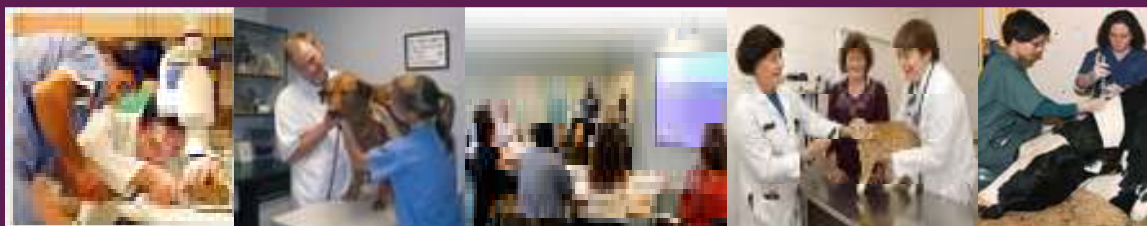




VETERINARY COUNCIL
OF NEW ZEALAND
Te Kaunihera Rata Kararehe o Aotearoa

The New Zealand Veterinary Workforce in 2011-2012



The New Zealand Veterinary Workforce in 2011-2012

Introduction

This report summarises the most relevant results of the Veterinary Council of New Zealand (VCNZ) 2011-2012 workforce survey. It contains information about changes in the veterinary workforce including retention rates for veterinarians.

The information for this survey was collected from a questionnaire voluntarily completed by veterinarians at the time they applied for their 2012-2013 Annual Practising Certificate (APC).

The response rate to the 2011-2012 workforce survey was 94% (2243 completed surveys accompanied the 2378 APC forms that had been returned to VCNZ by 30 June 2012). Because the number of full time equivalent (FTE) practising veterinarians has been calculated on the basis of information provided in the completed surveys it is important to recognise that the FTE estimates provided in this report are likely to underestimate the true number by around 6%.

Results published in this report are based on survey data unless otherwise stated

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Facts at a glance

	2007	2008	2009	2010	2011	2012
Size of workforce ^a	2,275	2,312	2,360	2,392	2,425	2,521
Vets per 100,000 population	54	54	55	55	56	57
Vets per head of population ^b	1858	1846	1829	1826	1801	1742
Percent IVG FTEs ^c	-	-	27%	28%	28%	28%
Percent women FTEs ^d	-	-	42%	43%	43%	45%
Percent specialist FTEs	-	-	-	2.7%	2.6%	2.9%
Median age (years)	-	-	43	43	43	43
Average routine work hours ^e	-	-	42	42	41	41
Vets in rural bonding scheme	-	-	115	120	126	134

^a Numbers of practising veterinarians with an APC on 30 June of respective year.

^b Vets per 100,000 population calculated using counts of veterinarians with an APC on 30 June of respective year.

^c IVG: international veterinary graduate full time equivalents.

^d Number of women FTEs divided by the total number of practising veterinarian FTEs.

^e Average routine work hours per week, includes activities carried out as a veterinarian during business hours as well as veterinary work done while on call.

Changes in the veterinary workforce

Size of the workforce

Information from the VCNZ Register of Veterinarians shows that as of 30 June 2012 the number of practising veterinarians increased by 4.0% compared with the same time in 2011. This compares with increases of +1.4% for 2011 and +1.4% for 2010 (Table 1). This increase is most likely the

result of a combination of the economic downturn overseas and continued demand for veterinary graduates within New Zealand.

Table 1: Yearly workforce growth and changes in composition.

	2007	2008	2009	2010	2011	2012
Size of workforce ^a	2,275	2,312	2,360	2,392	2,425	2,521
Vets per 100,000 population	54	54	55	55	56	57
Vets per head of population ^b	1858	1846	1829	1826	1801	1742
Percent IVG FTEs ^c	-	-	27%	28%	28%	28%
Percent women FTEs ^d	-	-	42%	43%	43%	45%
Percent specialist FTEs	-	-	-	2.7%	2.6%	2.9%
Median age (years)	-	-	43	43	43	43

^a Numbers of practising veterinarians with an APC on 30 June of respective year.

^b Vets per 100,000 population calculated using counts of veterinarians with an APC on 30 June of respective year.

^c IVG: international veterinary graduate full time equivalents.

^d Number of women FTEs divided by the total number of practising veterinarian FTEs.

Age distribution of the workforce

Figure 1 is a population pyramid comparing the age distribution of men and women practising as veterinarians in New Zealand in 2012. In the younger age groups there were more women than men: 59% of women in the workforce were under age 40 compared to 23% of men. Only 13% of women in the workforce were over the age of 50, compared to 49% of men.

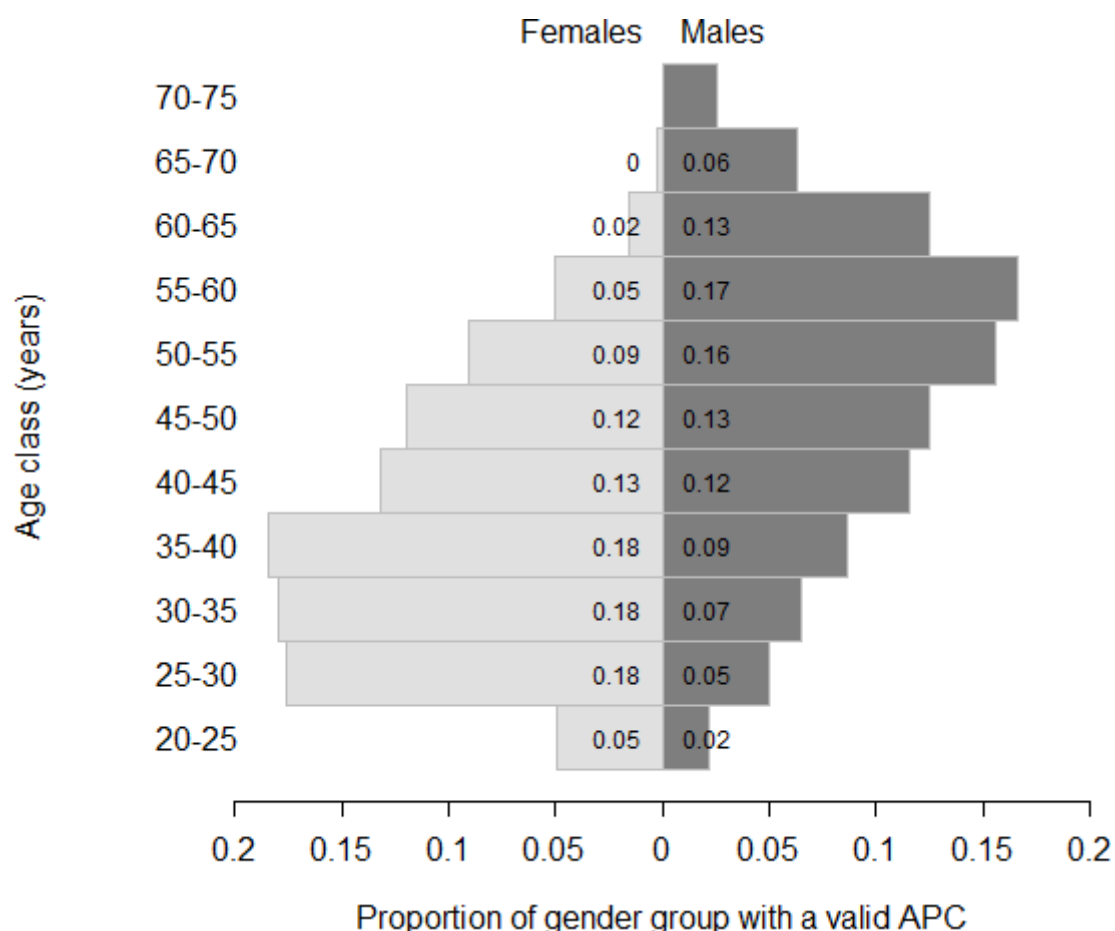


Figure 1: Population pyramid comparing the proportions of males and female veterinarians in 5-year age groupings in 2012.

Changes by work role

Table 2 shows counts of full time equivalent (FTE) veterinarians by work role for 2008, 2009, 2010 and 2011. Each of the workforce surveys asked veterinarians about their work activities for the previous year so a survey carried out in 2012 reports details of work activities that took place in 2011.

Numbers of FTE consultants have steadily increased since 2008. Veterinarians working in education increased from 55 FTEs in 2010 to 107 FTEs in 2011. This increase is believed to be due to: (1) more educators completing the workforce survey in 2011 compared with previous years ($n = 33$ FTEs), (2) more educators using just the ED role code to report on their 2011 work instead of several as they did the previous years ($n = 15$ FTEs), and (3) an increase in work hours for some veterinarians reporting the ED role code ($n = 5$ FTEs).

Table 2: Counts of FTE practising veterinarians by work role and year, 2008-2011.

Workforce role	Year			
	2008	2009	2010	2011
Clinician	1,382	1,547	1,481	1,525
Consultant	72	87	93	95
Education	60	71	55	107
Manager	146	109	139	143
Other	26	36	30	26
Technical	304	281	265	286
Not stated	5	0	0	0
Total	1,993	2,130	2,063	2,182

Work type

Counts of FTE veterinarians by work type and year are shown in Table 3. Changes in work type definitions after the first year of the work force survey (2008) mean that attention should focus on changes from 2009 to 2011. Since 2009 counts of FTE veterinarians working with companion animals have remained relatively static. There has been a moderate increase in the number of FTEs working in a regulatory role.

Table 3: Counts of FTE practising veterinarians by work type and year, 2008-2011.

Work type	Year			
	2008	2009	2010	2011
Beef cattle	38	21	26	23
Companion animals	792	782	789	773
Dairy cattle	349	286	297	307
Equine	153	164	153	163
Large animals	32	113	102	95
Miscellaneous	127	124	115	158
Monogastric	8	9	11	10
Mixed animal practice	67	238	192	244
Other	104	62	44	37
Practice management	71	62	67	74
Regulatory	225	253	250	277
Small ruminants	30	15	16	18
Total	1,993	2,127	2,063	2,179

Workload

Hours worked by age and gender

Table 4 shows the average routine work hours worked per week by age and gender. Figure 2 shows the same data as a box and whisker plot. In this context 'routine work hours' includes work carried out as a veterinarian during business hours in addition to veterinary work done while on call.

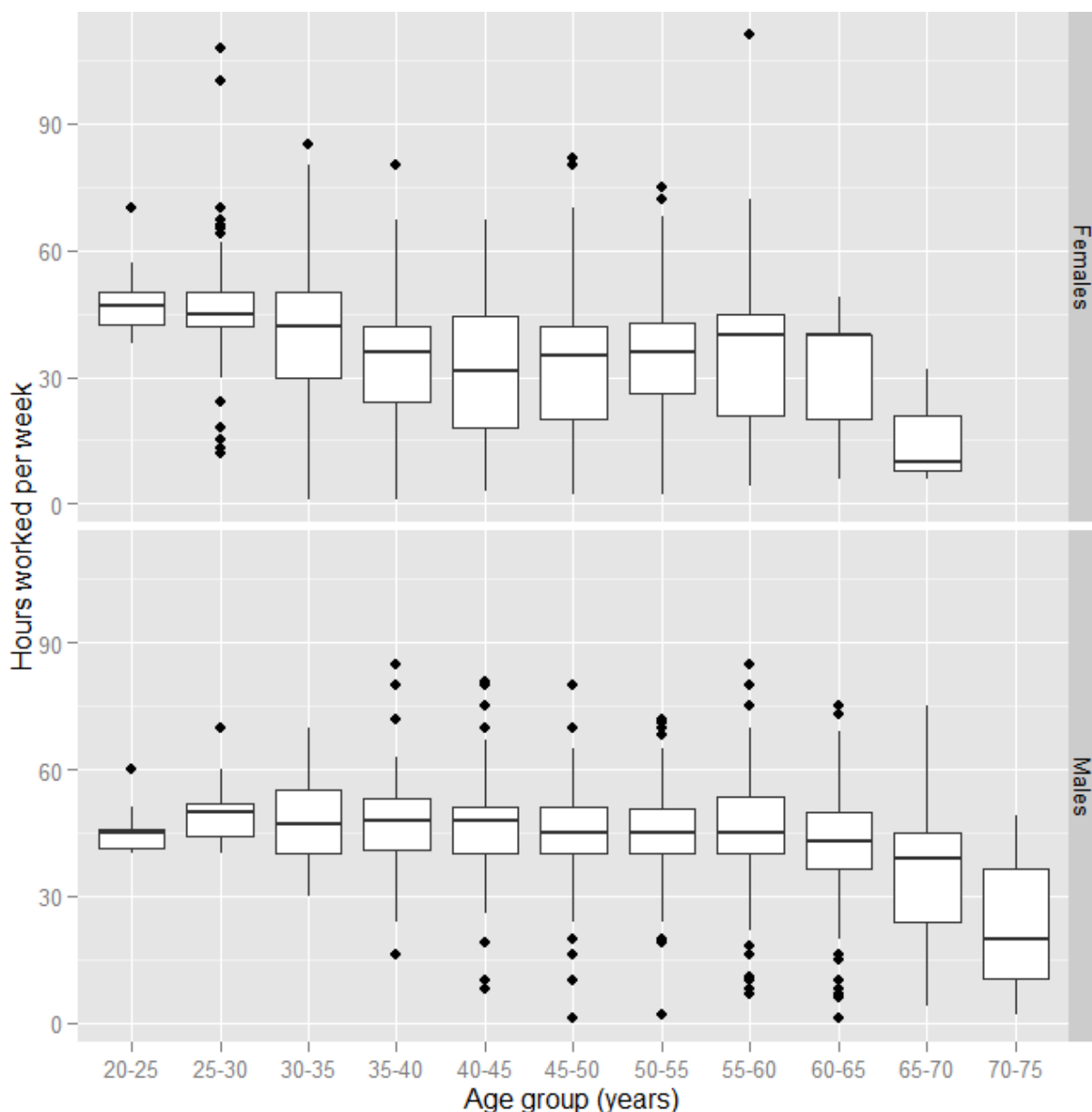


Figure 2: Box and whisker plots showing the distribution of hours worked per week by age group and gender, 2011. In the above plot the points represent the median number of hours worked per week for each age group. The lower and upper bound of the boxes represent the 25th and 75th quantiles of the distribution of work hours, respectively. The lower and upper whiskers represent the lower and upper bounds of the 95% confidence interval around the distribution of work hours. The solid circles represent outliers.

For all practising veterinarians the average number of routine work hours per week in 2011 was 41. Women worked a similar number of hours to men during their twenties. After the age of 30, men worked more hours than women, with the difference greatest in the 40-44 age group.

For men, average routine work hours per week were relatively static across age groups, decreasing sharply after the age of 60 (Figure 2). For women average routine work hours per week decreased after 25 and remained relatively static between 35 and 55.

Table 4: Average routine work hours per week by practising veterinarians in their main work role, by age and gender, 2011. Routine work includes activities carried out as a veterinarian during business hours as well as veterinary work done while on call.

Gender	Age group (years)										
	20-24	25-29	30-34	34-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
Male	45	49	48	48	48	46	46	46	42	35	23
Female	47	46	39	34	31	33	35	37	32	16	-
Total	47	47	42	38	39	39	42	44	41	34	23

Table 5 shows that the average number of hours worked per week for both men and women has decreased by one hour between 2008 and 2011.

Table 5: Average routine work hours per week by practising veterinarians in their main role, by gender and year, 2008-2011.

Gender	Year			
	2008	2009	2010	2011
Male	46	46	45	45
Female	38	38	37	37
Total	42	42	41	41

Hours on call by work role

When completing the workforce survey veterinarians were asked to record the additional hours when they were on call but were not required to work. If no on-call hours are reported, the veterinarian was either not on call, or chose not to provide details of their on-call hours. Table 6 shows counts of veterinarians by on-call hours per week and main work type. Fifty five percent of veterinarians reported no on-call hours. Relatively large numbers of veterinarians working with horses and monogastrics reported that they spent more than 50 hours per week on call.

Table 6: Counts of practising veterinarians by number of on-call hours per week in main work type, 2011.

Work type	Number of on-call hours per week						Total
	None	1-4	5-9	10-19	20-49	≥50	
Beef cattle	6	0	3	4	1	0	14
Companion animals	504	34	122	120	39	47	866
Dairy cattle	88	3	98	121	12	11	333
Equine	41	0	26	36	2	22	127
Large animals	42	0	20	23	1	3	89
Miscellaneous	122	0	8	9	4	2	145
Monogastric	6	0	1	0	0	2	9
Mixed animal practice	58	3	55	68	15	16	215
Other	24	1	6	0	0	3	34
Practice management	25	2	3	6	1	2	39
Regulatory	264	0	4	4	3	10	285
Small ruminants	7	0	1	1	2	1	12
Total	1,187	43	347	392	80	119	2,168

Geographic distribution

Regional population counts were derived from the National Population Estimates for June 2011 from Statistics New Zealand (Anonymous 2011).¹ Regional livestock population counts were derived from the October 2012 version of AgriBase (Sanson & Pearson, 1997). Livestock population counts were then expressed in terms of livestock units (LSUs). One LSU was defined as 250 kg liveweight with cattle (beef and dairy) contributing 2 LSUs, sheep 0.2 LSUs, and pigs 0.5 LSUs.

Numbers of practising veterinarians, population counts, livestock unit counts and the numbers of practising veterinarians per 100,000 head of human population and numbers of practising veterinarians per 100,000 LSUs for veterinarians taking out an APC in 2012 are shown in Table 7. The same data by territorial land authority are provided in Appendix 1.

Table 7: Counts of practising veterinarians by region of main work site, 2011.

Region	Vets ^a	Population ^b	LSU ^c	Vets/pop ^d	Vets/LSU ^e
Auckland	394	14.7	9.7	27	41
Bay of Plenty	80	2.8	12.0	28	7
Canterbury	311	5.6	35.9	56	9
East Coast	31	0.5	9.5	67	3
Hawkes Bay	75	1.6	17.3	48	4
Manawatu	265	2.3	34.6	114	8
Marlborough	22	0.5	3.3	48	7
Northland	84	1.6	18.7	53	4
Otago	104	2.1	23.5	49	4
Southland	107	0.9	24.3	113	4
Taranaki	50	1.1	16.5	46	3
Tasman-Nelson	49	0.9	3.2	52	15
Waikato	422	4.1	48.3	103	9
Wellington	258	4.9	9.3	53	28
West Coast	20	0.3	4.2	61	5
Total	2,272	43.9	270.2	52	8

^a Counts of practising veterinarians.

^b × 100,000.

^c × 100,000.

^d Number of practising veterinarians per 100,000 head of population.

^e Number of practising veterinarians per 100,000 livestock units.

Throughout New Zealand the number of practising veterinarians per 100,000 head of population was 52. The number of practising veterinarians ranged from 26 per 100,000 in the Auckland to 114 per 100,000 in the Manawatu.

A colour shaded map showing the number of practising veterinarians per 100,000 head of population by TLA is shown in Figure 3. Figure 4 shows the number of practising veterinarians per 100,000 LSUs. Figures 5 and 6 show, for the North and South Islands (respectively), the change in veterinarian counts per TLA in 2011 relative to 2010. In 2010-2011 there were positive changes in the number of veterinarians per TLA in most areas of the North Island, particularly the Waikato and Taranaki (Figure 5). There were positive changes in veterinarian counts in most TLAs in the South Island; the only exception being the West Coast (Figure 6).

¹ In previous reports regional population counts were based on the 2006 census.

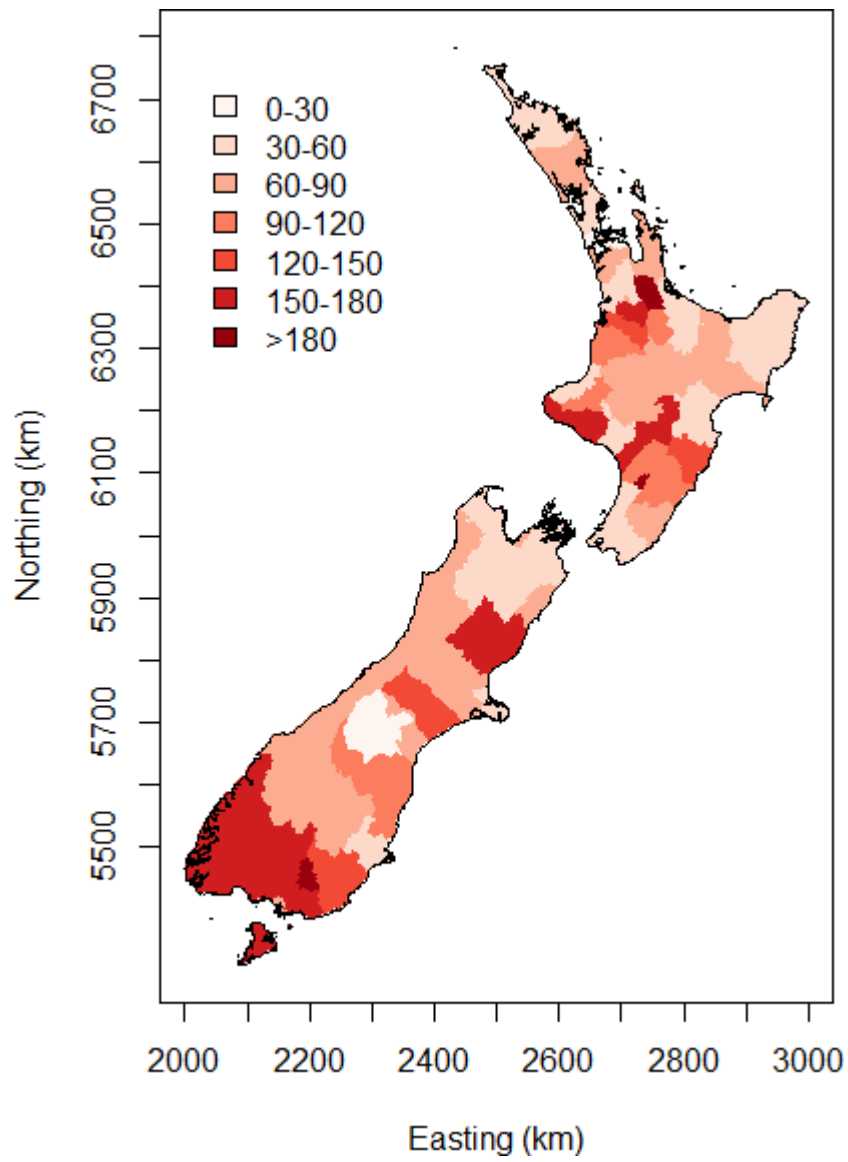


Figure 3: Map of New Zealand showing the number of practising veterinarians per 100,000 head of population in 2011 by territorial land authority.

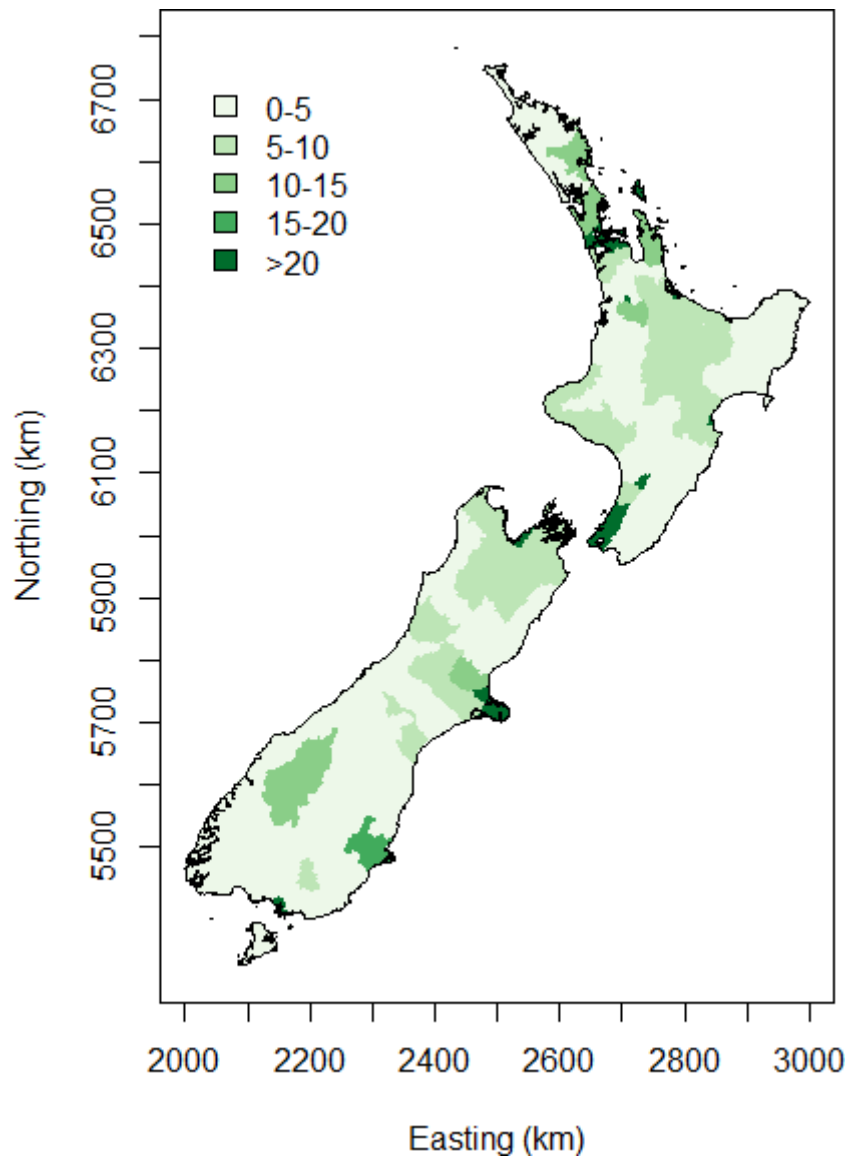


Figure 4: Map of New Zealand showing the number of practising veterinarians per 100,000 livestock units in 2011 by territorial land authority.

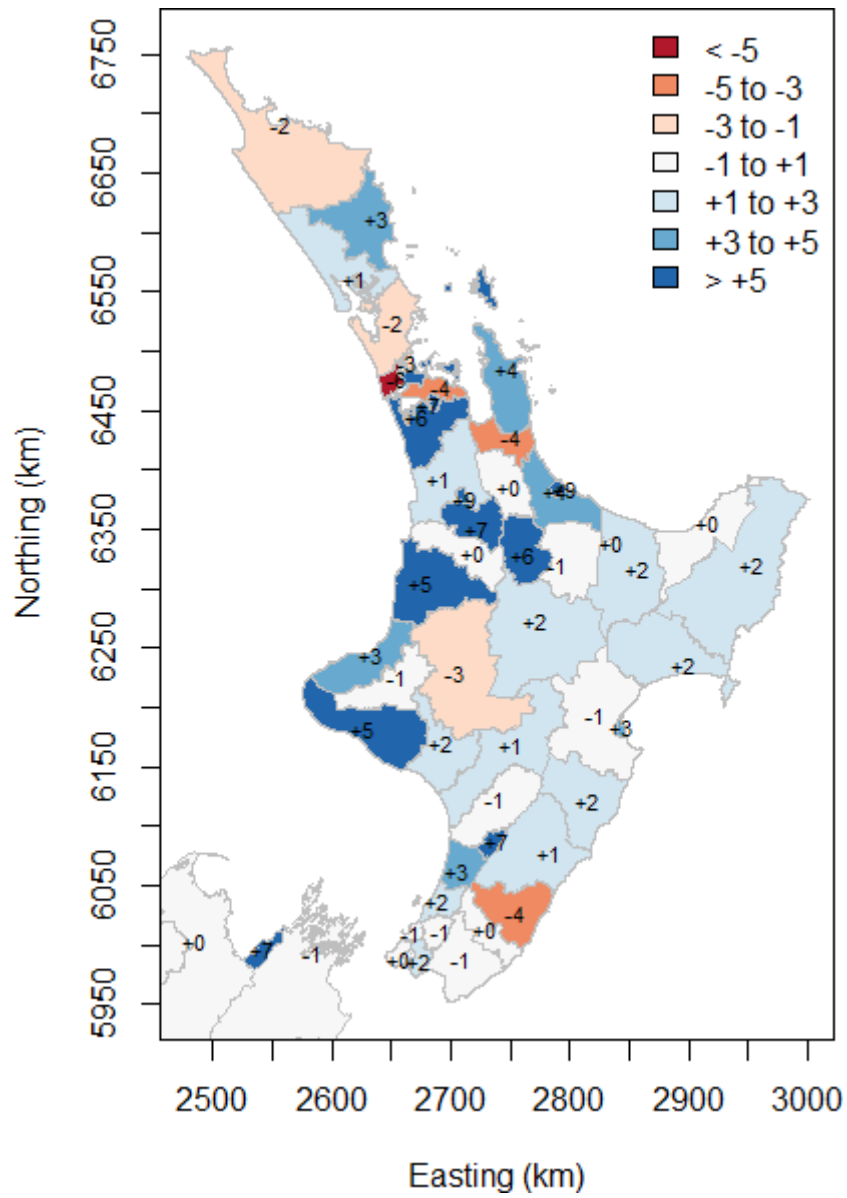


Figure 5: Map of the North Island of New Zealand showing the change in practising veterinarian counts per TLA in 2011 relative to 2010.

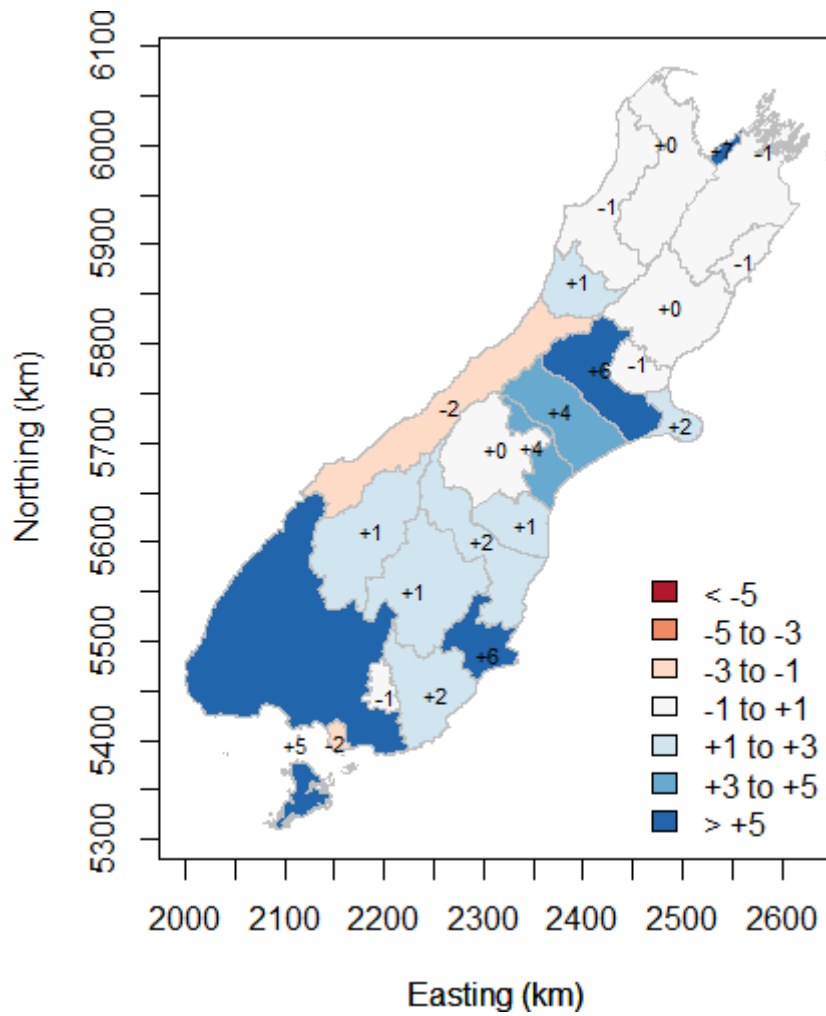


Figure 6: Map of the South Island of New Zealand showing the change in practising veterinarian counts per TLA in 2011 relative to 2010.

Practising veterinarian counts in each of the Rural Bonding Scheme TLAs are provided in Table 8. Since 2009 the net change in the number of veterinarians in these areas ranged from 0 in Westland to +6 in Southland.

Table 8: Counts of practising veterinarians in Rural Bonding Scheme TLAs, 2009-2012.

Work role	Year			
	2009	2010	2011	2012
Gisborne	22	23	23	25
Wairoa	5	7	5	7
Tararua	14	15	18	19
Grey	7	10	7	8
Westland	6	7	8	6
Southland	39	38	40	45
Gore	22	20	25	24

Gender

Work role

Table 9 shows the numbers of male and female FTEs in the 2011 workforce by work role. Proportions of women by work role for 2008-2011 are shown in Table 10. The overall proportion of women FTEs in the 2011 workforce was 45%, an increase from 42% recorded in 2008. In 2011 women were under-represented in consultant, managerial and technical roles and over-represented in the field of education.

Table 9: Counts of FTE practising veterinarians by work role and gender, 2011.

Work role	Female	Male	Total
Clinician	743	781	1,524
Consultant	27	69	96
Education	58	48	106
Manager	40	103	143
Other	11	16	27
Technical	112	174	286
Total	991	1,191	2,182

Table 10: Proportion of women FTE practising veterinarians by work role, 2008-2011.

Work role	Year			
	2008	2009	2010	2011
Clinician	45%	47%	47%	49%
Consultant	23%	26%	25%	28%
Education	50%	47%	57%	55%
Manager	30%	23%	26%	28%
Other	30%	35%	32%	41%
Technical	34%	36%	35%	39%
Total	42%	43%	43%	45%

Work type

Table 11 shows the numbers of male and female FTEs in the 2011 workforce by work type. Proportions of women by work type for 2008-2011 are shown in Table 12.

Table 11: Counts of FTE practising veterinarians by work type and gender, 2011.

Work type	Gender		
	Female	Male	Total
Beef cattle	7	16	23
Companion animals	451	322	773
Dairy cattle	119	187	306
Equine	65	98	163
Large animals	23	72	95
Miscellaneous	75	83	158
Monogastric	2	9	10
Mixed animal practice	107	137	244
Other	17	20	37
Practice management	16	58	74
Regulatory	102	175	277
Small ruminants	6	11	18
Total	990	1,189	2,179

Table 12: Proportion of women FTE practising veterinarians by work type, 2008-2011.

Work type	Year			
	2008	2009	2010	2011
Beef cattle	30%	25%	31%	29%
Companion animals	54%	56%	56%	58%
Dairy cattle	34%	35%	36%	39%
Equine	39%	39%	40%	40%
Large animals	26%	26%	23%	24%
Miscellaneous	37%	39%	40%	48%
Monogastric	3%	8%	10%	15%
Mixed animal practice	32%	42%	42%	44%
Other	44%	48%	44%	47%
Practice management	19%	25%	19%	22%
Regulatory	31%	34%	34%	37%
Small ruminants	34%	23%	42%	36%
Total	42%	43%	43%	45%

Gender distribution within work type has changed little over the four years in which the workforce survey has been carried out. Women dominate companion animal practice. Since 2008 the proportion of women working with monogastric species has also steadily increased.

International veterinary graduates

In 2012 the proportion of international graduates (i.e. veterinarians who obtained their primary veterinary qualification in a country that was not New Zealand) was 28% (Table 13). Graduates from the United Kingdom comprised the largest group of international graduates (221 of 2,270, 10%) followed by Australia (127 of 2,270, 6%). International graduate numbers and the country of origin of international graduates has changed little over the four years in which the workforce survey has been carried out. Exceptions include a decrease in numbers of Australian graduates and an increase in the number of graduates from Europe and the United Kingdom.

Table 13: Counts of practising veterinarians by country of qualifying degree, 2009-2012^a

Work type	Year			
	2009	2010	2011	2012
Australia	145	137	123	127
European Union ^a	83	98	100	106
New Zealand	1,467	1,532	1,531	1,634
North America	59	61	56	58
Other	88	96	99	100
Other European	24	25	25	24
United Kingdom	186	198	206	221
Total	2,052	2,147	2,140	2,270

^a from VCNZ Register of Veterinarians

Work role

The proportions of international veterinary graduates in each of the specified work roles have changed little over the four years in which the workforce survey has been carried out (Tables 14 and 15). Work roles with the highest proportion of international graduates include education (51% in 2011) followed by technical (40% in 2011).

Table 14: Counts of FTE practising veterinarians by work role and country where first veterinary degree obtained, 2011.

Work role	Country		
	New Zealand	International	Total
Clinician	1,150	375	1,525
Consultant	74	21	95
Education	53	54	107
Manager	116	27	143
Other	17	10	26
Technical	172	114	286
Total	1,580	601	2,181

Table 15: Proportion of FTE international veterinary graduates by work role, 2008-2011.

Work role	Year			
	2008	2009	2010	2011
Clinician	25%	25%	25%	25%
Consultant	29%	26%	33%	22%
Education	44%	47%	47%	51%
Manager	26%	27%	21%	19%
Other	38%	31%	40%	36%
Technical	40%	41%	40%	40%
Total	28%	28%	28%	28%

Work type

Table 16 shows counts of FTE veterinarians by work type and international graduate status for 2011. Table 17 shows the proportion of international veterinary graduates in the workforce by work type and year. As noted for work role, the proportion of international graduates has changed little over the four years in which the workforce survey has been carried out. In the clinical work type categories (beef cattle, companion animals, dairy cattle, equine, large animals, mixed animals and small ruminants) international graduates ranged from 20% to 25% of all FTEs. In 2011 63% of FTEs working with monogastric species and 39% of FTEs working in regulatory areas were international graduates.

Table 16: Counts of FTE practising veterinarians by work type and country where first veterinary degree obtained, 2011.

Work type	Graduate status		
	New Zealand	International	Total
Beef cattle	19	4	23
Companion animals	585	188	773
Dairy cattle	237	70	307
Equine	113	51	164
Large animals	79	16	95
Miscellaneous	90	68	158
Monogastric	4	7	10
Mixed animal practice	180	64	244
Other	30	7	37
Practice management	61	13	74
Regulatory	169	108	277
Small ruminants	14	4	18
Total	1,581	600	2,180

Table 17: Proportion of FTE international veterinary graduates by work type, 2008-2011.

Work type	Year			
	2008	2009	2010	2011
Beef cattle	28%	31%	29%	16%
Companion animals	24%	25%	25%	24%
Dairy cattle	25%	27%	23%	23%
Equine	36%	36%	37%	31%
Large animals	23%	16%	21%	17%
Miscellaneous	40%	45%	39%	43%
Monogastric	51%	66%	69%	63%
Mixed animal practice	21%	21%	22%	26%
Other	33%	23%	22%	18%
Practice management	19%	23%	18%	18%
Regulatory	41%	41%	41%	39%
Small ruminants	15%	18%	19%	21%
Total	28%	28%	28%	28%

Retention

New Zealand graduates

Table 18 and Figure 8 provide retention rates for successive cohorts of New Zealand graduates registering with the VCNZ for the first time from 2002 to 2011.

Table 18 provides counts of the number of veterinary science graduates from Massey University in each year. In 2002 there were 73 individuals in the final year class that went on to graduate with the degree of BVSc at the graduation ceremony in 2003. Numbers graduating and numbers taking out an APC with VCNZ for the first time differ (particularly for 2002 to 2008) because of the tendency for graduates to take out an APC for the first time after their return from a period of working overseas.

Table 18: Counts (and percentages) of New Zealand veterinary graduates taking out an APC with the VCNZ one to eight years following the year of first registration, 2002-2011.

Year first registered	Grad ^a	Year								
		0	1	2	3	4	5	6	7	8
2002	73	97 (100%)	79 (81%)	78 (80%)	70 (72%)	58 (60%)	59 (61%)	58 (60%)	61 (63%)	60 (62%)
2003	68	86 (100%)	79 (92%)	73 (85%)	69 (80%)	62 (72%)	63 (73%)	59 (69%)	54 (63%)	57 (66%)
2004	70	47 (100%)	42 (89%)	40 (85%)	43 (91%)	33 (70%)	34 (72%)	35 (74%)	36 (77%)	33 (70%)
2005	61	92 (100%)	68 (74%)	65 (71%)	60 (65%)	54 (59%)	57 (62%)	56 (61%)	52 (57%)	-
2006	87	48 (100%)	35 (73%)	28 (58%)	28 (58%)	24 (50%)	25 (52%)	25 (52%)	-	-
2007	80	95 (100%)	75 (79%)	71 (75%)	57 (60%)	53 (56%)	50 (53%)	-	-	-
2008	95	71 (100%)	65 (92%)	50 (70%)	47 (66%)	42 (59%)	-	-	-	-
2009	95	97 (100%)	90 (93%)	79 (81%)	67 (69%)	-	-	-	-	-
2010	97	72 (100%)	63 (88%)	59 (82%)	-	-	-	-	-	-
2011	90	113 (100%)	97 (86%)	-	-	-	-	-	-	-

^a Total number of veterinary graduates from Massey University for the respective year.

Table 18 shows that, on average, 76% of New Zealand graduates are retained 2 years after first registering with VCNZ. By the third year 70% are retained, 61% by year four and 62% by year five. It is not possible to make definitive general statements without more data, but it appears that retention rates level out to between 60% and 65% in years 5 to 10 after first registration date.

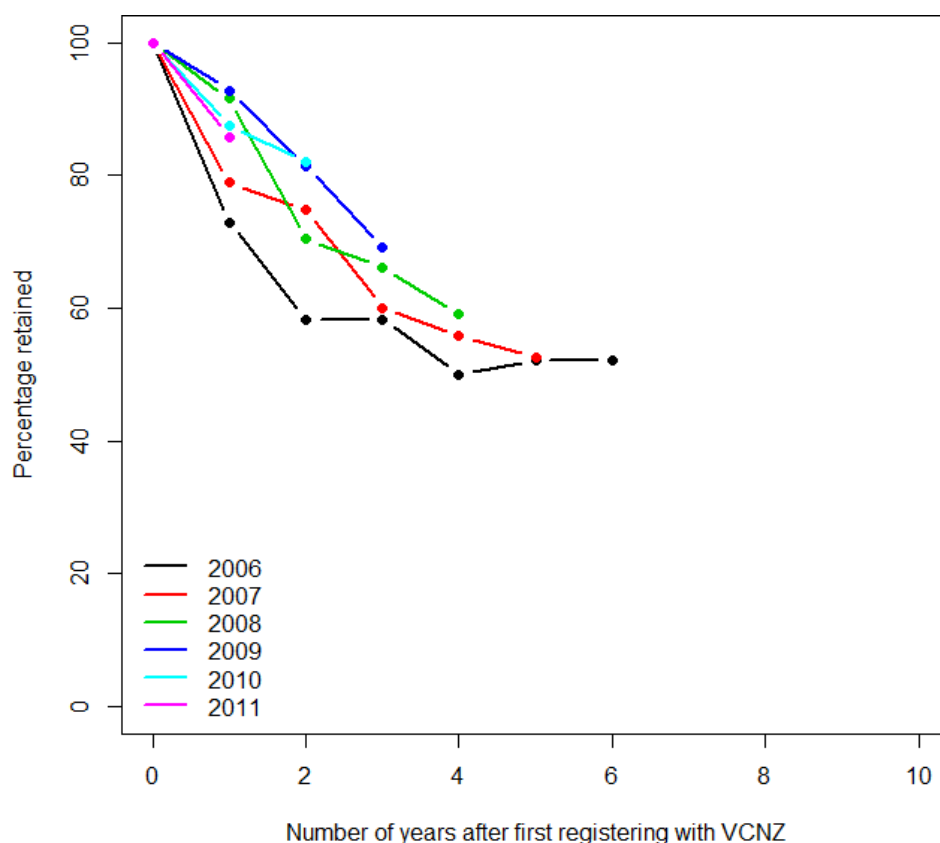


Figure 8: Line plot showing the percentage of New Zealand veterinary graduates taking out an APC with VCNZ as a function of the number of years since first registering with VCNZ.

International veterinary graduates

Table 19 and Figure 9 provide retention rates for successive cohorts of international graduates registering with the VCNZ for the first time from 2002 to 2011.

Table 19: Counts (and percentages) of international veterinary graduates taking out an APC with the VCNZ one to eight years following the year of first registration, 2002-2011.

Year first registered	Year									
	0	1	2	3	4	5	6	7	8	
2002	126 (100%)	72 (57%)	57 (45%)	57 (45%)	51 (40%)	46 (37%)	39 (31%)	37 (29%)	38 (30%)	
2003	136 (100%)	80 (59%)	67 (49%)	61 (45%)	50 (37%)	47 (35%)	46 (34%)	43 (32%)	41 (30%)	
2004	104 (100%)	71 (68%)	60 (58%)	55 (53%)	52 (50%)	42 (40%)	42 (40%)	40 (38%)	36 (35%)	
2005	137 (100%)	87 (64%)	70 (51%)	59 (43%)	59 (43%)	50 (36%)	48 (35%)	43 (31%)	-	
2006	127 (100%)	74 (58%)	49 (39%)	46 (36%)	39 (31%)	34 (27%)	28 (22%)	-	-	
2007	130 (100%)	72 (55%)	52 (40%)	45 (35%)	38 (29%)	34 (26%)	-	-	-	
2008	106 (100%)	75 (71%)	61 (58%)	53 (50%)	40 (38%)	-	-	-	-	
2009	93 (100%)	53 (57%)	33 (35%)	28 (30%)	-	-	-	-	-	
2010	96 (100%)	60 (63%)	45 (47%)	-	-	-	-	-	-	
2011	108 (100%)	37 (34%)	-	-	-	-	-	-	-	

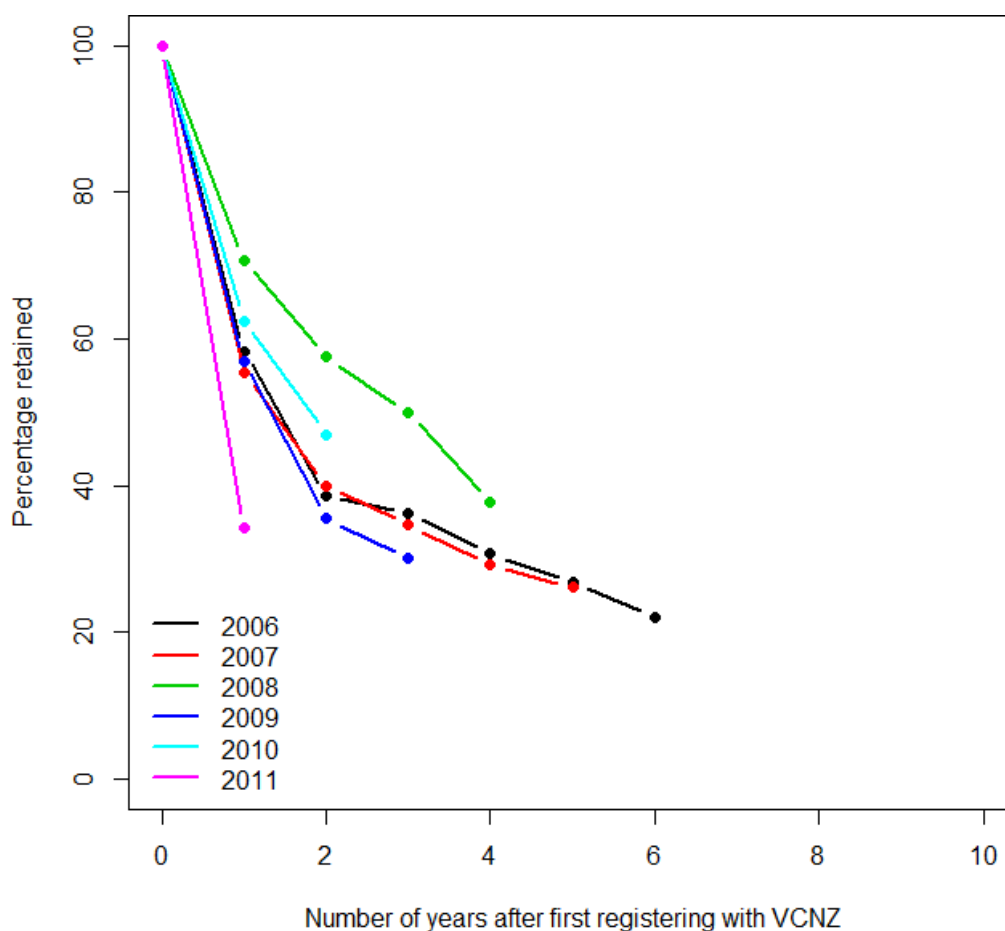


Figure 9: Line plot showing the percentage of international veterinary graduates taking out an APC with VCNZ as a function of the number of years since first registering with VCNZ.

Table 19 shows that, on average, 47% of international graduates are retained 2 years after first registering with VCNZ. By the third year 42% are retained, 38% by year four and 33% by year five. Retention rates for international graduates level out to between 20% and 30% by years 5 to 10 after first registration date.

Survey method

Workforce information is collected as part of the renewal of annual practising certificates (APCs).

The eligible population for the workforce survey questionnaire included practising, non-practising and retired veterinarians whose details appear on the register of veterinarians held by VCNZ.

The analyses in this report are presented in two categories. The first provides details of the status of the veterinary profession based on veterinarians who applied for an APC for 2012-2013. The second relates specifically to the questionnaire where veterinarians were asked to describe key aspects of their work activities for the twelve month period from 1 January to 31 December 2011 (inclusive). In the questionnaire work details were collected in the categories 'Employment', 'Role' and 'Work type' for up to four individual work activities. A copy of the questionnaire is provided in Appendix 2.

A total of 2840 APC forms were sent out between January and April 2012 by VCNZ to practising and non-practising veterinarians. By June 2012 2378 APC forms had been returned of which 2243 included a completed workforce questionnaire. The percentage of APC forms returned was 84%, similar to the 80% recorded for 2011. Of the veterinarians that returned a completed APC form (presumably those that took out an APC for 2012-2013) the response rate to the questionnaire was 94%.

The analyses relating to the status of those applying for an APC or non-practising status for 2012-2013 are based on the 2378 veterinarians that returned a completed APC form by June 2012. The analyses relating to work activities carried out in 2011 are based on the 2243 completed questionnaires.

Table 20: Counts of APC forms sent out, APC forms returned to VCNZ, workforce questionnaires completed and questionnaire response rates, 2010-2012.

Work type	Year		
	2010	2011	2012
APC forms sent out	2833	2861	2840
APC forms returned	2251	2278	2378
Percent returned ^a	79%	80%	84%
Questionnaires completed	2122	2140	2243
Percent response ^b	94%	94%	94%

^a Number of APC forms returned to VCNZ ÷ number of APC forms sent out.

^b Number of completed questionnaires ÷ number of APC forms returned to VCNZ.

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Appendix 1

Table 21: Counts of practising veterinarians with a valid APC in 2012, territorial land authority human and livestock unit population counts and the estimated number of veterinarians per 100,000 head of population and the estimated number of veterinarians per 100,000 livestock units.

Territorial land authority	Vets ^a	Popula tion ^b	LSU ^c	Vets/pop ^d	Vets/LSU ^e
Far North District	23 (-2)	58	735	39	3
Whangarei District	49 (+3)	80	487	61	10
Kaipara District	15 (+1)	19	646	78	2
Rodney District	47 (-2)	99	391	47	12
North Shore City	28 (-3)	226	1	12	1579
Waitakere City	21 (-6)	210	6	10	330
Auckland City	185 (+33)	460	19	40	929
Manukau City	36 (-4)	367	54	10	66
Papakura District	32 (+7)	46	17	69	186
Franklin District	45 (+6)	63	475	71	9
Thames-Coromandel District	18 (+4)	27	153	67	12
Hauraki District	14 (-4)	18	375	75	4
Waikato District	21 (+1)	64	908	33	2
Matamata-Piako District	74 (0)	32	841	231	9
Hamilton City	106 (+9)	145	12	73	828
Waipa District	76 (+7)	46	599	165	13
Otorohanga District	11 (0)	9	556	118	2
South Waikato District	24 (+6)	22	406	105	6
Waitomo District	11 (+5)	9	531	114	2
Taupo District	23 (+2)	34	442	67	5
Western BOP District	23 (+4)	45	305	50	8
Tauranga City	38 (+9)	115	11	33	328
Rotorua District	36 (-1)	68	414	52	9
Whakatane District	23 (+2)	34	354	67	6
Kawerau District	0 (0)	6	2	0	0
Opotiki District	4 (0)	8	109	45	4
Gisborne District	25 (+2)	46	948	54	3
Wairoa District	7 (+2)	8	367	84	2
Hastings District	39 (-1)	75	623	52	6
Napier City	17 (+3)	57	14	29	119
Central Hawke's Bay District	18 (+2)	13	727	133	2
New Plymouth District	40 (+3)	73	422	54	9
Stratford District	10 (-1)	9	299	109	3

South Taranaki District	47 (+5)	26	929	175	5
Ruapehu District	10 (-3)	13	639	75	2
Wanganui District	24 (+2)	43	292	55	8
Rangitikei District	24 (+1)	14	697	162	3
Manawatu District	29 (-1)	30	625	97	5
Palmerston North City	139 (+7)	82	54	169	256
Tararua District	19 (+1)	17	940	107	2
Horowhenua District	17 (+3)	30	210	55	8
Kapiti Coast District	26 (+2)	49	36	52	71
Porirua City	19 (-1)	52	11	36	162
Upper Hutt City	22 (-1)	41	11	53	186
Lower Hutt City	31 (+2)	103	3	30	1002
Wellington City	88 (0)	200	15	44	585
Masterton District	16 (-4)	23	349	68	5
Carterton District	5 (0)	7	192	65	3
South Wairarapa District	4 (-1)	9	310	42	1
Tasman District	18 (0)	48	307	37	6
Nelson City	31 (+7)	46	9	67	317
Marlborough District	22 (-1)	45	330	48	7
Kaikoura District	3 (-1)	3	87	78	3
Buller District	6 (-1)	10	139	59	4
Grey District	8 (+1)	13	123	58	6
Westland District	6 (-2)	8	157	67	4
Hurunui District	16 (0)	11	678	142	2
Waimakariri District	31 (-1)	48	267	64	12
Christchurch City	137 (+2)	367	39	37	347
Selwyn District	30 (+6)	41	558	73	5
Ashburton District	38 (+4)	30	920	126	4
Timaru District	31 (+4)	44	391	69	8
Mackenzie District	1 (0)	4	236	25	0
Waimate District	7 (+1)	7	404	92	2
Waitaki District	23 (+2)	20	493	110	5
Central Otago District	13 (+1)	18	468	71	3
Queenstown-Lakes District	15 (+1)	28	125	52	12
Dunedin City	47 (+6)	126	298	37	16
Clutha District	23 (+2)	17	960	131	2
Southland District	45 (+5)	29	2	152	2
Gore District	24 (-1)	12	279	195	9
Invercargill City	38 (-2)	53	46	72	81
Total	2272 (+132)	4	27	52	8

^a Numbers in parentheses indicate the change in veterinarian counts from 2010.

^b Based on 2006 New Zealand Census of Population and Dwellings.

- ° Livestock units.
- ° Veterinarians per 100,000 head of population.
- ° Veterinarians per 100,000 livestock units.