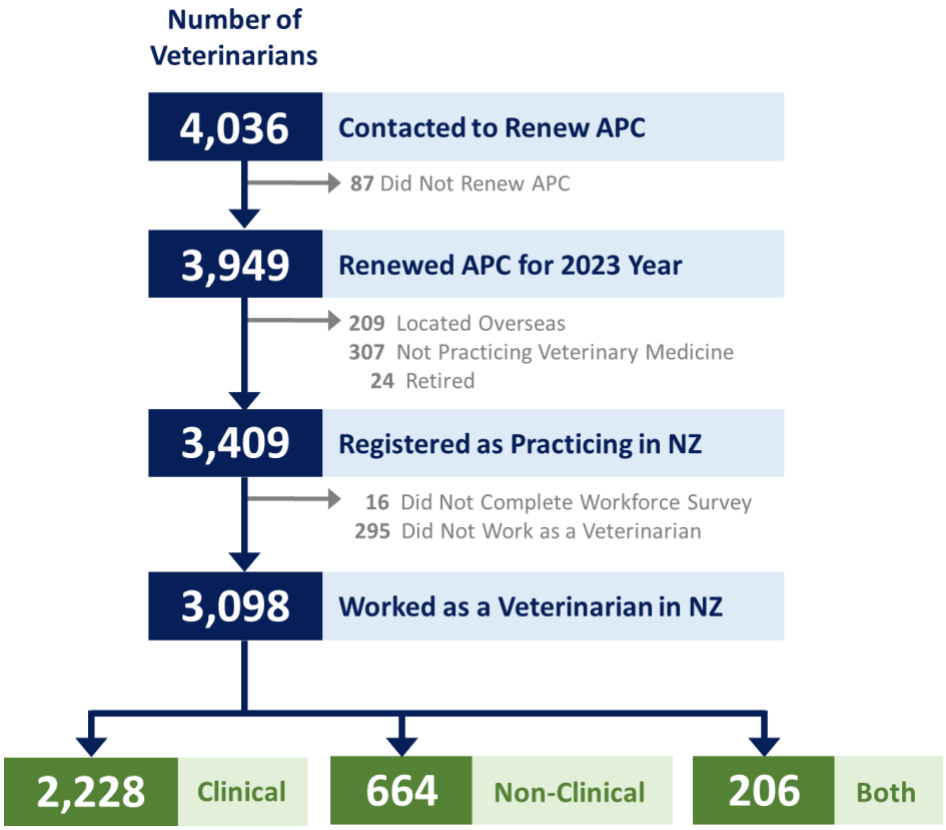
Defining the Veterinary Workforce

The VCNZ contacted 4,036 veterinarians between January 2024 and June 2024 to renew their APC for the 2024 calendar year. This included all practicing, non-practicing, and retired veterinarians whose contact details appeared on the Register of Veterinarians. A total of 3,949 veterinarians (97.8%) subsequently elected to renew their APC. Of these, 3,114 (91.3%) were registered as practicing veterinarians located in New Zealand. A veterinarian was classified as being located in New Zealand if either their practice address or their postal district was a location in New Zealand. Most veterinarians (3,098; 99.5%) provided at least some information about their employment roles on the 2023-24 Workforce Survey.

Overall, there were 3,114 individuals who reported working as a veterinarian over the 2023-24 period. For the 3,098 individuals who specified their work type, there were 2,228 (71.9%) working exclusively in clinical veterinary roles, 664 (21.4%) working exclusively in non-clinical veterinary roles, and 206 (6.7%)

who held both clinical and non-clinical veterinary roles. A summary of the processing steps is provided in Figure 6.

Figure 6: Processing steps to generate the final sample of practicing veterinarians included in the New Zealand Veterinary workforce analysis



Veterinary FTEs

Veterinary full-time equivalents (FTEs) were calculated by dividing the total number hours veterinarians indicated that they worked per week by 40.

Workforce Coverage

To estimate veterinary workforce coverage across New Zealand, the livestock population counts from Agribase were first converted into Veterinary Livestock Units (VLUs) using coefficients that were adapted from Electronic Code of Federal Regulations in the United States that have been historically used to define areas with veterinary shortages:

Veterinary Livestock Units (VLU) = 1 x (number of milking dairy cattle)
+ 0.2 × (number of non-milking dairy cattle and beef cattle)
+ 0.05 × (number of sheep and goats)
+ 0.2 x (number of deer)
+ 0.2 x (number of buffalo and bison)
+ 0.2 x (number of camelids)

Horses were excluded from the calculations because they are primarily used for companionship or sport in New Zealand with most veterinary services being provided by equine veterinarians. Pigs and poultry were also excluded because most animals are raised in commercial systems that draw on a limited pool of veterinarians to provide clinical services.

Data from the 2,434 veterinarians working in 2,546 employment roles as clinicians in companion animal practice, mixed animal practice, farm animal practice, equine practice, and/or practice with other species was used to estimate the total number of veterinarians providing clinical services to owned animal species in New Zealand.

The estimated counts of veterinarians engaged in farm animal clinical work was calculated as the number of farm animal veterinarians + number of mixed-animal veterinarians. The estimated FTEs of veterinarians engaged in farm animal clinical work was calculated as FTEs of farm animal veterinarians + (0.5 x FTEs of mixed-animal veterinarians).

Similarly, the estimated counts of veterinarians engaged in companion animal clinical work was calculated as number of companion animal veterinarians + number of mixed-animal veterinarians. The estimated FTEs of veterinarians engaged in companion animal clinical work was calculated as FTEs of companion animal veterinarians + (0.5 x FTEs of mixed-animal veterinarians).

A weighting coefficient of 0.5 was used for the FTE contributions of mixed-animal veterinarians to farm animal and companion animal clinical work because no data were available on the % split of mixed-animal veterinarians between the different species.

Limitations

- In 2021, there was a change in the format for how data regarding the different employment roles was captured on the APC survey which restricted individuals to selecting only role type code and one work type code per employment position. This has likely impacted the relative distribution of FTEs across the different role types and work types compared with previous years where individuals were allowed to select multiple codes per role making it difficult to determine whether any observed trends resulted from changes in the data collection process or true shifts in the demographics of the veterinary profession.

- Some individuals did not provide a valid address for the contact detail or employment position and it was not always possible to match an address to a Territorial Authority because the data were written in free-text format with frequent spelling errors and/or missing information. Furthermore, individuals were only allowed to list the name and address for one employer overall even if they reported data for multiple employment roles in different locations. This may have resulted in misallocation of FTEs across the different Territorial Authorities.

- Individuals were only allowed to select one area of practice per employment role. Some areas of practice codes represented individual species (i.e. deer, pigs, equine, avian) while other codes covered multiple species (i.e. companion animal, mixed animal, production animal, lifestyle) so it was not easily possible to determine which species each veterinarian actually treats and the FTE split between the different species.

- There were no clear definitions for the role type codes which made it difficult to accurately determine which individuals were providing clinical veterinary services to clients (i.e. diagnosing,

prescribing, performing surgery) and which individuals were working in non-clinical roles (i.e. research consulting, government, industry).

- Some individuals appeared uncertain about how to provide data on the total hours they worked for each role. While most individuals reported the total number of hours worked in a typical week as specified in the question, some individuals reported total hours worked on an annual basis. This highlights that the question format may not be appropriate to account for the heterogeneity in work patterns for individuals who are not working full-time hours across the entire calendar year or for individuals whose work patterns fluctuate seasonally with changes in demand for veterinary services, particularly for veterinarians who work with farm animal species.

- There was a database error in recording "hours on call" and no data were available for this report.

- This report used human population counts and veterinary livestock units (VLUs) as a proxy for the demand for companion animal and livestock veterinary services, respectively. We do not currently have a good understanding of what the coefficients should be for the New Zealand farming context and what thresholds indicate that there may be a shortage of clinical veterinarians in a particular geographic region. It is difficult to compare with other countries because their metrics often include pigs and poultry, which are usually managed by specialist veterinarians working for the commercial companies rather than the general population of practicing veterinarians. We currently do not have good estimates of the size of backyard pig and poultry populations in New Zealand nor the number of veterinarians who treat these species.

  Other challenges with setting threshold limits for veterinary shortages in New Zealand are the seasonal nature of farm animal work which changes demand substantially depending on the time of year. The rural location of many livestock farms and potentially long travel distance from veterinary clinics on roads that are often in poor condition may also influence the capacity of veterinarians to provide services in particular areas. A more accurate measure may be estimating the road distance and/or travel time between farms with livestock and the nearest veterinary clinic that treats these species. Another factor to consider is both the number and size of farms within a veterinary catchment area (i.e. having 10 farms with 1,000 cattle each likely has a different workload profile than 100 farms with 100 cattle each even through the total population size for both areas is 10,000 cattle).

Appendix

Appendix 1:Counts of farm animal species by Territorial Authority in New Zealand as of June 2022

Territory	Dairy Cattle (Milking)	Dairy Cattle (Dry Stock)	Beef Cattle	Sheep	Goats	Deer	Buffalo	Bison	Camelids	Horses	Pigs	Poultry
Ashburton District	340,899	90,295	99,686	833,556	742	36,975	0	200	356	1,597	18,285	103,762
Auckland	83,717	20,805	179,534	299,669	10,261	14,853	345	6	1,431	11,890	10,833	5,316,268
Buller District	51,020	15,004	8,703	10,627	456	9,941	0	0	29	227	124	1,861
Carterton District	23,323	5,848	27,955	314,322	254	4,884	0	0	22	398	9,305	26,179
Central Hawke's Bay District	29,286	6,538	185,531	1,324,129	3,568	27,534	0	0	126	1,202	4,332	13,128
Central Otago District	27,550	2,913	83,423	1,596,661	3,899	33,764	0	0	81	942	150	14,763
Christchurch City	2,131	1,300	38,269	224,846	958	1,027	0	0	669	1,465	14,781	218,614
Clutha District	134,168	38,790	107,739	2,168,921	2,740	41,499	0	0	307	815	344	10,005
Dunedin City	21,785	7,202	43,926	739,863	1,193	13,638	0	0	461	1,787	2,227	515,226
Far North District	85,803	21,198	232,366	170,161	5,313	1,064	0	1	193	2,537	1,814	19,714
Gisborne District	3,697	1,941	292,366	1,720,755	4,411	14,392	0	0	12	3,402	1,033	58,632
Gore District	50,926	13,843	21,295	719,076	422	14,007	0	0	38	545	497	6,513
Grey District	40,862	13,293	10,252	18,609	159	16,356	0	0	23	176	125	2,153
Hamilton City	4,791	768	2,034	2,754	82	424	0	0	29	116	16	22,195
Hastings District	20,357	7,463	189,438	1,186,783	3,533	28,127	0	0	414	1,940	3,205	355,645
Hauraki District	117,810	21,679	25,711	42,628	1,712	836	0	0	110	518	238	252,668
Horowhenua District	53,248	16,147	23,738	55,699	227	2,142	0	0	205	1,117	8,841	943,878
Hurunui District	80,707	24,103	129,128	1,330,095	2,954	34,624	0	0	168	1,895	8,258	39,524
Invercargill City	15,911	2,455	5,371	41,477	190	3,385	0	0	68	761	95	20,422
Kaikoura District	10,069	2,658	18,981	103,530	2,168	3,826	0	0	58	266	833	522
Kaipara District	112,955	30,019	148,564	186,738	3,876	3,688	0	0	20	1,207	2,852	64,660
Kapiti Coast District	3,997	1,299	8,393	31,133	468	3,303	0	0	142	1,027	127	85,813
Kawerau District	0	450	1,203	0	0	0	0	0	0	0	0	0
Lower Hutt City	0	0	464	11,601	187	12	0	0	7	132	114	733
Mackenzie District	16,115	9,011	254,177	564,140	193	41,314	0	0	56	243	52	2,974
Manawatu District	88,880	22,830	108,050	810,659	1,164	26,784	0	0	206	1,768	8,222	662,865
Marlborough District	17,136	4,830	66,327	556,023	1,732	8,717	0	0	215	1,155	4,195	17,380
Masterton District	7,852	3,391	67,068	954,462	1,689	4,026	0	5	232	1,162	234	268,290
Matamata-Piako District	285,802	55,265	24,112	37,242	17,836	2,296	0	0	91	3,732	7,262	3,758,771
Napier City	3	36	1,822	11,818	38	39	0	0	52	105	29	679
Nelson City	680	527	1,392	9,920	870	193	0	0	89	100	12	421
New Plymouth District	115,946	31,374	44,035	153,233	3,915	2,642	0	0	180	1,617	8,251	2,773,877
Opotiki District	23,075	8,124	17,179	32,012	1,010	625	0	1	2	591	300	1,634
Otorohanga District	137,676	29,081	62,845	260,300	2,431	6,372	0	0	38	868	1,212	2,863

Palmerston North City	13,927	3,838	11,174	45,353	277	1,881	0	0	483	1,212	2,051	2,318
Porirua City	0	0	2,446	31,279	332	1,250	0	0	158	266	114	28,499
Queenstown-Lakes District	4,770	189	28,436	381,400	364	41,025	0	0	80	376	42	3,792
Rangitikei District	37,255	9,027	136,003	1,517,736	1,775	18,445	0	0	53	1,614	3,309	2,618
Rotorua District	125,113	31,023	36,892	163,667	1,699	22,241	0	0	239	994	268	123,643
Ruapehu District	13,761	2,711	149,040	1,369,502	2,468	20,475	0	0	76	1,390	539	7,178
Selwyn District	173,303	47,688	69,199	651,769	2,126	31,773	0	55	1,107	5,723	39,517	2,438,973
South Taranaki District	316,462	70,365	41,926	289,581	1,188	1,395	0	0	8	1,390	13,174	189,671
South Waikato District	163,365	25,088	16,879	28,562	829	2,020	0	2	7	359	195	1,281,871
South Wairarapa District	38,004	10,102	53,061	493,524	2,480	1,147	0	0	94	489	7,838	1,303
Southland District	502,871	94,251	196,980	3,509,281	3,052	203,254	0	0	241	3,196	2,058	18,212
Stratford District	68,095	18,315	37,281	239,876	8,677	1,528	0	0	38	602	136	952
Tararua District	96,527	28,295	150,879	1,782,505	4,399	8,292	0	3	54	1,318	515	3,846
Tasman District	54,031	18,348	52,626	280,937	4,034	15,615	0	0	687	1,559	551	174,338
Taupo District	105,483	36,927	69,495	370,690	413	43,644	0	1	118	940	327	1,728
Tauranga City	2,344	510	3,012	1,558	65	0	0	0	24	175	49	21,370
Thames-Coromandel District	20,591	6,674	31,404	52,917	1,280	217	0	0	43	537	2,535	3,621
Timaru District	109,609	28,986	63,188	409,481	1,357	75,144	0	0	353	1,154	11,356	11,385
Upper Hutt City	677	327	3,687	14,195	418	21	0	0	33	453	163	1,979
Waikato District	231,109	46,909	210,643	487,068	13,474	5,789	0	0	398	5,993	14,660	2,615,929
Waimakariri District	76,553	22,753	50,879	201,137	1,978	20,785	0	0	1,153	4,271	36,890	1,011,244
Waimate District	109,678	30,660	65,213	562,156	1,151	39,710	0	0	484	687	6,927	5,293
Waipa District	187,766	34,896	48,889	74,592	9,917	12,992	0	1	509	6,169	13,168	122,537
Wairoa District	4,221	1,257	102,237	709,103	12,346	9,555	0	0	9	792	260	719
Waitaki District	113,777	20,379	88,096	868,364	1,094	25,557	0	0	194	1,107	4,812	382,217
Waitomo District	35,013	17,658	121,544	800,897	1,127	6,986	0	2	48	747	317	1,176
Wellington City	0	0	2,849	29,528	2,134	202	0	0	58	499	58	27,218
Western Bay of Plenty District	70,256	19,911	44,446	83,730	7,749	12,882	0	3	307	1,029	2,351	148,710
Westland District	54,128	17,853	16,788	12,498	216	4,251	0	0	11	221	63	1,331
Whakatane District	98,316	31,827	36,943	54,996	2,721	2,580	0	1	137	1,375	6,641	69,800
Whanganui District	11,066	3,336	55,114	524,681	1,573	5,360	0	0	37	1,150	3,024	213,975
Whangarei District	96,297	27,739	108,068	71,313	3,045	1,903	0	0	227	1,776	460	413,576