

# Facts & Figures

## Employment of female and male graduates of US veterinary medical colleges, 2013

- In a survey of US veterinary students expected to graduate in spring 2013, mean starting salary was \$56,433 for male respondents who had accepted full-time positions and \$48,722 for female respondents.
- When salaries for positions in advanced education were excluded, mean full-time starting salary increased to \$70,008 for males and \$65,968 for females.
- Overall, 90.2% of respondents reported having educational debt. Mean educational debt was \$153,295 for males with debt and \$164,650 for females with debt. When all respondents were considered (including those without any reported educational debt), mean educational debt was \$136,320 (median, \$142,000) for male respondents and \$149,121 (median, \$154,500) for female respondents.

In cooperation with the 28 US schools and colleges of veterinary medicine, the AVMA conducted its annual survey of fourth-year veterinary medical students in the spring of 2013. Surveys were sent to 2,706 veterinary students expected to graduate in spring 2013, and responses were received from 2,593 (95.8%; Appendix). Information regarding year-2013 graduates' employment choices, expected salaries, and estimated educational indebtedness was described in an earlier report.<sup>1</sup> Results reported here include an analysis of that information according to gender; additional information on employment benefits and demographic characteristics is also provided. Of students who responded to the survey, 22.6% (587) were male and 77.4% (2,006) were female. Base sizes in the present report vary because some respondents did not answer all questions.

### Employment Preferences, Offers, and Acceptances

At the time of the survey, 96.1% (2,491/2,593) of respondents indicated that they were actively seeking employment or advanced education in veterinary medicine. The remaining respondents (3.9% [102]) indicated that they were not actively seeking such positions. Respondents seeking veterinary positions were asked to indicate their top 3 employment preferences, and 557 males and 1,932 females answered the question. Em-

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ployment preferences were similar for male and female respondents; for both groups, the first choice was employment in the private sector (65.4% [364] of males and 59.4% [1,148] of females), followed by advanced education (30.3% [169] of males and 36.1% [698] of females), and public and corporate employment (3.6% [20] of males and 4.2% [82] of females). The remaining respondents (8) indicated preferences for other types of veterinary employment.

Among respondents seeking veterinary positions, 85.5% (477/558) of males and 78.7% (1,520/1,931) of females had received  $\geq 1$  offer of employment or advanced education at the time of the survey. Of year-2013 male respondents with employment offers, 47.4% had  $>1$  offer and 11.3% had  $\geq 4$  offers (Table 1). Among year-2013 female respondents with employment offers, 36.4% had  $>1$  offer and 4.6% had  $\geq 4$  offers. The mean number of employment offers received was 2.0 for male and 1.6 for female respondents.

Among those who had received offers, similar proportions of male and female respondents had accepted offers of employment (91.8% [438/477] of males and 89.8% [1,364/1,519] of females). These individuals represented 72.3% (1,802/2,491) of the respondents who indicated that they were seeking a veterinary position. Of the respondents who had accepted offers, 77.8% (340/437) of males and 82.6% (1,127/1,364) of females had accepted an offer that matched their first choice, whereas 7.3% (32) of males and 6.8% (93) of females had accepted an offer of employment or advanced education that was not among their top 3 choices.

The distribution of employment types among respondents who had accepted veterinary positions was determined (Table 2). Types of employment accepted most often by male respondents were companion ani-

Table 1—Distribution of numbers of offers of employment received by female and male year-2013 graduates of US veterinary medical colleges.

No. of offers	Female (n = 1,518)		Male (n = 477)	
	No.	Percentage	No.	Percentage
1	965	63.6	251	52.6
2	327	21.5	94	19.7
3	156	10.3	78	16.4
$\geq 4$	70	4.6	54	11.3

Surveys were sent to all students (n = 2,706) at the 28 veterinary medical colleges in the United States who were expected to graduate in spring 2013, and responses were received from 2,593; some respondents did not answer every question. Of 2,491 respondents seeking positions at the time of the survey, 1,997 had received  $\geq 1$  employment offer.

mal exclusive practice (28.5%), internship positions (27.2%), and mixed animal practice (12.8%). For female respondents, types of employment accepted most often were internship positions (40.9%), companion animal exclusive practice (30.9%), and mixed animal practice (8.0%). Respondents entering internships were asked to provide their primary reason for undertaking an internship (Table 3). Most (55.8%) males indicated that they planned to apply for a residency position; 25.7% indicated that they wanted to practice better quality veterinary medicine, and 14.2% believed they needed more training before entering veterinary practice. Among females, 36.5% planned to apply for a residency position, 35.9% indicated that they wanted to practice better quality veterinary medicine, and 21.4% believed they needed more training before entering veterinary practice. Very few (0.9% of males and 1.2% of females) cited earning more money in veterinary medicine as the primary reason for undertaking an internship.

Nearly all respondents entering private practice (98.5% [266/270] of males and 99.0% [665/672] of females) indicated they would be an employee rather than self-employed. Similar percentages of male and fe-

male respondents entering private practice expected to work full-time (98.1% [263/268] vs 95.7% [647/676], respectively).

### Base Starting Salaries and Production-Related Compensation

Survey questions allowed respondents to indicate various means by which they expected to be compensated for work (eg, base salary or stipend only, base salary or stipend with production bonus, and production-based compensation only [in lieu of salary]). Respondents who accepted an offer of employment in 2013 were asked to indicate types of compensation expected.

Among the 424 male respondents who indicated the type of full-time salary they would receive, 66.0% (280) indicated they would receive a guaranteed salary with no option for a production bonus, 29.0% (123) indicated they would receive a base salary with a production bonus, and 1.4% (6) indicated they would receive a salary fully based on production; 3.5% (15) were uncertain. Of the 1,307 female respondents with full-time positions who answered this question, 72.4% (946) indicated they

Table 2—Distribution of employment types among year-2013 graduates\* of US veterinary medical colleges by gender.

Practice type	Female (n = 1,364)		Male (n = 438)	
	No.	Percentage	No.	Percentage
Private practice (all)	682	50.0	271	61.9
Food animal exclusive	11	0.8	18	4.1
Food animal predominant	17	1.2	29	6.6
Mixed animal	109	8.0	56	12.8
Companion animal exclusive	422	30.9	125	28.5
Companion animal predominant	94	6.9	31	7.1
Equine	26	1.9	11	2.5
Other private practice	3	0.2	1	0.2
Public or corporate (all)	42	3.1	19	4.3
University	3	0.2	3	0.7
Uniformed services	23	1.7	11	2.5
State or local government	0	0	0	0
Federal government	2	0.1	0	0
Industry or commercial	2	0.1	4	0.9
Not-for-profit	12	0.9	1	0.2
Advanced education program (all)	640	46.9	148	33.8
Internship (private or academic)	558	40.9	119	27.2
MBA	1	0.1	2	0.5
MPH	9	0.7	3	0.7
MPVM	1	0.1	1	0.2
MS	7	0.5	3	0.7
PhD	10	0.7	6	1.4
Residency	48	3.5	13	3.0
Other advanced education	6	0.4	1	0.2

\*In total, 1,802 respondents had accepted employment offers at the time of the survey.

Table 3—Distribution of the primary reason for undertaking an internship for year-2013 graduates of US veterinary medical colleges by gender.

Reason	Female (n = 513)		Male (n = 113)	
	No.	Percentage	No.	Percentage
To practice better-quality veterinary medicine	184	35.9	29	25.7
Need more training before entering veterinary practice	110	21.4	16	14.2
Plan to apply for residency position	187	36.5	63	55.8
Feel I will earn more money in veterinary medicine by doing an internship	6	1.2	1	0.9
Other	26	5.1	4	3.5

would receive a guaranteed salary with no option for a production bonus, 24.2% (316) indicated they would receive a base salary with a production bonus, 1.1% (14) indicated they would receive a salary fully based on production, and 2.4% (31) were uncertain. The mean number of hours that respondents with full-time employment offers expected to work each week was 55.4 (median, 50.0) for males and 57.4 (median, 55.0) for females.

Mean full-time starting salaries in 2013 among all employer types combined (private, public, and corpo-

rate practice and advanced education programs) were \$56,433 for male and \$48,722 for female respondents (n = 420 and 1,299, respectively; all salary values are reported in nominal dollars and have not been adjusted for inflation). When advanced education salaries were excluded from the analysis, mean full-time starting salaries increased to \$70,008 for males and \$65,968 for females. Mean full-time starting salary for respondents who accepted an offer in private practice was \$70,113 for males (n = 261) and \$66,491 for females (644).

Among male respondents, full-time private practice salaries ranged from a mean of \$57,000 for equine practice to a mean of \$78,394 for food animal exclusive practice (Figure 1). Among female respondents, full-time private practice salaries ranged from a mean of \$43,120 for equine practice to a mean of \$69,160 for companion animal exclusive practice.

### Additional Compensation

Respondents were asked whether they would receive a signing bonus, moving allowance, or emergency case compensation; multiple responses to the question were allowed. In total, 497 respondents (33.3% [141/424] of males and 27.2% [356/1,308] of females) expected to receive ≥ 1 of these types of compensation in addition to their salary. Of these respondents, a signing bonus was expected by 19.6% (27/138) of males and 15.1%

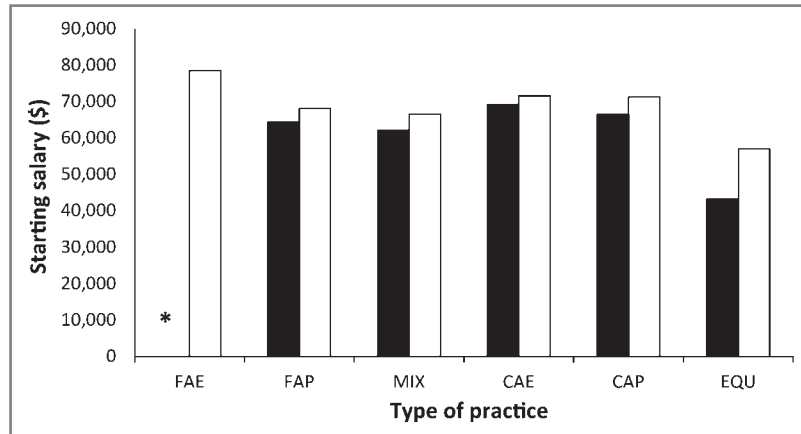


Figure 1—Mean full-time starting salaries of year-2013 male (white bars; n = 261) and female (black bars; 644) graduates of US veterinary medical colleges entering private practice. Salary information was provided by 905 of 953 respondents who had accepted private practice employment offers at the time of the survey. CAE = Companion animal exclusive. CAP = Companion animal predominant. EQU = Equine. FAE = Food animal exclusive. FAP = Food animal predominant. MIX = Mixed animal practice. \*Base size was too small to report a value.

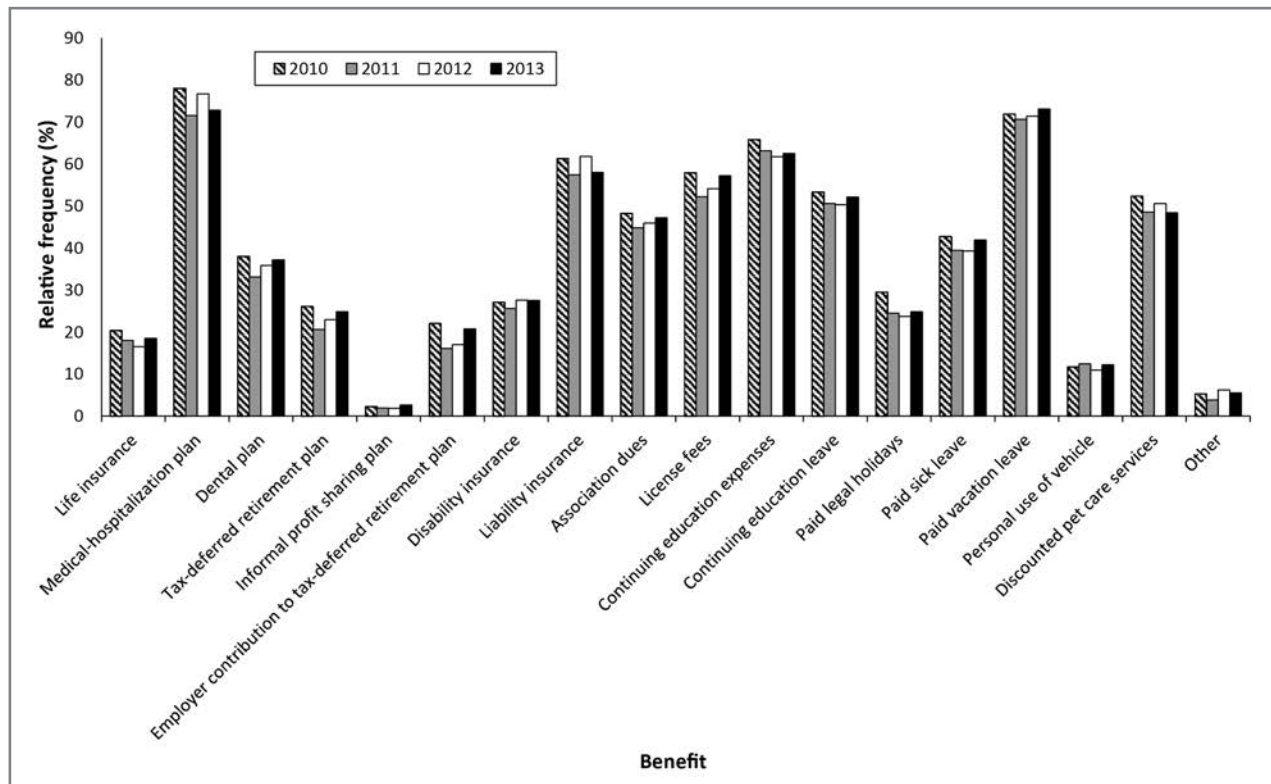


Figure 2—Comparison of frequencies of benefits offered by employers to new graduates of US veterinary medical colleges in 2010, 2011, 2012, and 2013.

(53/350) of females, a moving allowance was indicated by 34.1% (47) of males and 33.1% (116) of females, and emergency case compensation was expected by 66.7% (92) of males and 66.0% (231) of females.

### Additional Benefits

Respondents who accepted employment offers were asked to indicate the additional benefits that would be provided by their new employer. All but 4.8% of respondents (87/1,802; 6.6% [29/438] of males and 4.3% [58/1,364] of females) reported that they would receive  $\geq 1$  of the benefits listed in the survey. In 2013, the compensation packages of more than half of the 1,802 respondents who accepted positions included paid vacation leave (73.1% [1,318]), medical-hospitalization plan (72.8% [1,311]), continuing education expenses (62.5% [1,127]), liability insurance (58.0% [1,045]), license fees (57.2% [1,030]), and continuing education leave (52.1% [938]; Figure 2).

Although the percentages of male and female respondents who expected to receive these benefits

were fairly similar overall, the percentage of males indicating they would receive individual benefits was higher than that of females for most benefits (Table 4). Benefits for which the greatest distribution difference was detected between genders were association dues (53.4% of males vs 45.2% of females), license fees (62.3% of males vs 55.5% of females), and disability insurance (32.6% of males vs 25.8% of females). The benefits reported most often by respondents of both genders were paid vacation leave (males, 73.5%; females, 73.0%) and medical-hospitalization plan (males, 73.7%; females, 72.4%).

### Educational Indebtedness

Most respondents had accumulated educational debt by the time they graduated. Among respondents who answered questions about debt in 2013, 11.1% (65/587) of males and 9.4% (189/2,004) of females did not incur any educational debt. Mean reported educational debt was \$153,295 for

Table 4—Distribution of employment-related benefits offered by employers to year-2013 graduates of US veterinary medical colleges by gender.

Benefit	Female (n = 1,364)		Male (n = 438)	
	No.	Percentage	No.	Percentage
Medical-hospitalization plan	988	72.4	323	73.7
Dental plan	507	37.2	164	37.4
Tax-deferred retirement plan	323	23.7	123	28.1
Informal profit-sharing plan	30	2.2	16	3.7
Employer contribution or match to tax-deferred retirement plan	269	19.7	104	23.7
Life insurance	239	17.5	95	21.7
Disability insurance	352	25.8	143	32.6
Liability insurance	790	57.9	255	58.2
Association dues	617	45.2	234	53.4
License fees	757	55.5	273	62.3
Continuing education expenses	846	62.0	281	64.2
Continuing education leave	699	51.2	239	54.6
Paid legal holidays	335	24.6	112	25.6
Paid sick leave	553	40.5	202	46.1
Paid vacation leave	996	73.0	322	73.5
Personal use of vehicle	144	10.6	75	17.1
Discounted pet care services	669	49.0	204	46.6
Other	85	6.2	15	3.4

Table 5—Demographics of year-2013 graduates of US veterinary medical colleges by gender.

Characteristic	Female		Male		All	
	No.	Value	No.	Value	No.	Value
Mean age (y)	1,999	27.6	587	27.7	2,586	27.7
Marital status (%)						
Single	1,400	70.4	399	68.3	1,799	69.9
Married	542	27.2	176	30.1	718	27.9
Divorced	48	2.4	9	1.5	57	2.2
Respondents with children (%)	100	5.0	63	10.8	163	6.3
Race or ethnicity (%)						
White or Caucasian	1,748	87.8	514	87.7	2,262	87.7
Black or African American	38	1.9	15	2.6	53	2.1
Hispanic	60	3.0	30	5.1	90	3.5
Asian or Pacific Islander	82	4.1	18	3.1	100	3.9
Other race or ethnicity	64	3.2	9	1.5	73	2.8

Marital status information was provided by 1,990 females and 584 males. Information on number of children was provided by 2,002 females and 585 males. Information on race or ethnicity was provided by 1,992 females and 586 males. Units in parentheses apply to the value column.

male respondents who had debt (n = 522; median, \$150,000) and \$164,650 for female respondents who had debt (1,815; median, \$160,000; all values for educational debt are reported in nominal dollars and have not been adjusted for inflation). Among those with debt, 24.1% (126/522) of males and 31.2% (566/1,815) of females had debt ≥ \$200,000. For all respondents, mean debt incurred for veterinary medical college education alone was \$126,603 (median, \$130,000) for males and \$137,887 (median, \$141,000) for females. Mean total educational debt for all respondents was \$136,320 (median, \$142,000) for males and \$149,121 (median \$154,500) for females.

### Graduate Characteristics

Male and female veterinary students were approximately the same age at graduation (mean, 27.7 years for males [n = 587] and 27.6 years for females [1,999]; Table 5). Most respondents (87.7% of males and 87.8% of females) described themselves as white or Caucasian. More than two-thirds (69.9%) of respondents were single and had never married; 68.3% of males and 70.4% of females were in this category. A slightly higher percentage of males were married (30.1%), compared with the percentage of females who were married (27.2%), and a higher percentage of male respondents had children (10.8%), compared with females (5.0%).

### Reference

1. Shepherd AJ, Pikel L. Employment, starting salaries, and educational indebtedness of year-2013 graduates of US veterinary medical colleges. *J Am Vet Med Assoc* 2013;243:983–987.

### Appendix

Response rates for fourth-year students at the 28 colleges of veterinary medicine in the United States who participated in a 2013 survey of employment, starting salaries, and educational indebtedness.

School or college of veterinary medicine	Response rate of graduating class (%)
Auburn University	100
Colorado State University	79
Cornell University	99
Cummings SVM at Tufts University	96
Iowa State University	91
Kansas State University	99
Louisiana State University	100
Michigan State University	97
Mississippi State University	100
North Carolina State University	100
The Ohio State University	89
Oklahoma State University	100
Oregon State University	73
Purdue University	100
Texas A&M University	100
Tuskegee University	100
University of California-Davis	100
University of Florida	97
University of Georgia	100
University of Illinois	94
University of Minnesota	98
University of Missouri-Columbia	99
University of Pennsylvania	86
University of Tennessee	100
University of Wisconsin	100
Virginia-Maryland Regional College of Veterinary Medicine	100
Washington State University	98
Western University of Health Sciences	97
<b>Overall response rate</b>	<b>96</b>

SVM = School of veterinary medicine.  
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