

2022 AVMA REPORT ON THE
ECONOMIC
STATE OF THE
VETERINARY
PROFESSION

Principal contributors

Bridgette Bain, PhD

AVMA Veterinary Economics Division
Senior Economist/Associate Director of Analytics

Frederic B. Ouedraogo, PhD

AVMA Veterinary Economics Division
Senior Economist/Associate Director of Economics

Charlotte Hansen, MS

AVMA Veterinary Economics Division
Assistant Director of Statistical Analysis

Rosemary Radich, MA

AVMA Veterinary Economics Division
Principal Data Scientist, Assistant Director



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Veterinary Economics Division
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American Veterinary Medical Association
1931 N. Meacham Road, Suite 100
Schaumburg, IL 60173
800-248-2862

Executive summary

This State of the Profession report investigates some of the biggest trends and concerns of the veterinary profession, including labor markets, compensation, debt, wellbeing, diversity, and practice characteristics.

We've observed a tightening of the labor market and increases in incomes of veterinarians. New graduates are experiencing the highest rates of job offers ever. Although incomes are increasing, we've also observed increases in student loan debt and the impact of inflation on real dollars.

At the same time, practices are navigating the impact of the pandemic, and it remains to be seen which aspects of the veterinary industry will normalize as time goes on, and which shifts are more enduring. Practices are also dealing with market concentration; talent, time, and space management; and effective and appropriate leveraging of technology.

This report provides a detailed summary of the economic state of the veterinary profession and examines the major trends through the lens of three critical areas:

- Veterinary education
- Veterinary employment
- Veterinary services

Three surveys informed the report:

The **AVMA Senior Survey** gathers information on demographics, debt, compensation, and postgraduate plans of fourth-year students at U.S. and two Caribbean veterinary medical schools and colleges. These data were used in the Market for Veterinary Education section of this report.

The **Census of Veterinarians** collects information on employment, compensation, wellbeing, and other factors. These data were used in the Market for Veterinarians section.

The **Veterinary Practice Owner Survey** gathers information about practice owners and their practices. These data were used in Market for Veterinary Services section.

Our overarching goal is to provide an indispensable resource for three main segments of the veterinary profession:

- New veterinarians entering the workforce
- Practicing and non-practicing veterinarians looking for an enhanced understanding of how economic issues are shaping the profession
- Educational and business leaders in the veterinary sector

We hope the information in this report helps you make the right decisions for your career and your practice with confidence in 2022 and beyond. Thank you for reading.

Market for veterinary education

This section reports data from the AVMA Senior Survey, an annual survey that, in 2021, included fourth-year veterinary students graduating from the 30 U.S. veterinary schools and colleges and from two Caribbean veterinary schools accredited by the AVMA Council on Education (AVMA-COE). The AVMA Senior Survey does not include U.S. citizens graduating from other international AVMA-COE accredited veterinary schools.

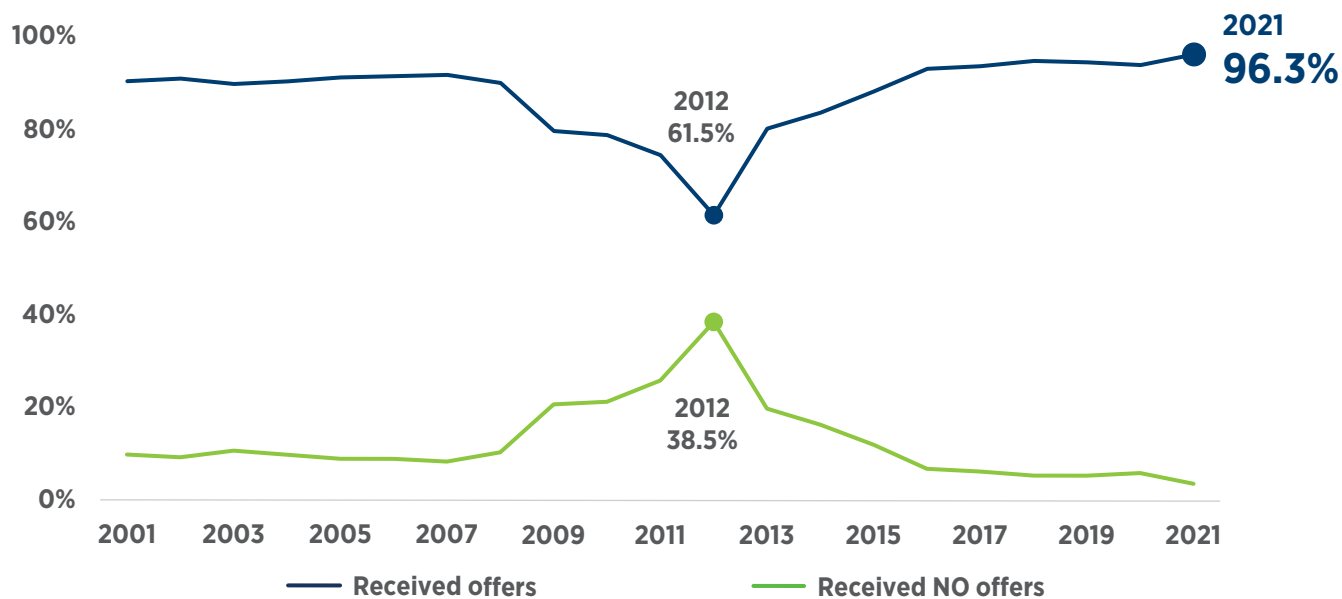
Characteristics of new graduates

The 2021 class of new veterinary school graduates entered into a robust market. One aspect of this is seen in the proportion of graduates receiving postgraduate offers. This section provides details around those offers.

Offers

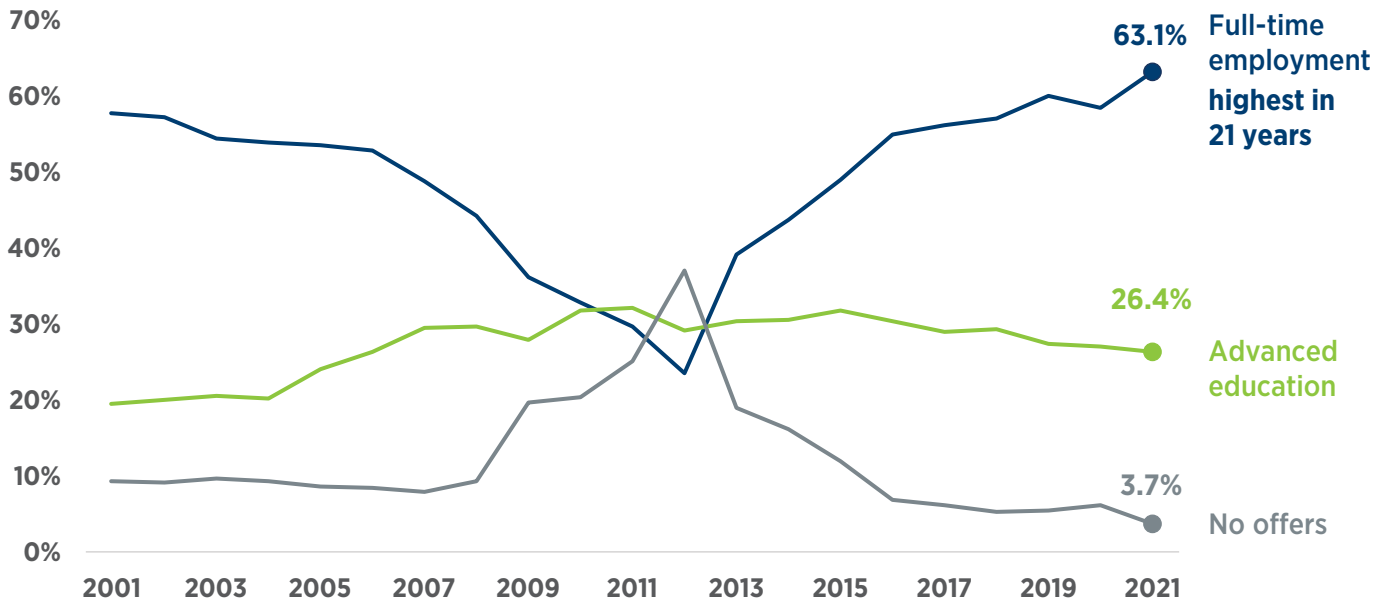
96.3% of 2021 graduates reported they had secured a full-time employment offer or advanced education opportunity (i.e., internship, residency, or position in other academic programs) by two to three weeks prior to graduation. This is the highest proportion recorded for any class in the period from 2001 through 2021. The last peak occurred in 2018, at 94.7%.

DISTRIBUTION OF NEW GRADUATES RECEIVING OFFERS FOR JOBS OR ADVANCED EDUCATION



2021 veterinary graduates received full-time employment offers at a higher rate than any other graduating class in the past **21 years**.

DISTRIBUTION OF OFFERS MADE TO NEW GRADUATES

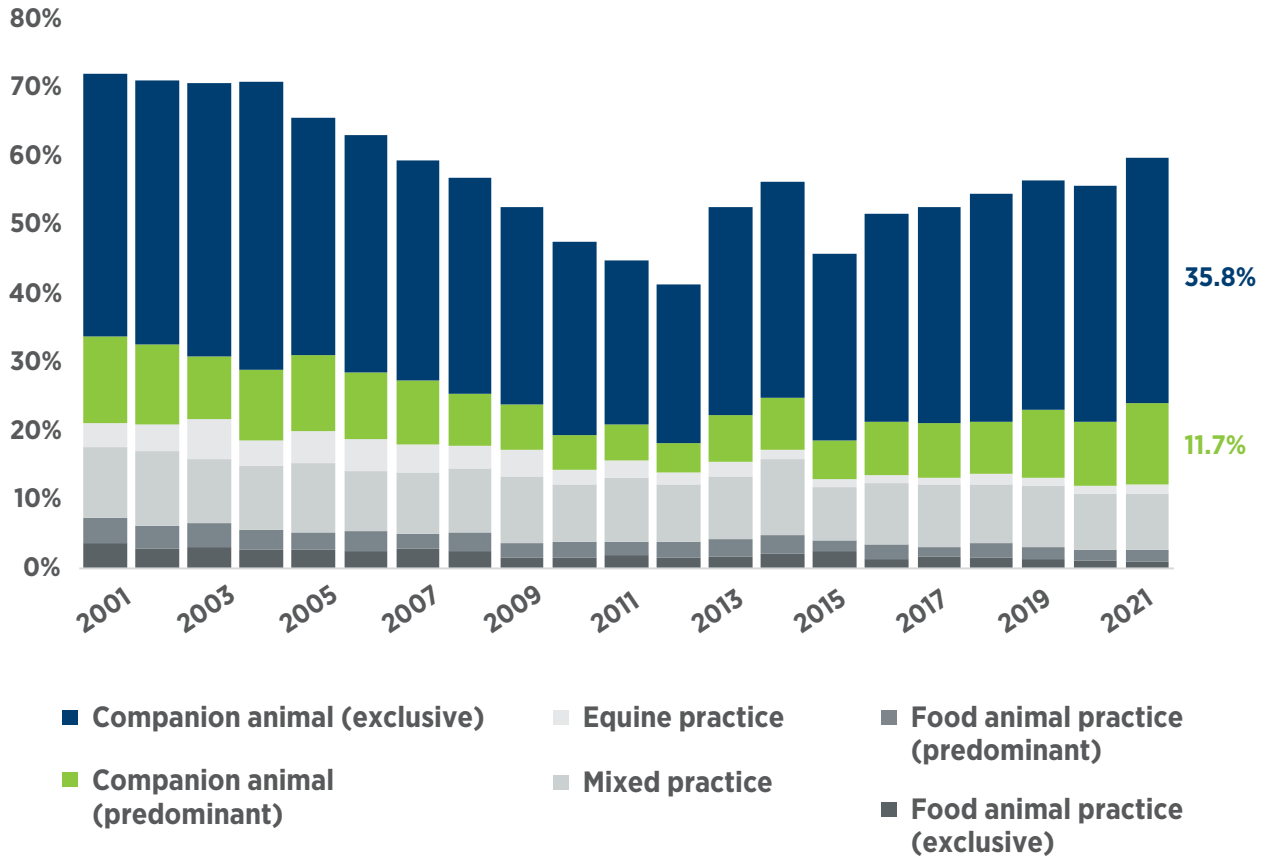


The denominator in these percentage calculations is all graduates, including those who did not report their postgraduate plans (6.8% of all respondents).



Nearly half of all 2021 graduates—**47.5%**—planned to enter companion animal exclusive or companion animal predominant practice.

PERCENTAGE OF ALL NEW GRADUATES WHO ACCEPTED OFFERS IN PRIVATE PRACTICE



Please note that although 35.8% and 11.7% of 2021 graduates reported finding full-time positions in companion animal exclusive and predominant practices, respectively, the total number of graduates (i.e., the denominator) in these calculations comprises all respondents, including those who reported no offer (3.7% of all respondents) and those who did not report their employment sector (2.8% of all respondents). This was done to provide transparency into the results. There was no reason to assume that the respondents with missing data on employment sector would have a different distribution with respect to this variable than the respondents who provided this information.

DISTRIBUTION OF NEW GRADUATES IN PRIVATE PRACTICE

66.8% Overall, 66.8% of graduates reporting postgraduate opportunities accepted offers in **private practice**.

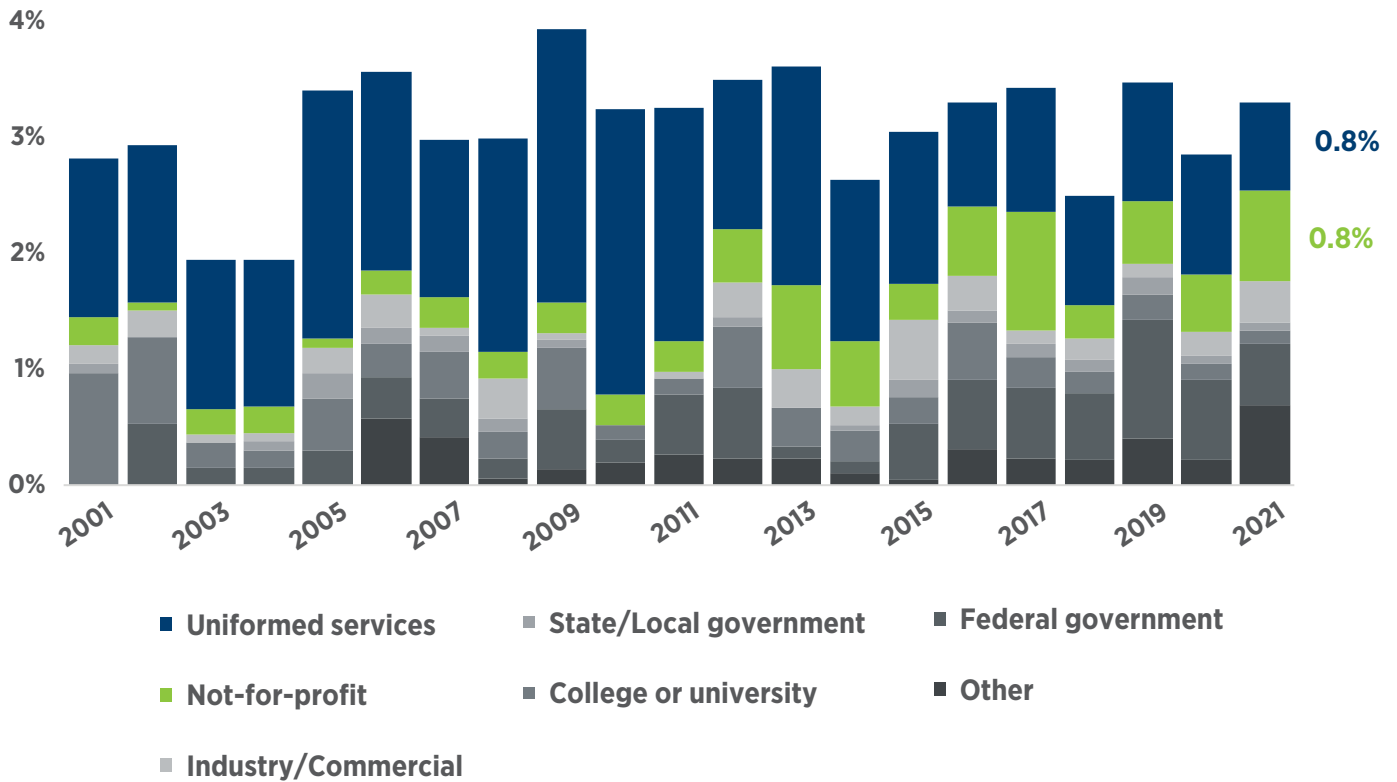
35.8% **Companion animal exclusive practice** attracted the highest percentage of all graduates at 35.8%.

1.4% Full-time positions in **equine practice** were accepted by 1.4% of all graduates.

2.7% **Food animal exclusive and food animal predominant practice** together attracted 2.7% of all graduates.

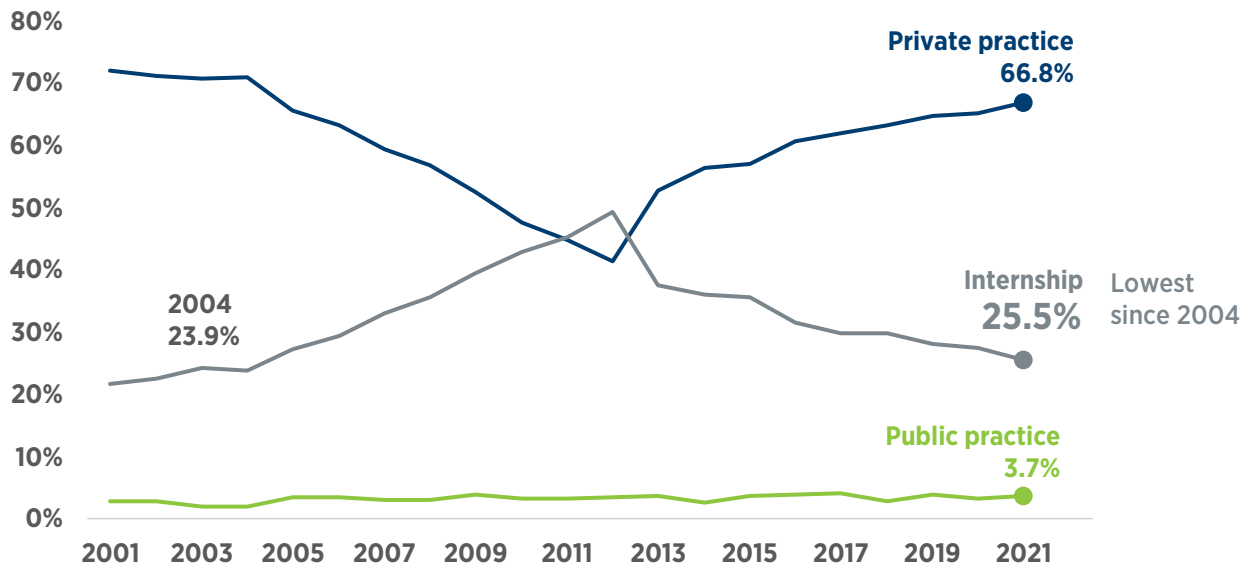
3.7% of 2021 graduates reporting postgraduate opportunities secured full-time positions in public practice. Positions in uniformed services and not-for-profit organizations were most common, at 0.8% of all graduates in each category.

PERCENTAGE OF ALL NEW GRADUATES WHO ACCEPTED OFFERS IN PUBLIC PRACTICE

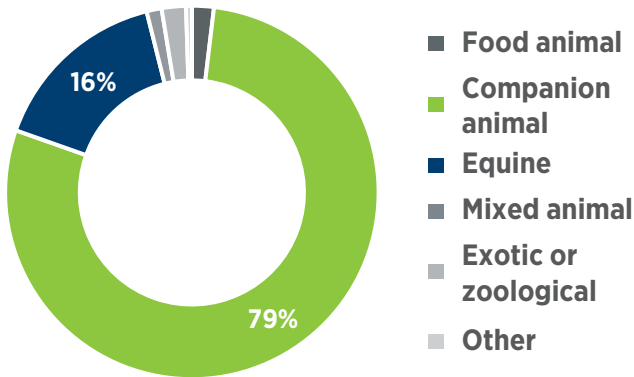


25.5% of 2021 graduates reporting postgraduate opportunities secured an internship position. This is the lowest proportion since 2004.

DISTRIBUTION OF NEW GRADUATES REPORTING POSTGRADUATE OPPORTUNITIES WHO ACCEPTED OFFERS IN PRACTICE AND INTERNSHIPS



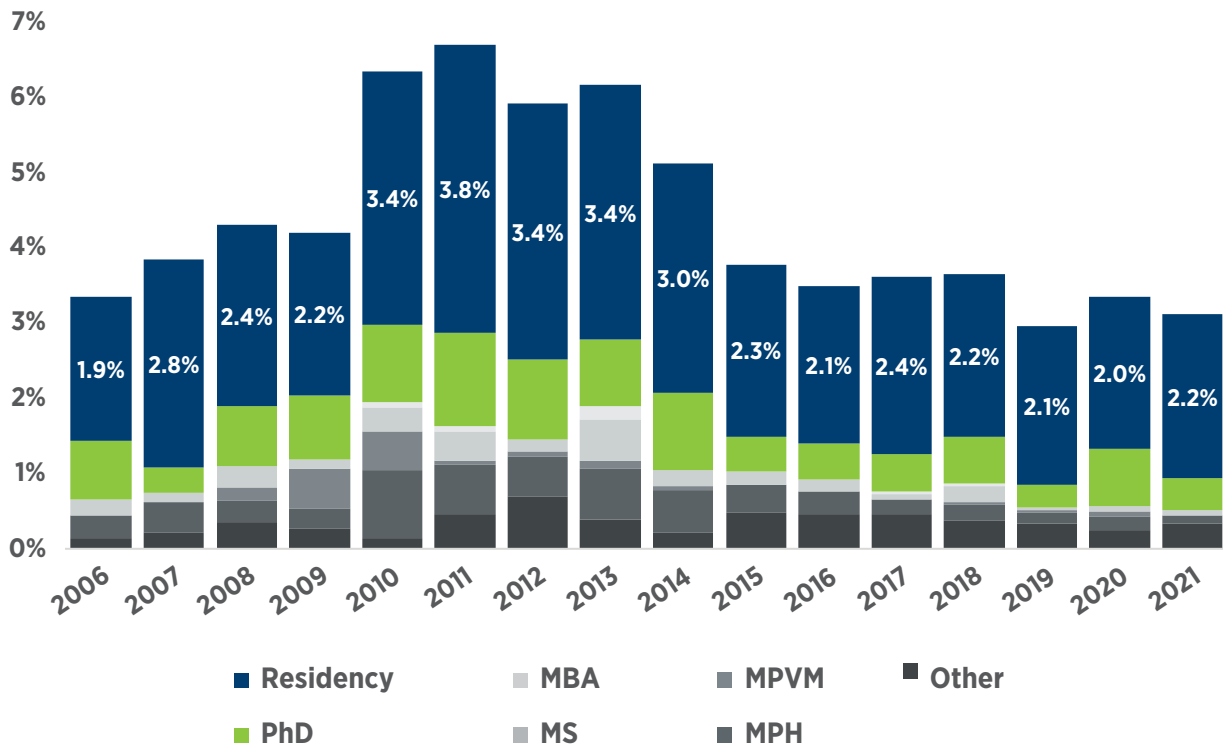
SPECIES FOCUS OF INTERNSHIPS



Internship positions continued to be dominated by the companion animal sector, at **79%** of internship positions in 2021.

16% of internship positions were in the equine sector, and **2%** each were in the food animal and exotic/zoological sectors.

PERCENTAGE OF ALL NEW GRADUATES PURSUING ADVANCED EDUCATION OTHER THAN INTERNSHIPS



No 2021 graduates reported securing positions in an MBA or MPVM program.

Outside of internships, the most common choice for advanced education was a residency program, comprising **2.2% of graduates in 2021**.

What it means

- Attracting the best candidates: Almost all new veterinarians graduating in 2021 secured full-time employment or advanced education opportunities. This likely will spur employers to make salaries more competitive in order to attract the best candidates.
- Considering internships? More than 1 in 4 new graduates opt to pursue advanced education programs. Internship stipends average more than \$40K less than starting salaries for full-time employment, and for most graduates with federal student loan debt, interest on those loans will continue to accrue. In deciding whether or not to choose an internship, it is important to weigh the value of the experience an internship brings against the cost, especially for those with high student loan debt.
- Companion animal practice continues to dominate the market, whereas the percentage of new graduates choosing public practice remains low at 3.7%.

Starting salaries for new graduates have increased—another signal of a robust market. However, it's important to consider these changes within the context of inflation and pre-recessionary trends. This section explores how factors such as demographics, species focus, and location impact starting salaries.



Aggregating all graduates choosing full-time employment positions and advanced education opportunities, mean compensation for the 2021 graduating class was **\$80,844**.

MEAN COMPENSATION

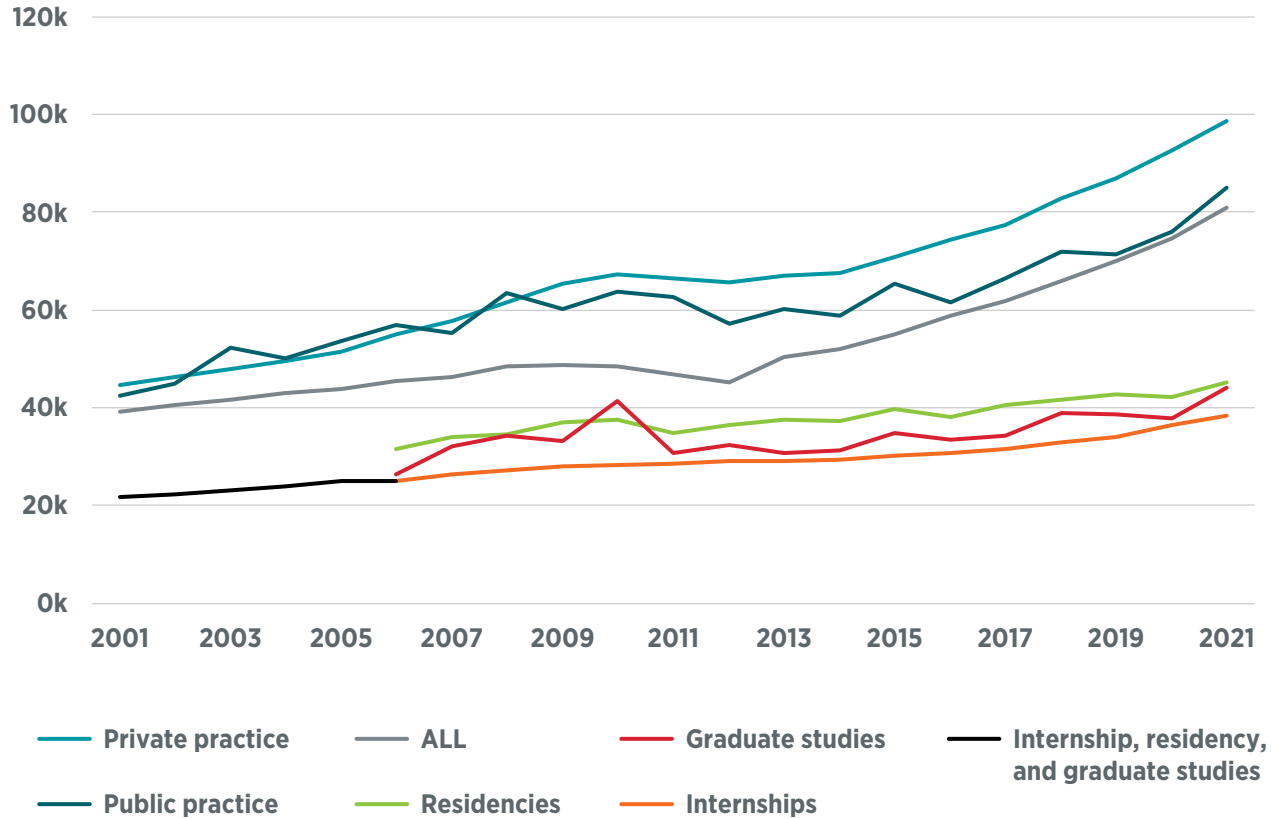
Private practice	\$98,705
Public practice	\$84,872
Internships	\$38,331



Graduates pursuing internships continued to have low compensation at an average of **\$38,331**.

Across the entire graduating class, mean compensation of each graduating class increased by \$2,078 each successive year. The average increase was \$2,710 per year for private practice, \$2,128 for public practice, and \$883 for internships.

MEAN COMPENSATION OF NEW GRADUATES

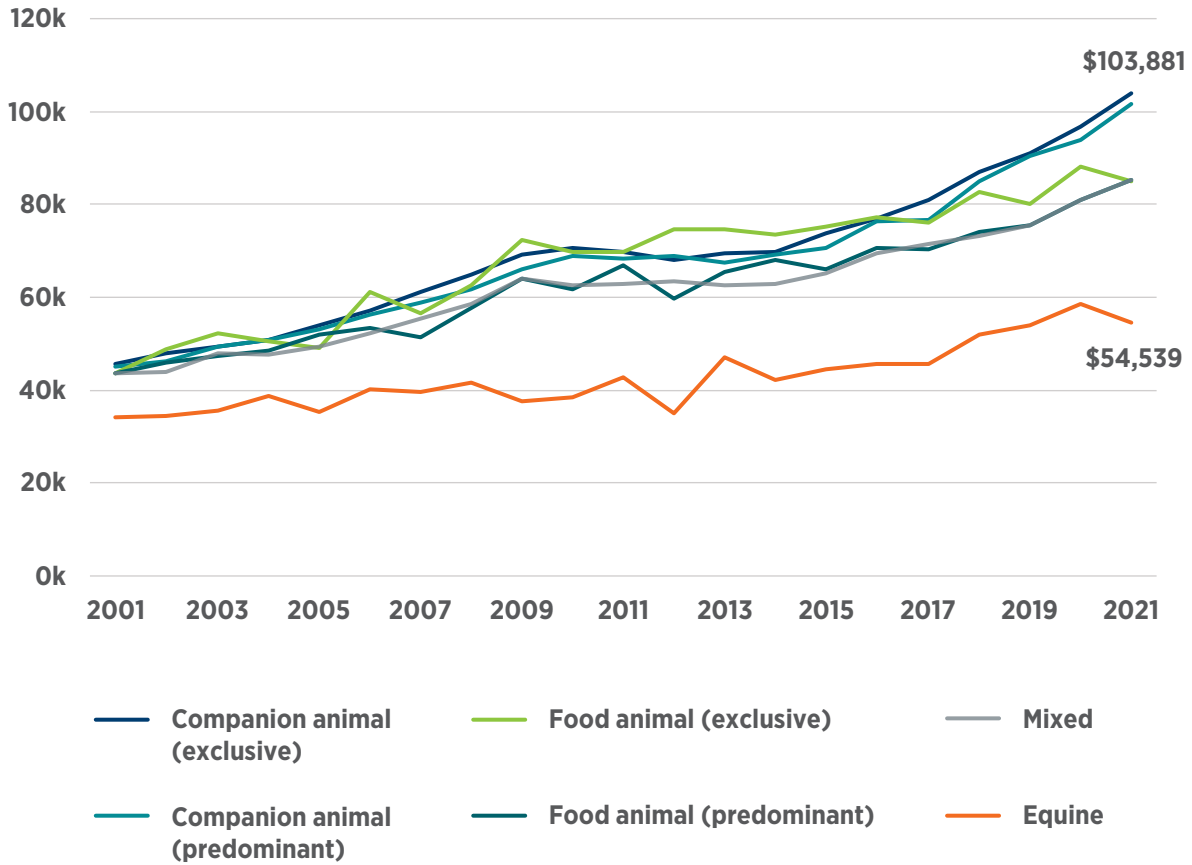


Graduate studies include advanced degree programs such as MS, MPH, MBA, and PhD, that are distinct from residency programs. Prior to 2006, the survey instrument aggregated internships, residencies, and graduate studies. These categories were separated from 2006 onward.

Salaries climb disproportionately across sectors

Among those in private practice, graduates securing full-time positions in companion animal exclusive practice were offered the highest starting salary, averaging \$103,881. Those securing full-time positions in equine practice had the lowest average, at \$54,539.

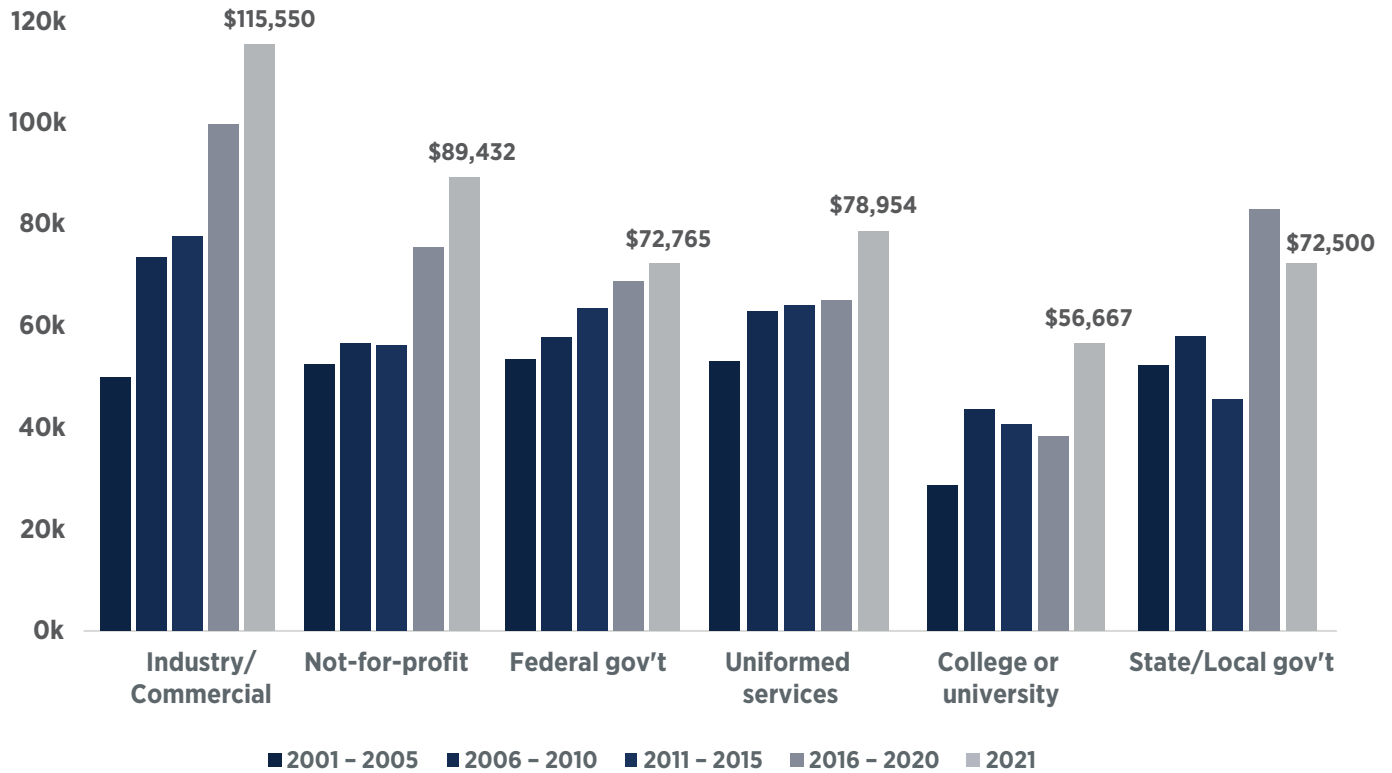
MEAN STARTING SALARY FOR PRIVATE PRACTICE



Public practice salaries have been increasing

Among new graduates entering public practice, the lowest-compensated group remained those accepting full-time positions as college or university faculty or staff. Those entering industry remained the highest-compensated group within public practice. At the mean, all public practice salaries increased, except for those in state and local government. These findings, however, are not indicative of trends since fewer than five respondents reported securing full-time employment in state and local government sectors.

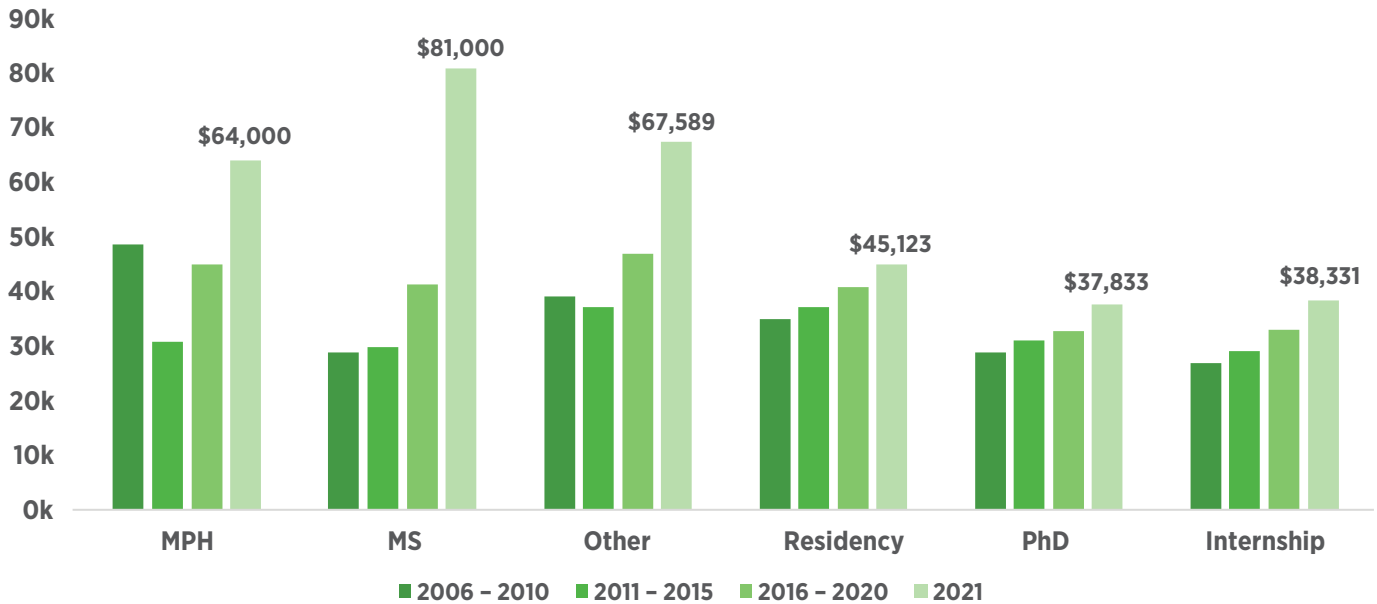
MEAN STARTING SALARY FOR PUBLIC PRACTICE



Some compensation increases for advanced education

New graduates in 2021 saw higher compensation than their predecessors in some areas of advanced education. Although compensation for graduate studies (e.g., master’s or PhD programs) increased, we were unable to determine if this increase was significant since annual counts of graduates in these categories were below five. In 2021, the average stipend awarded to graduates pursuing a PhD was \$37,333, which is not significantly different from the average stipend awarded to graduates pursuing an internship (\$38,331). Stipends for residents were slightly higher at an average of \$45,123.

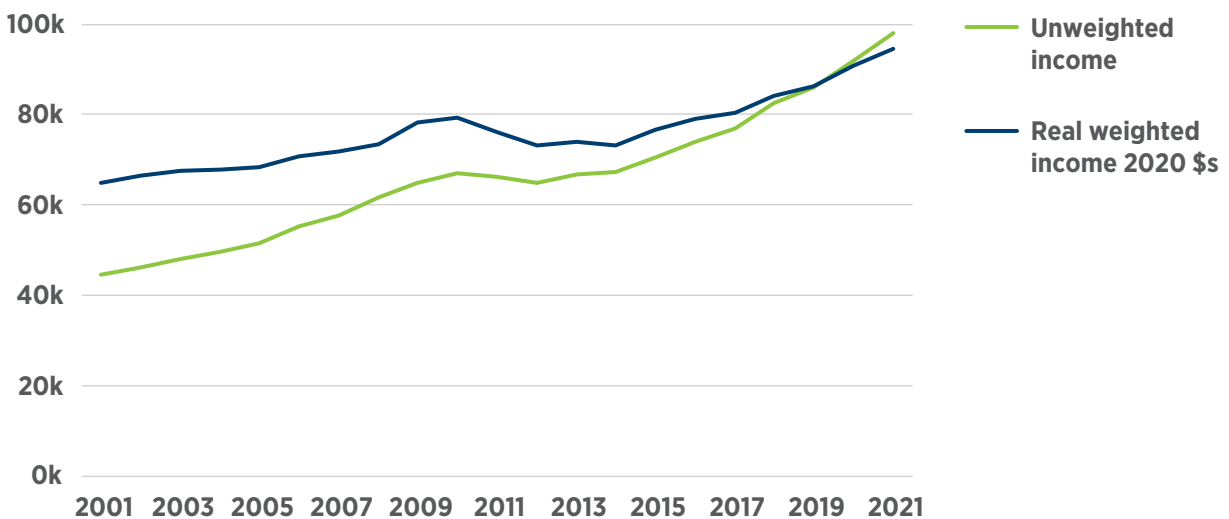
MEAN COMPENSATION FOR ADVANCED EDUCATION



Salaries up, though not yet back to trend

Mean unweighted income in 2021, determined by finding the simple average of 2021 graduates securing full-time employment, was \$98,088. Mean real weighted income, which provides a year-over-year comparison by expressing 2021 graduates' compensation in 2020 inflation-adjusted dollars, was \$94,416, up from \$90,730 in 2020. Although mean incomes have been increasing, this increase is still not back to trends seen before the 2008 financial crisis.

MEAN INDEXED REAL INCOME AND NOMINAL (UNWEIGHTED) INCOME OF NEW GRADUATES



What it means

Salaries in private practice took a major hit beginning in 2011, with real incomes declining. Starting salaries in 2021 were on the rise, but not back to pre-recessionary trends.

Debt

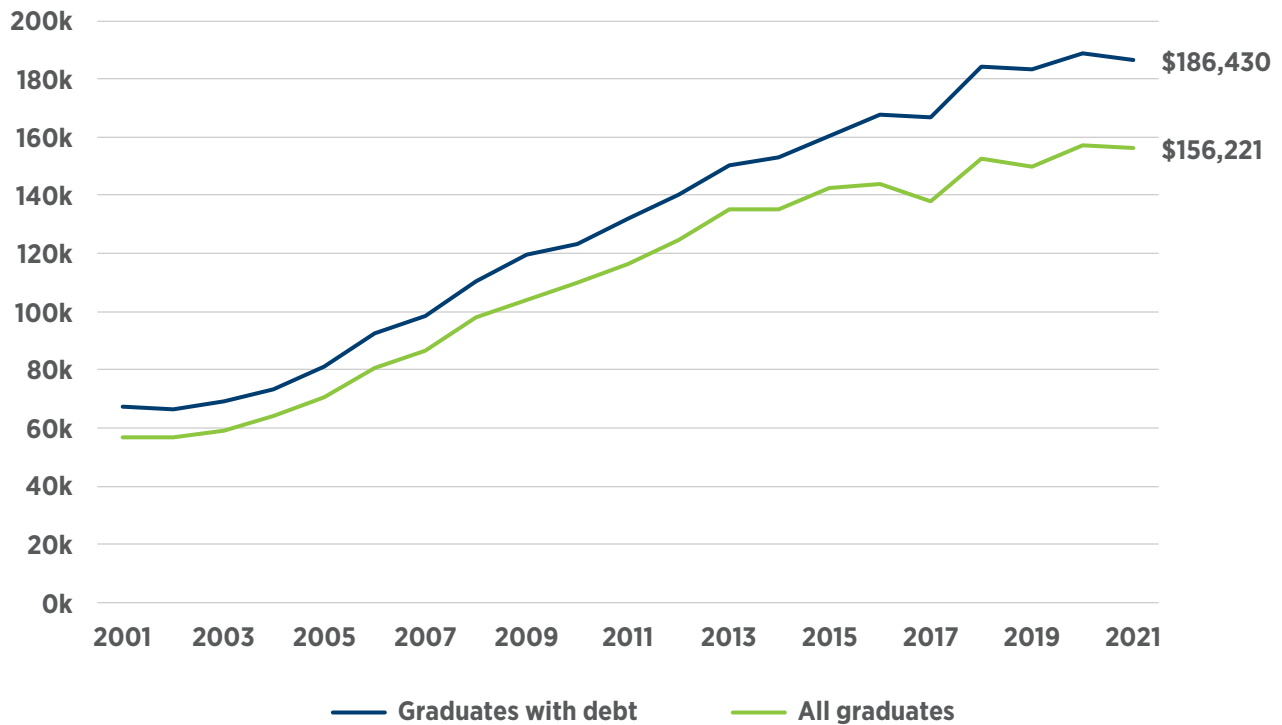
Average debt levels continued to increase with the 2021 graduating class. The percentage of students graduating without debt, however, has persisted. This section explores changes in DVM student loan debt, the distribution of this debt, and factors that influence debt, such as demographics and school choice.



The percentage of graduates with no debt was **16%** in 2021.

DEBT OF NEW GRADUATES

Mean debt for all vs. only those with debt

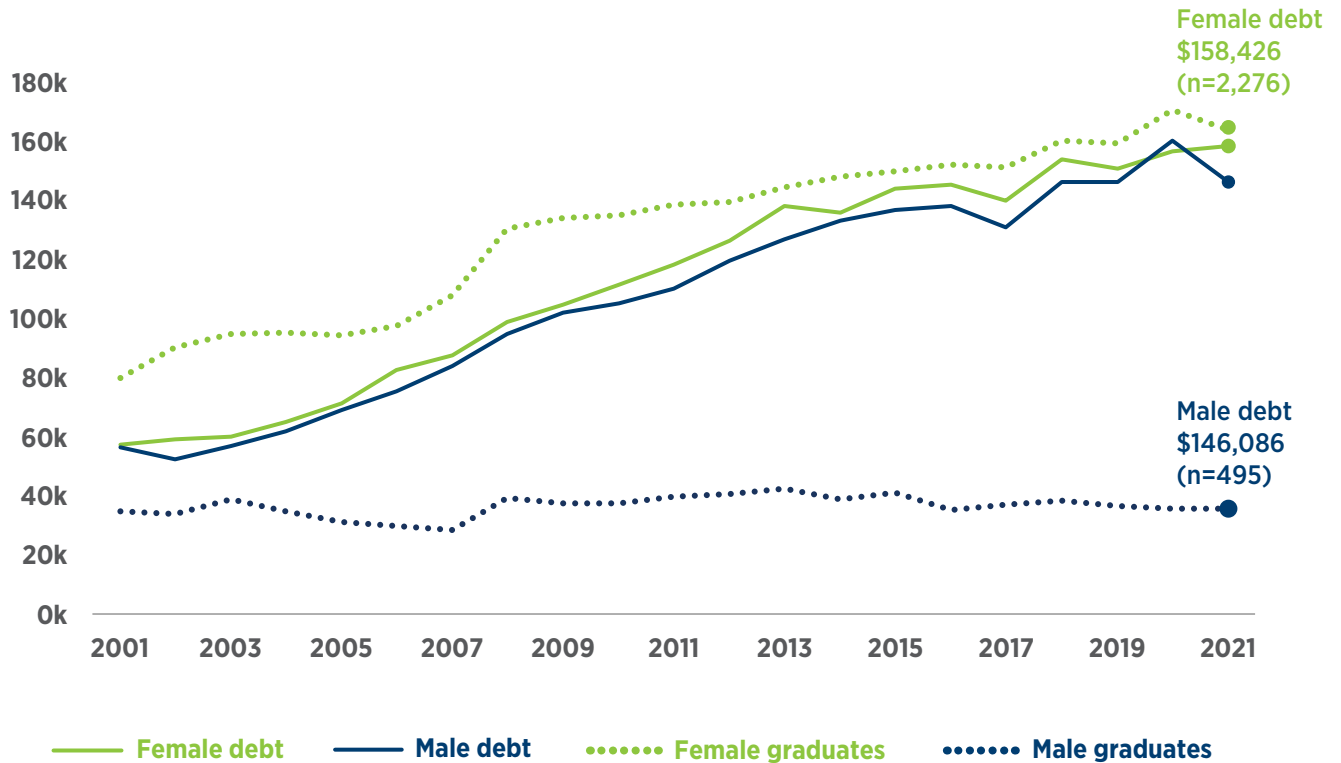


Mean DVM debt for all new graduates—including those with no debt—was **\$156,221** in 2021. Mean debt for those with at least some DVM loans was **\$186,430**.

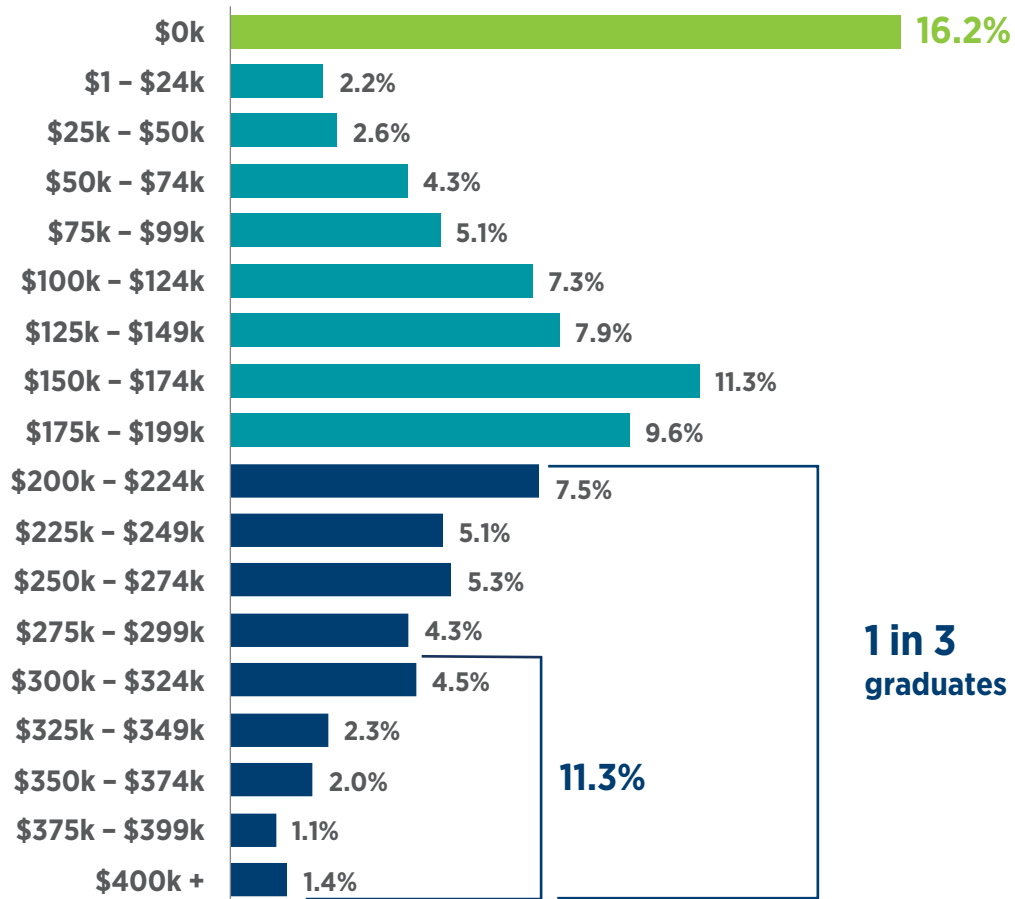


Mean debt of male graduates declined by approximately \$14,000 to **\$146,086** between 2020 and 2021, while mean debt of female graduates increased slightly from just over \$156,000 to **\$158,426**.

MEAN DEBT AND NUMBER OF GRADUATES BY GENDER



DISTRIBUTION OF DVM DEBT FOR NEW GRADUATES IN 2021



DEMOGRAPHIC FACTORS ASSOCIATED WITH VARIATION IN DVM DEBT

Gender	↑	Women incurred approximately \$6,047 more debt than men.
Race & ethnicity	↓	White students reported \$3,783 less debt than nonwhite students.
School type	↑	Private-school graduates incurred approximately \$83,000 more debt than those in public schools.
State residency status	↑	Non-residents incurred approximately \$34,428 more debt than residents.

All estimates are average values, with all other factors held constant.

BLACK GRADUATES CARRIED SUBSTANTIALLY MORE DVM DEBT THAN OTHERS

Black/African American	\$228,673
Hispanic or Latino	\$184,745
Other	\$179,653
White/Caucasian	\$153,169
Asian	\$132,298



On average, DVM debt increased each year by **\$3,199**, all else being constant.

IMPACT OF VARIOUS FACTORS ON DEBT-TO-INCOME RATIO

Graduation year	0.050 higher each year
Age	0.058 higher for each year above average graduation age
School	Impact varied due to tuition fees differing among schools
Offers	0.079 lower for each job or advanced education offer received
Degree	0.291 higher for those with a bachelor's degree and 0.389 higher for those with a master's, compared with those admitted before earning a degree

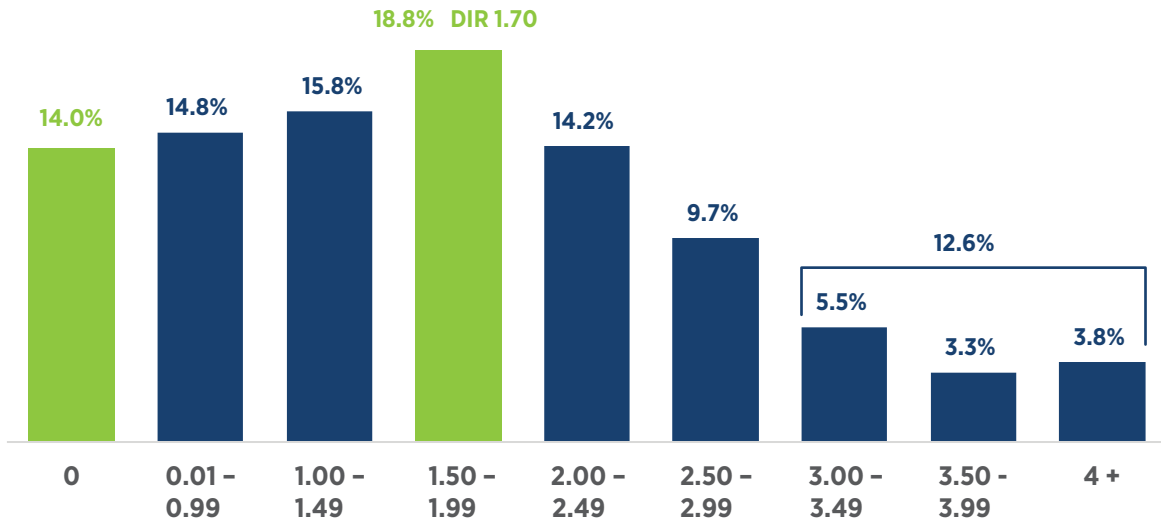


The mean national average debt-to-income ratio was **1.7** for 2021 graduates securing full-time employment.

The debt-to-income ratio is increasing steadily each year. Having a bachelor's or master's degree was associated with an increase in this value. Having a non-DVM doctorate or other professional degree did not impact the debt-to-income ratio.

All estimates are average values, with all other factors held constant.

DEBT-TO-INCOME RATIO (DIR) OF 2021 GRADUATES SECURING FULL-TIME EMPLOYMENT



What it means

- Managing debt:** The debt-to-income ratio of all graduates continues to be of concern. The development and implementation of tools, scholarships, and strategies to reduce debt levels across the profession will benefit veterinary students, veterinarians, and the profession as a whole.
- Gender gap:** Female students are taking on higher debt than their male counterparts, on average.
- Racial inequality:** Black/African American graduates carry substantially more debt than other graduates, whereas white graduates have less debt on average than nonwhite graduates. Opportunities exist to develop and implement strategies to reduce the amount of debt incurred by nonwhite veterinary students, which could help increase both diversity and equity within the profession.
- Diversity, equity, and inclusion (DEI):** The AVMA is committed to increasing DEI in the veterinary profession. AVMA and the American Association of Veterinary Medical Colleges (AAVMC) have joined forces to enhance DEI in the profession.

Market for veterinarians

Veterinarian demographics

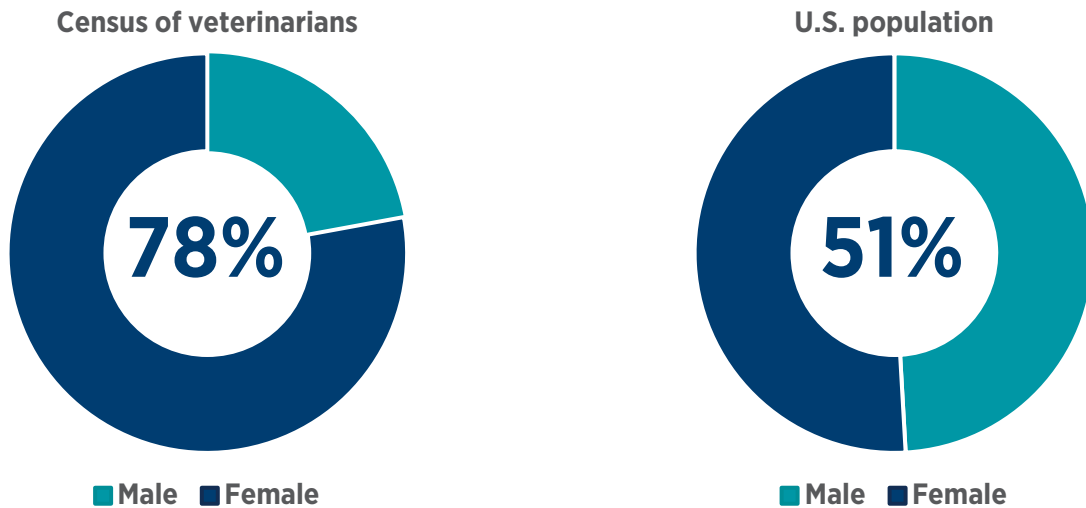
In 2021, there were an estimated 121,461 veterinarians actively engaged in either private or public practice in the U.S. Of those, 3 out of 4 were AVMA members. This section explores employment sectors, gender, diversity, geography, and communities of veterinarians in the U.S.

DISTRIBUTION OF VETERINARIANS BY EMPLOYMENT SECTOR

Sector	2021 census of veterinarians	AVMA membership
Food animal	1.4%	4.9%
Companion animal	71.7%	73.2%
Mixed animal	6.5%	3.5%
Equine	3.8%	4.5%
Other private practice	0.5%	0.6%
College or university	6.4%	6.0%
State/local/federal gov't	3.3%	1.9%
Uniformed services	0.9%	0.7%
Industry	2.7%	3.1%
Other public practice	2.8%	1.7%

The largest segment of the veterinary profession provides medical services to animals in private and corporate practices. Of these clinical practices, companion animal practices employ the largest number of veterinarians. In the public sector (public practice), colleges and universities are the largest employer. Private practice is defined in this report as any clinical veterinary practice that works with food animal, companion animal, mixed animal, equine, exotic animal, and other veterinary patients. Public practice includes colleges and universities, government, industry, and any other entity outside of private practice.

GENDER DISTRIBUTION IN THE CENSUS OF VETERINARIANS AND THE OVERALL U.S. POPULATION



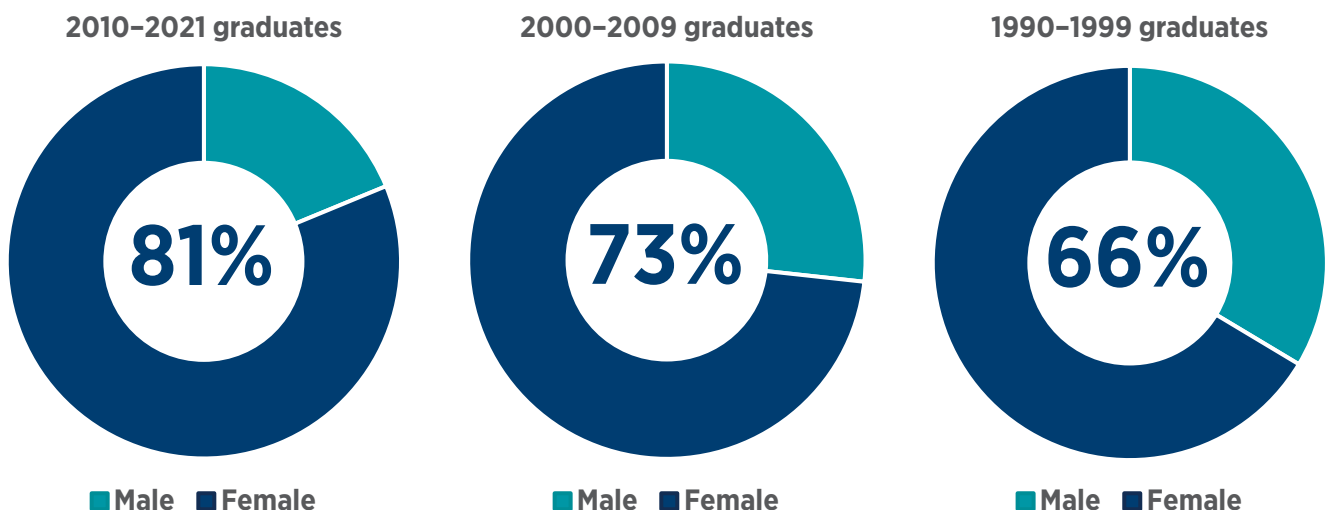
Additional source: U.S. Bureau of Labor Statistics



Women represented about two-thirds of the veterinarian population in 2021, based on AVMA membership data.

The number of women entering the veterinary profession continues to increase. **66%** of veterinarians who graduated from veterinary school between 1990 and 1999 were female, compared with **81%** of graduates between 2010 and 2021.

GENDER DISTRIBUTION BY YEAR OF GRADUATION



While AVMA recognizes non-binary gender identifications, the number of veterinarians self-identifying this way was less than a tenth of one percent and, therefore, these data are not included in this report.

Location of U.S. veterinarians

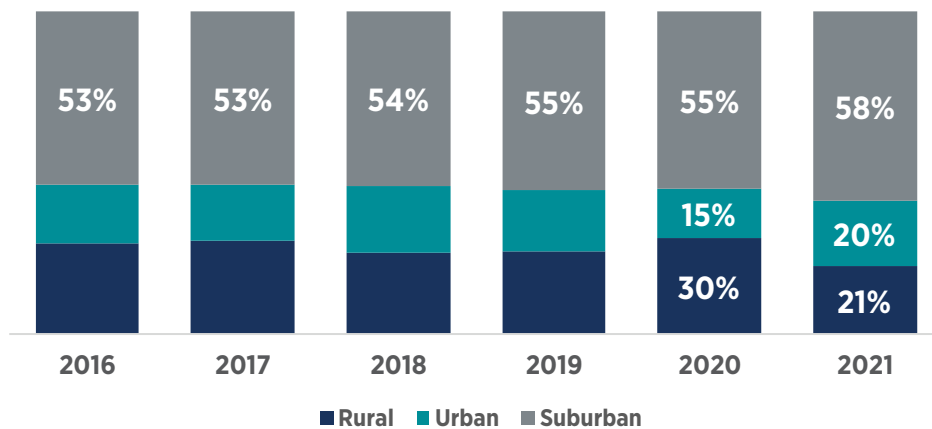
The Southeast U.S. had the highest percentage of veterinarians in 2021, followed by the Far West, Great Lakes, and Midwest regions. New England and Rocky Mountain regions had a smaller percentage of veterinarians than other regions.

GEOGRAPHIC DISTRIBUTION OF VETERINARIANS

Region	2021 census of veterinarians	AVMA membership	U.S. population
New England	6%	6%	5%
Midwest	14%	13%	15%
Great Lakes	15%	14%	14%
Plains	9%	9%	7%
Southeast	23%	27%	26%
Southwest	11%	12%	13%
Rocky Mountain	6%	6%	4%
Far West	17%	14%	17%

Year after year, the percentage of veterinarians living in suburban areas has increased, while a general decline has occurred in the percentage living in rural or urban areas.

DISTRIBUTIONS OF VETERINARIANS BY COMMUNITY TYPE



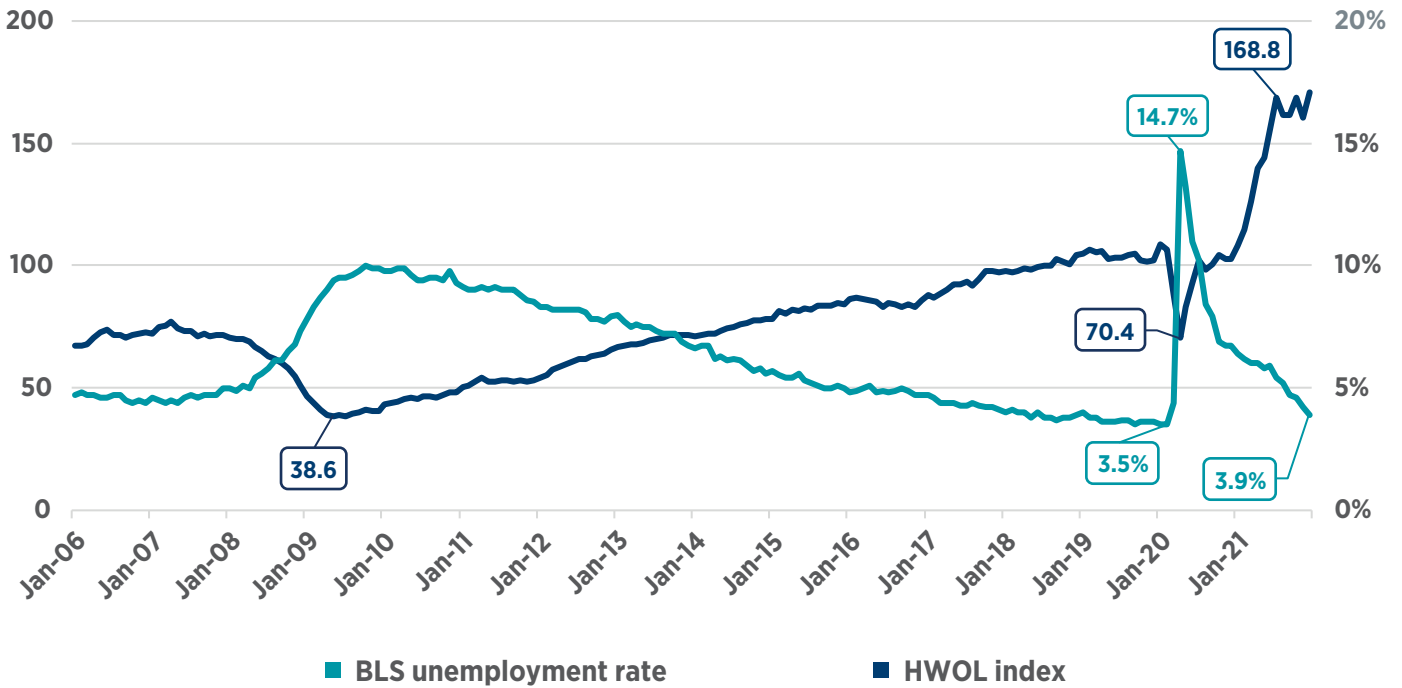
In 2021, **5%** more veterinarians reported their community type as urban than in 2020, and **9%** fewer reported their community type as rural.

Employment and compensation

U.S. job market

Over the past three years, the national labor market experienced unsteady supply and demand due to the COVID-19 pandemic. This section explores unemployment, labor force participation, and compensation in more detail.

U.S. LABOR DEMAND AND UNEMPLOYMENT RATE



Source: U.S. Bureau of Labor Statistics (BLS unemployment rate) and Conference Board Help Wanted Online (HWOL) data series

A tight U.S. labor market

A tight labor market occurs when there is more demand than supply to fill jobs, which happened in 2021. Unemployment peaked at almost 15% in April 2020, and the Conference Board Help Wanted Online (HWOL) Index (which measures the labor demand as seen by the number of national job postings) was 70. By the end of 2021, the unemployment rate dropped to near 4%, but the HWOL Index jumped to over 160.

The veterinarian labor force participation rate is the percentage of veterinarians who are working or actively looking for work (including internships, residencies, and other advanced education) out of the veterinarian working-age population. This value in 2021 was the lowest it has been in more than five years, falling from 99.2% in 2016 to 96.9%.

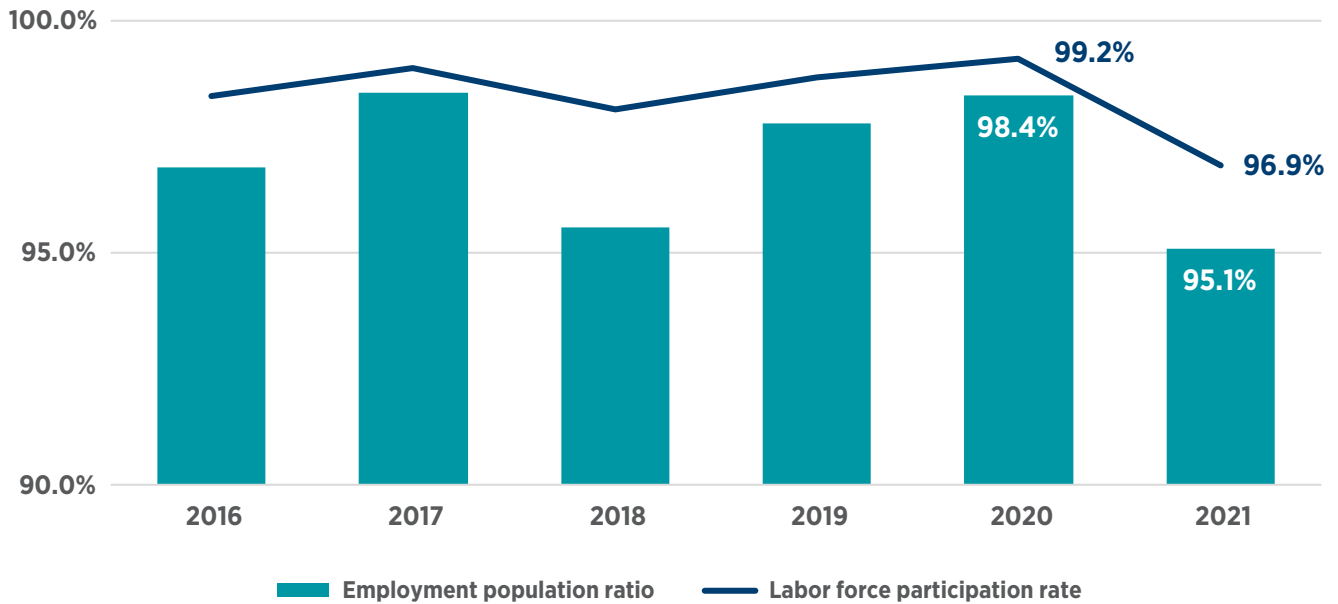
EMPLOYMENT AND LABOR FORCE PARTICIPATION

Statistic	Definition	2020	2021
U.S. labor force participation rate (end of December)	Percentage of the U.S. population that is either working or actively looking for work	61.5%	61.9%
Veterinarian labor force participation rate	Percentage of veterinarians who are working or actively looking for work (including internships, residencies, and other advanced education) out of the veterinarian working-age population	99.2%	96.9%
U.S. employment population ratio (end of December)	Percentage of the U.S. population that is currently working	57.4%	59.5%
Veterinarian employment population ratio	Ratio of veterinarians currently working against the veterinary working-age population	98.4%	95.1%
U.S. unemployment rate (end of December)	Number of unemployed people as a percentage of the labor force (sum of the employed and unemployed)	6.7%	3.9%
Veterinarian unemployment rate	Percentage of all veterinarians who are unemployed and seeking employment in the veterinary profession or enrollment in veterinary advanced education	0.8%	1.8%

U.S. employment

In addition to the veterinarian labor force participation rate dropping from 2020 to 2021, the veterinarian employment population ratio also declined. The veterinarian employment population ratio is a ratio of those who are currently working against the veterinary working-age population. This ratio was also at its lowest, going from **98.4%** in 2020 to **95.1%** in 2021.

VETERINARIAN EMPLOYMENT POPULATION RATIO AND LABOR FORCE PARTICIPATION RATE

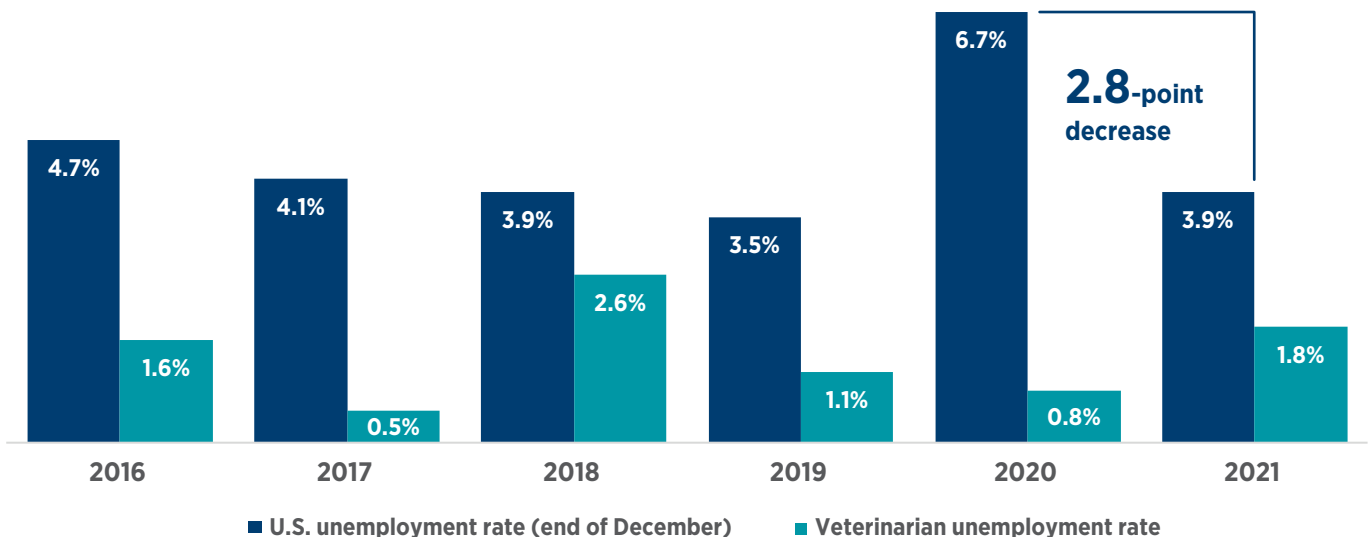


U.S. unemployment

The AVMA's 2021 Census of Veterinarians showed a 1.8% unemployment rate for veterinarians in 2021, up one percentage point from 2020. These numbers capture unemployed veterinarians who are seeking employment in the veterinary profession or enrollment in veterinary advanced education (including internships and residencies). As of December 31, 2021, the U.S. unemployment rate declined to 3.9%, from 6.7% in 2020.

1.8% of veterinarians were unemployed in 2021 and looking for veterinary employment or additional training. Some of these veterinarians might have been working in jobs outside the profession.

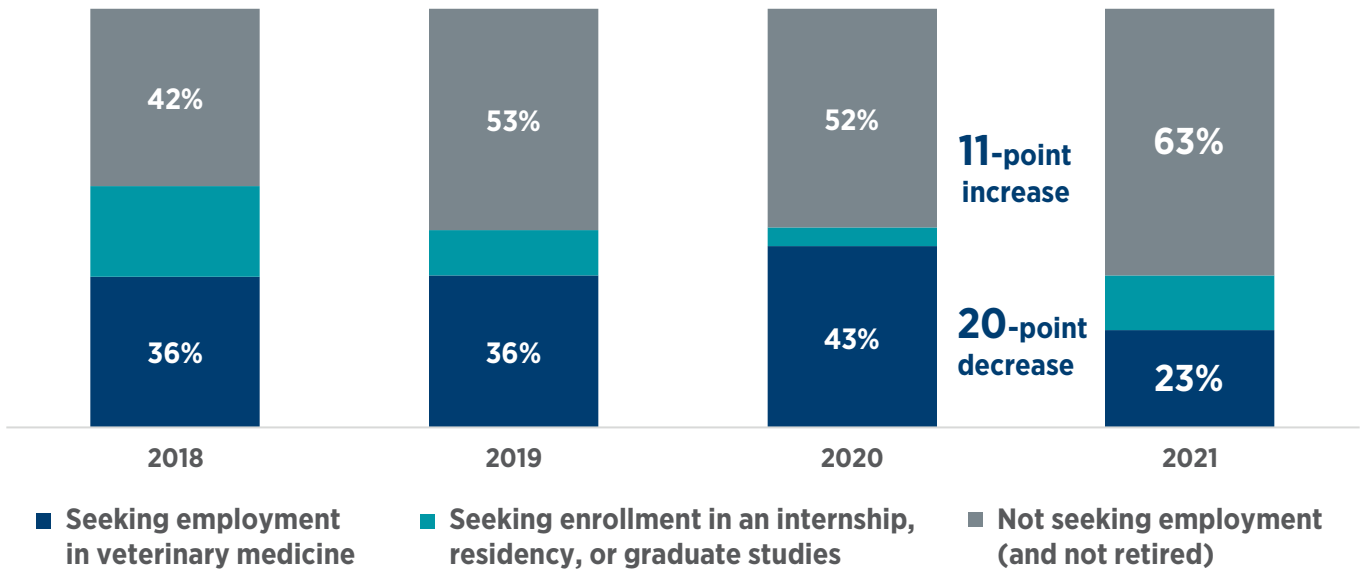
UNEMPLOYMENT RATES OVER TIME



Additional source: U.S. Bureau of Labor Statistics

While a percentage of unemployed veterinarians were seeking employment in the veterinary profession or additional training or education in 2021, there was a cohort of unemployed veterinarians (63%) who chose to sit out of the labor force. These latter veterinarians are not included in the unemployment rate.

VETERINARIANS OUT OF THE LABOR MARKET

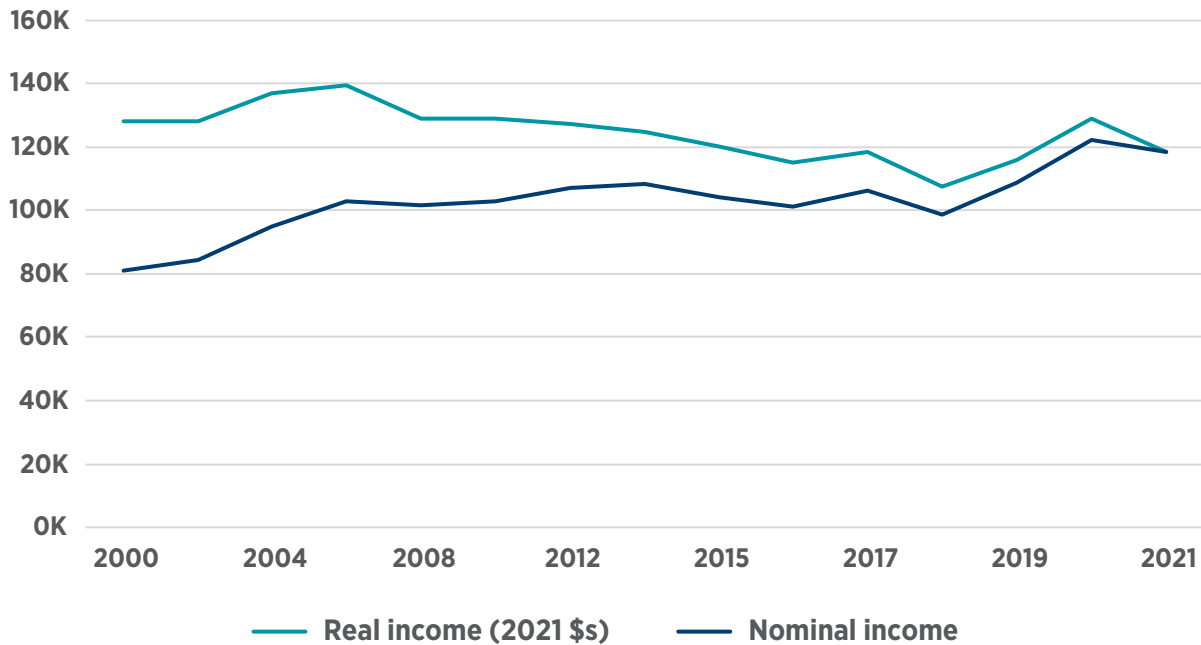


The large percentage of **unemployed veterinarians** who are sitting out of the labor force affects the labor participation rate and employment population ratios.

Compensation

Over the past few years, employer compensation has picked up momentum. This is due, in part, to the current market of low supply to high demand to fill roles, as well as some market corrections that were overdue from the 2008 financial crisis. Nominal and real incomes of veterinarians from 2000 to 2021 show that while incomes on average increased, incomes adjusted for inflation and reported in 2021 dollars reveal a different story. A healthy climb occurred in the period before the 2008 recession, and then a period of deflation in real income was seen from 2008 to 2016. Incomes have increased since then, but still not to pre-recession levels.

INCOME OVER TIME



Dates represent the time when the survey was performed. Respondents were asked about their total annual professional income in the previous year. Notice that the scale of the horizontal axis varies, depending on the time period.



Earnings respond to market forces, and for 15 years real (inflation-adjusted) incomes of veterinarians generally declined, **but they have since increased.**

INCOME VARIES BY PRACTICE TYPE

↑↑ **HIGHEST-PAID PRIVATE PRACTICE:**
**Companion animal
and food animal**

↑↑ **HIGHEST-PAID PUBLIC PRACTICE:**
**Industry and commercial
organizations**

↓↓ **LOWEST-PAID PRIVATE PRACTICE:**
**Mixed animal, equine,
and exotic**

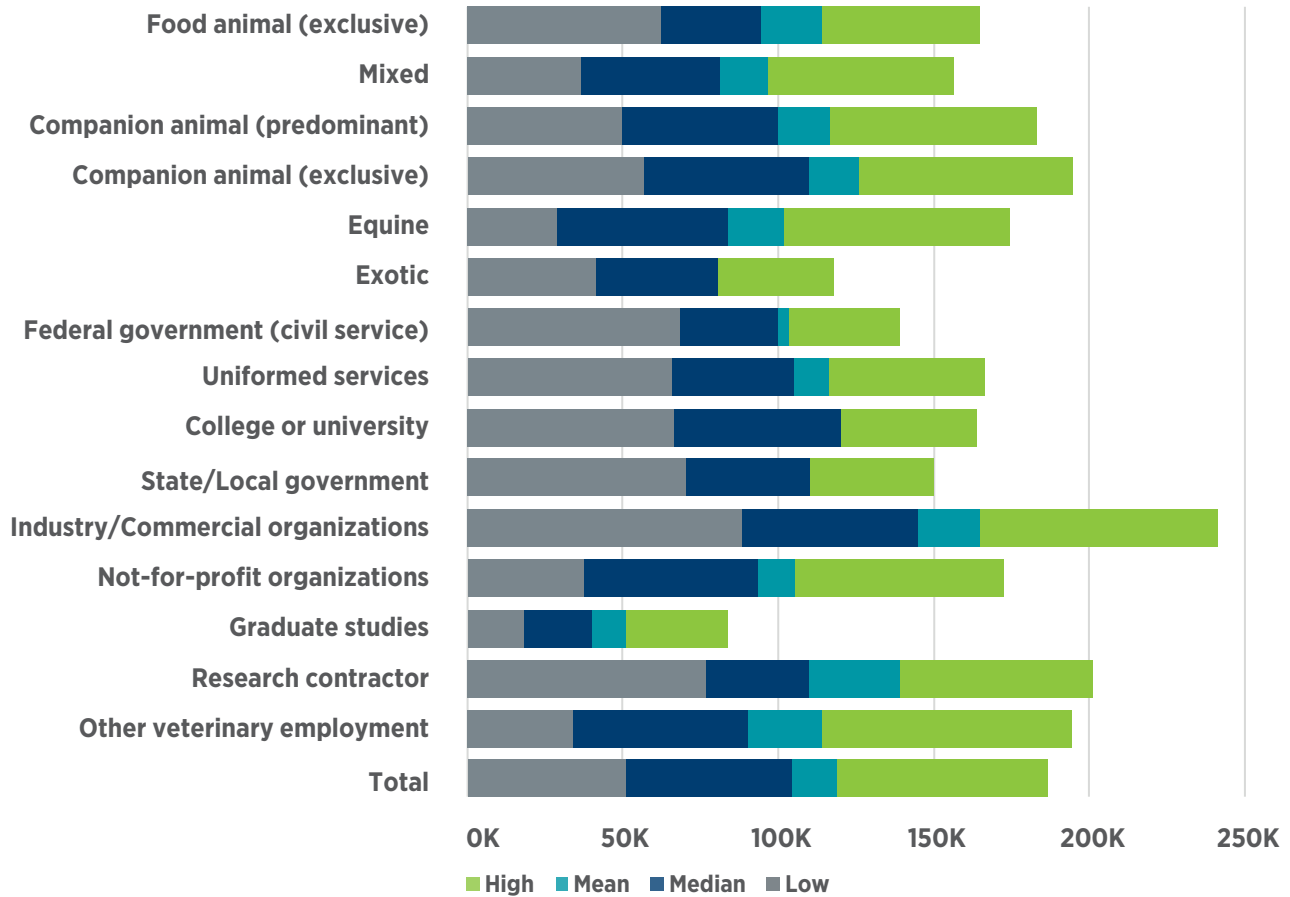
↓↓ **LOWEST-PAID PUBLIC PRACTICE:**
Advanced education*

*Most likely forgoing a full-time salary due to advanced learning



Mean professional income for all veterinarians as reported in 2021 for 2020 was **\$118,460**.

PROFESSIONAL INCOME REPORTED IN 2021, BY PRACTICE TYPE



“Low” is at least one standard deviation below the mean, and “High” is at least one standard deviation above the mean. The range between these two cut points captures 68% of incomes.

MOST COMMON EMPLOYMENT BENEFITS

Overall	Associates	Practice owners	Public practice
Continuing education	Continuing education	Discounted pet care	Paid vacation leave
Paid vacation leave	Licenses	Continuing education	Medical hospitalization plan
Licenses	Discounted pet care	Paid vacation leave	Paid sick leave

Other benefits

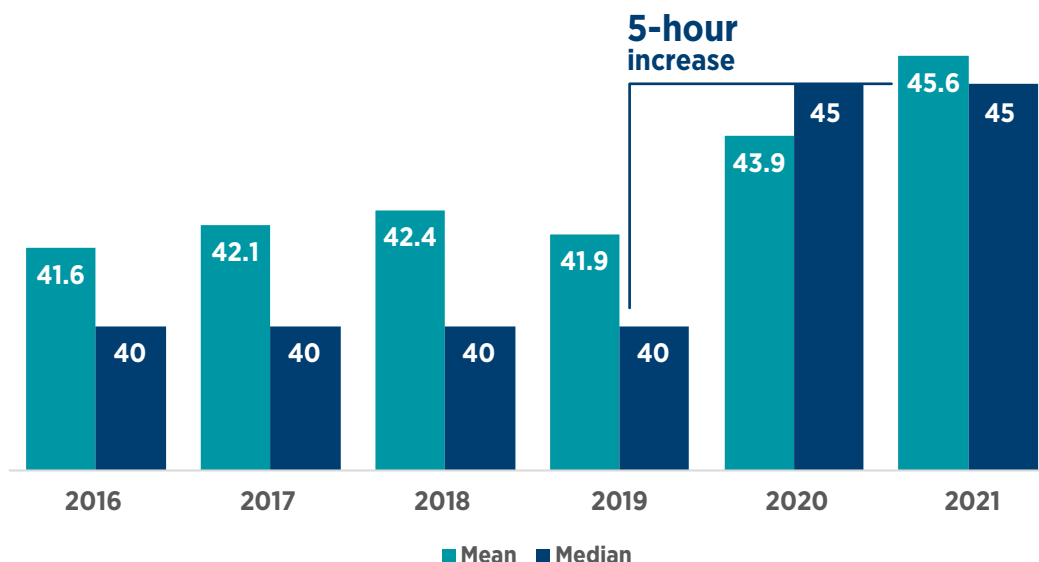
Overall, and across associates and owners in private practice and veterinarians in public practice, less frequently reported benefits in 2021 included personal use of vehicle, educational loan repayment, informal profit-sharing plan, pet insurance, and childcare/daycare. About 5% across these four groups reported that no benefits were provided/purchased.

BENEFITS OFFERED BY EMPLOYERS FOR BOTH PRIVATE AND PUBLIC PRACTICE

Benefit	All	Associates	Owners	Public practice
Continuing education expenses	75%	83%	72%	60%
Paid vacation leave	74%	76%	73%	82%
Licenses	73%	83%	71%	51%
Discounted pet care	66%	82%	77%	29%
Association dues	63%	72%	63%	45%
Medical/Hospitalization plan	61%	59%	48%	80%
Liability insurance	59%	69%	53%	36%
Paid sick leave	57%	52%	60%	75%
Tax-deferred retirement plan (e.g., 401k)	56%	57%	42%	64%
Continuing education leave	55%	60%	53%	49%
Employer contribution/match (e.g., 401k)	54%	56%	48%	58%
Dental plan	50%	46%	28%	73%
Paid legal holidays	45%	39%	52%	67%
Uniform clothing allowance	41%	44%	58%	24%
Disability insurance	35%	31%	25%	52%
Life insurance	34%	27%	21%	60%
Optical (vision) plan	33%	30%	15%	51%
Paid family leave	17%	14%	15%	30%
Cell phone bill	13%	8%	21%	17%
Personal use of vehicle	7%	5%	14%	6%
Educational loan repayment	6%	5%	3%	7%
No benefits provided/purchased	5%	3%	7%	4%
Informal profit-sharing plan	4%	2%	9%	4%
Pet insurance	4%	4%	4%	5%
Other	2%	1%	3%	4%
Childcare/Daycare benefit	1%	1%	1%	2%

Veterinarians are busy. Over time, veterinarians have reported working more hours, particularly in the past two years. In 2019, veterinarians worked an average of 41.9 hours per week, compared with 43.9 in 2020 and 45.6 in 2021. The median value held steady at 40 hours per week until 2020 and 2021, when it climbed to 45 hours per week.

NUMBER OF HOURS WORKED PER WEEK



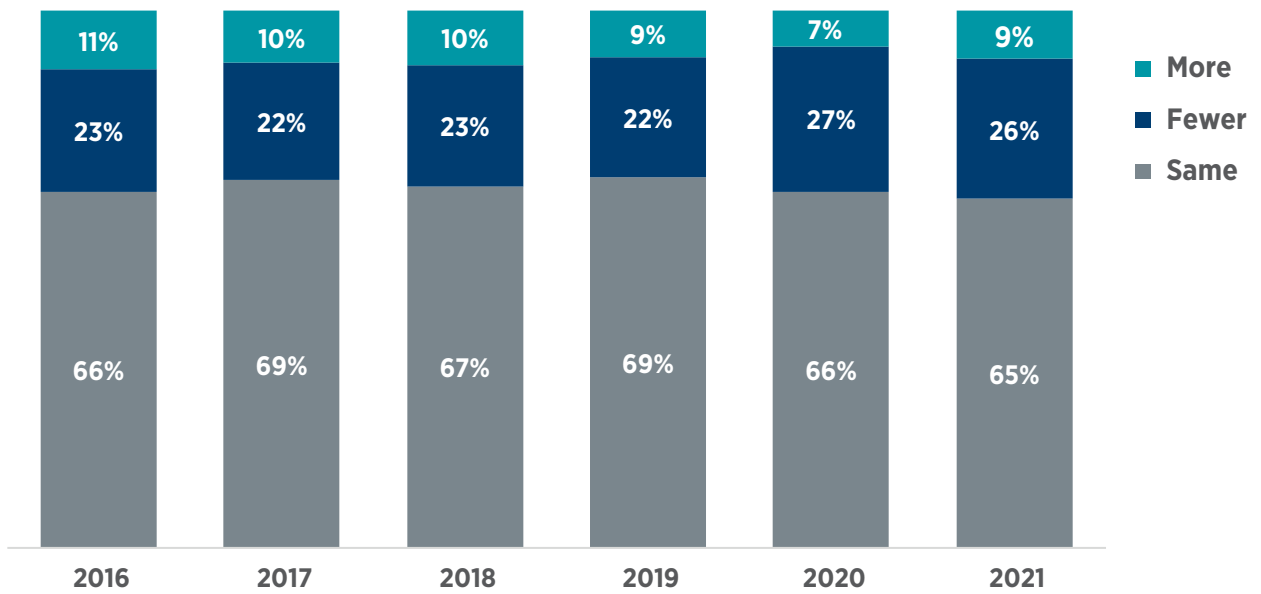
What is underemployment?

Underemployment can occur when an employee is not working as many hours as they would like. As measured in total hours, underemployment represents the number of hours that veterinarians desire to work (for more compensation) above what they are currently working, versus the number of fewer hours they desire to work (for lower compensation). This was measured as the desire to increase/decrease hours worked for an equivalent increase/decrease in compensation.



Underemployment was again negative in 2021, following a trend started in 2016. This means that **more veterinarians indicated they wish to work fewer hours for less compensation** than those who wish to work more hours for more compensation.

PREFERENCE FOR HOURS WORKED PER WEEK

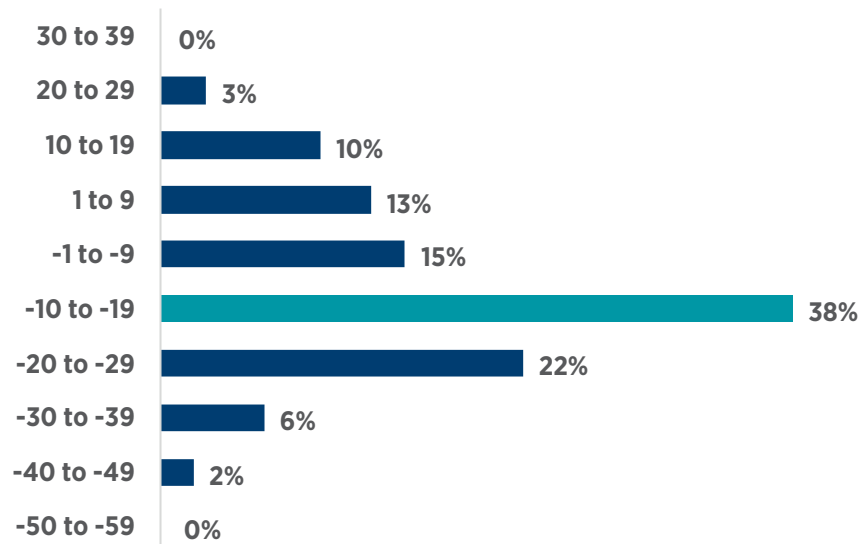


Veterinarians who chose “Work fewer hours per week than you do now, for a lower level of total compensation” are represented by “Fewer.” “Work the same number of hours per week as you do now, with no change to level of total compensation” is represented by “Same.” “Work more hours per week than you do now, for a higher level of total compensation” is represented by “More.”

Among veterinarians wishing to change their hours, desired changes ranged from 39 more hours per week to 59 fewer hours per week.

38% of veterinarians desired to decrease their hours by **10–19** hours in 2021.

CHANGE IN HOURS DESIRED



PRIMARY REASONS FOR DESIRING TO CHANGE HOURS

Reasons for desiring to work more hours for more pay		Reasons for desiring to work fewer hours for less pay*	
To make more money	52%	Better work-life balance	41%
I enjoy working	18%	Mental health (stress, anxiety, burnout)	29%
Concerned about retirement finances	9%	Feel overworked at current rate	11%
To gain more experience	8%	Taking care of children	9%
Other	7%	Other	2%
Anticipated financial problems	4%	Nearing retirement	2%
Spouse/significant other job change or issues	3%	Too busy with other activities	2%

*Working more hours than promised (1%), pursuing other work opportunities (1%), and medical reasons (1%) were also listed as reasons for desiring to work fewer hours.

What it means

- Veterinary medicine is experiencing a tight labor market as veterinary professionals say no to work without the right incentives.
- Veterinary employers stack on incentives or raise salaries to hire qualified candidates.
- Employers are encouraged to review the benefits they are currently providing and consider additional benefits that nurture a healthy mind and body, such as more paid time off or paid family leave. Even if these benefits aren't offered, employers can help boost engagement and work-life balance of veterinarians and other staff by promoting a culture that supports taking time off and avoiding excess work hours.
- Employers having trouble hiring veterinarians could take the opportunity to ensure that their practice is running at optimal efficiency, before investing in hiring and onboarding new staff. This could mean ensuring veterinary support staff are being engaged to their full potential, and implementing new automated processes, such as automated client reminders and a practice-directed online pharmacy. Indeed, employers may do well to ride out the short-term pain of an unknown labor/supply chain (even at the national level) and see how things pan out after the pandemic, before making financial decisions that can have long-term impacts in the future.

Wellbeing

Wellbeing is one of the most important issues for the veterinary profession and a critical focus for the AVMA. This section explores wellbeing and how it relates to satisfaction, practice ownership (including plans to sell practices), and interest in practice ownership.

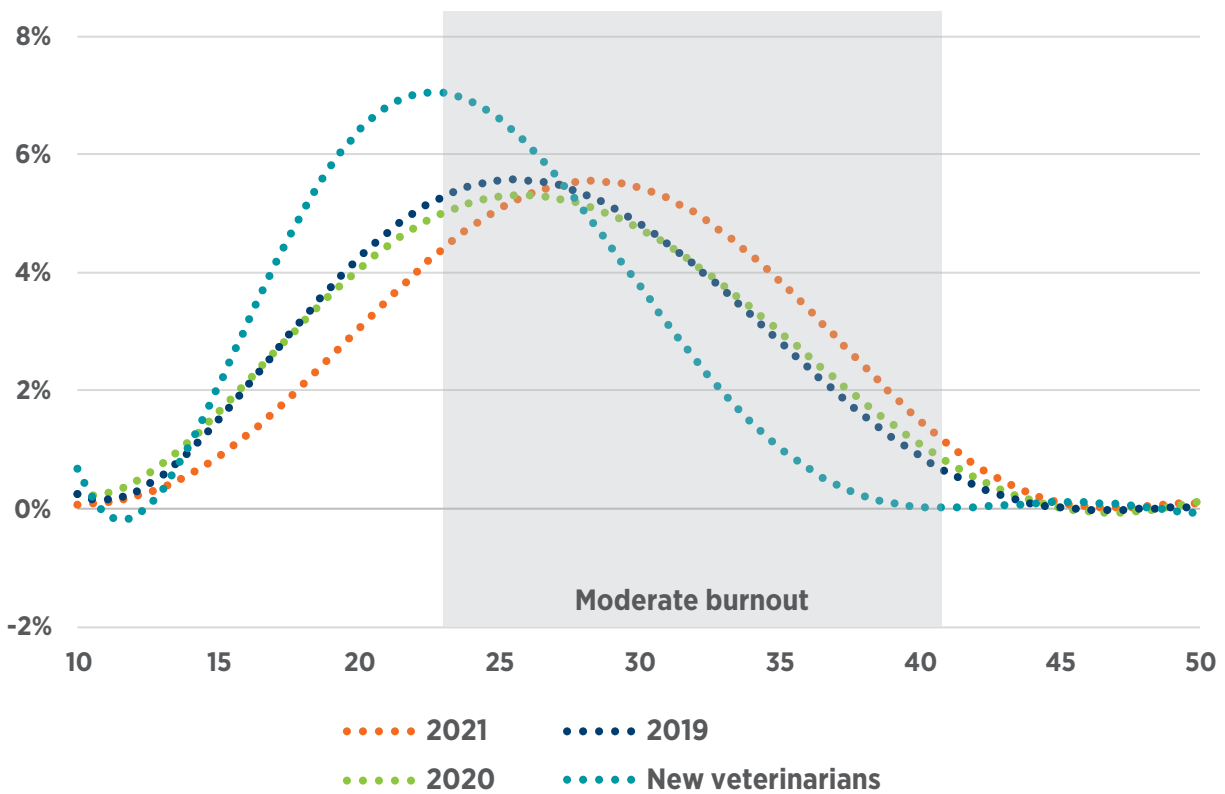
One measure used to examine wellbeing is how it varies over time and by job position. Questions from the Professional Quality of Life (ProQOL) Scale, a self-report instrument, are included in the Census of Veterinarians survey, and burnout scores can be calculated for each respondent. A shift toward higher burnout scores was seen in 2021, likely due in part to the COVID-19 pandemic. However, this shift has been happening since burnout was first measured in 2015 (not pictured).



New DVM graduates don't start off with high burnout—this happens as veterinarians **progress through their career.**

B. Hudnall Stamm, 2009. Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 (ProQOL). www.proqol.org

DISTRIBUTION OF BURNOUT SCORES

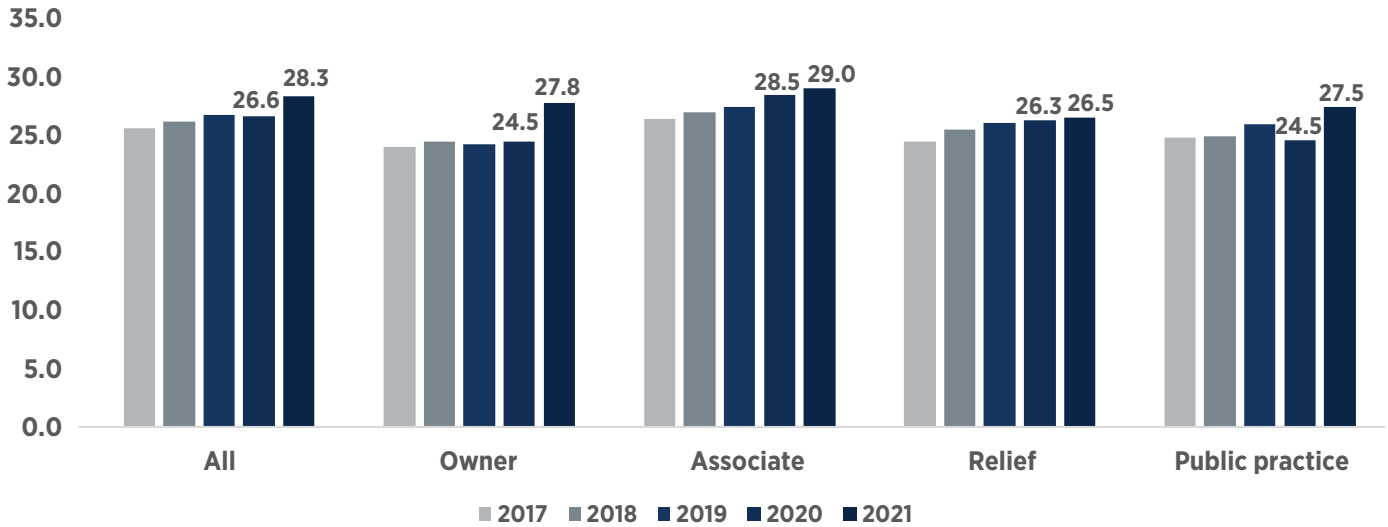


In 2021, veterinarians had the highest level of burnout overall relative to prior years, but among veterinarians, new veterinarians had the lowest.

Burnout

Burnout levels in 2021 jumped almost two points from 2020. The biggest increase was among practice owners, whose average score rose from 24.5 in 2020 to 27.8 in 2021. Among all other positions, associates continued to have the highest average burnout score, at 29.0. Public practice veterinarians also saw an increase in average burnout score.

BURNOUT SCORES BY JOB POSITION OVER TIME



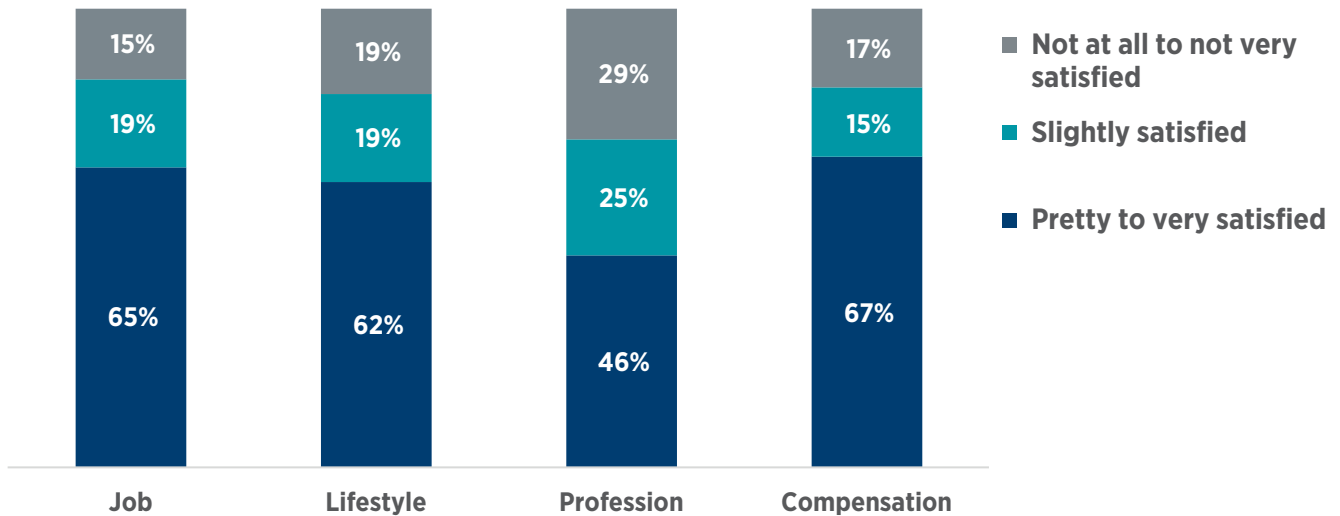
SATISFACTION VARIES BY JOB POSITION

Area	Highest satisfaction	Lowest satisfaction
Job	Owners	Associates and relief veterinarians
Compensation	Owners	Public practice
Lifestyle	Relief veterinarians	Associates
Profession	Owners	Associates and relief veterinarians

Day-to-day satisfaction, but big-picture dissatisfaction?

Overall, about **20% fewer** veterinarians were satisfied with the profession than were satisfied with their job, lifestyle, and compensation.

SATISFACTION WITH JOB, LIFESTYLE, PROFESSION, AND COMPENSATION

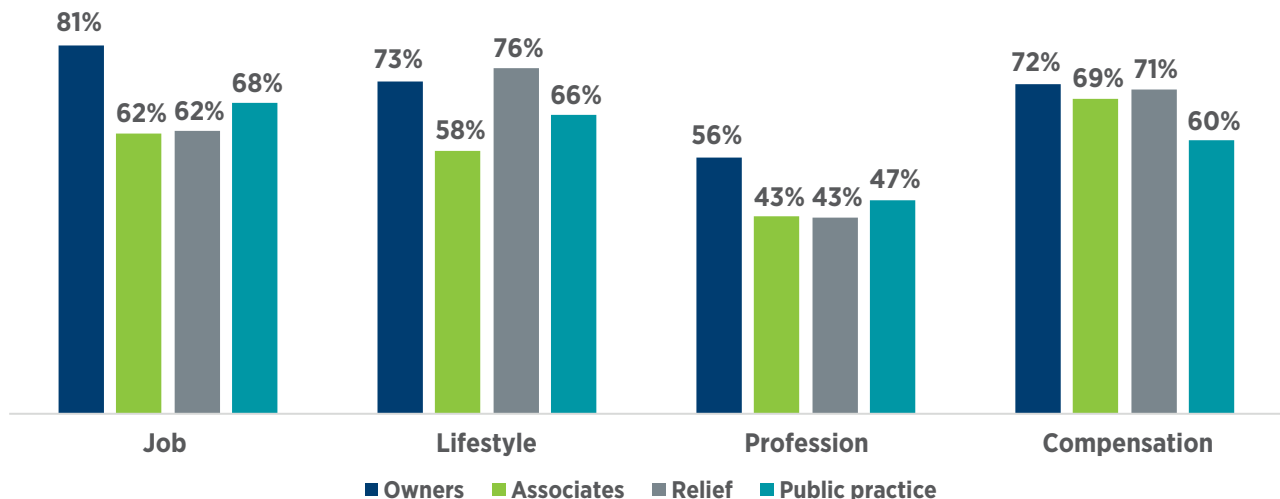


Practice owners: More likely to be satisfied than other veterinarians

Satisfaction with one's job, compensation, lifestyle, and the profession in 2021 all varied by job position. Practice owners had higher rates of satisfaction than associates in all areas examined. In fact, owners' satisfaction rates were the highest of all groups in all categories except lifestyle. In the lifestyle category, relief veterinarians had

the highest rate (76%), compared with practice owners (73%). Associates had the lowest satisfaction rates for job and lifestyle. Public practice veterinarians had the lowest satisfaction rate (60%) for compensation.

SATISFACTION RATE BY JOB POSITION



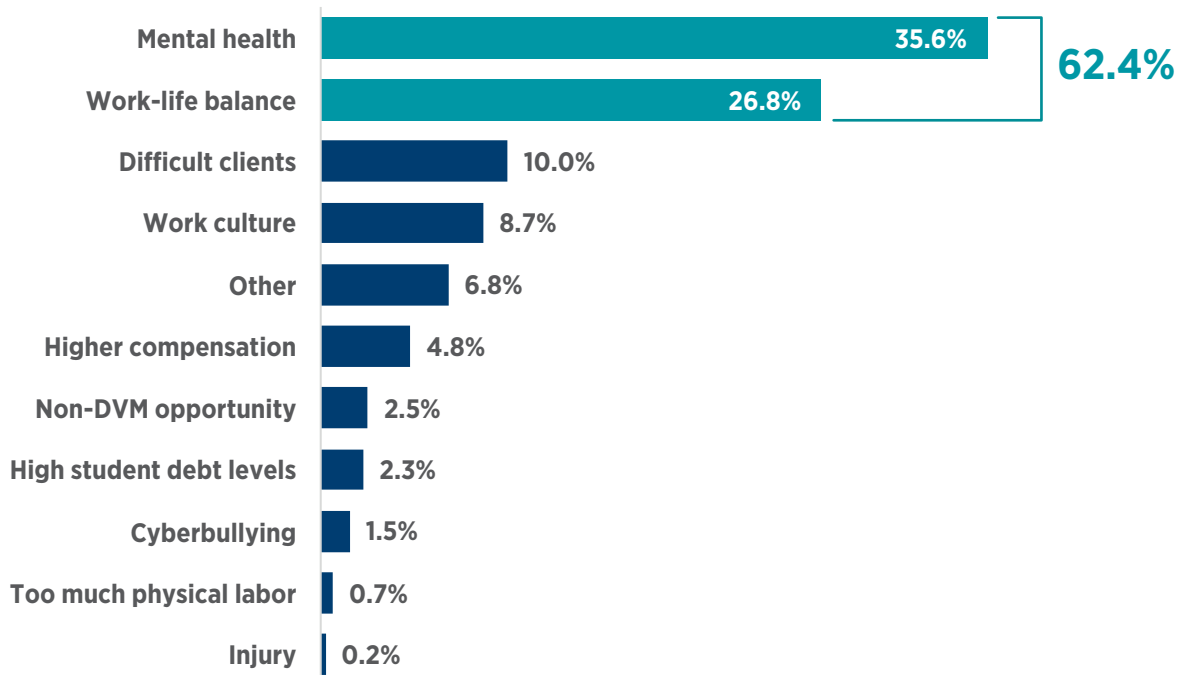
Respondents selecting "very satisfied" or "pretty satisfied" were considered satisfied.

Satisfaction with the profession is correlated with considering leaving the veterinary profession. Overall, 44% of veterinarians said they had considered leaving the veterinary profession for reasons other than retirement, up from 36% in 2020. For how long they had considered leaving, 23% said within the last year, 16% within the last two to five years, and 5% for more than five years. Although the way people feel is not always what they end up doing, these data can be interpreted as representing the current state of satisfaction.

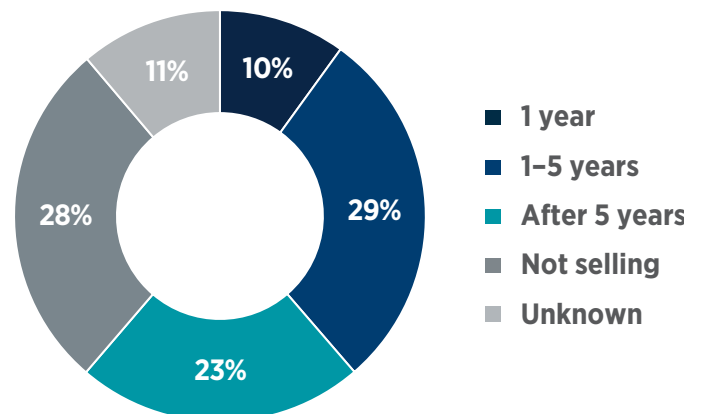


The top reasons for considering leaving the veterinary profession have to do less with money, and more with lifestyle and managing stress. **Mental health (36%)** and **work-life balance (27%)** were the most cited reasons in 2021.

PRIMARY REASON FOR WANTING TO LEAVE THE PROFESSION



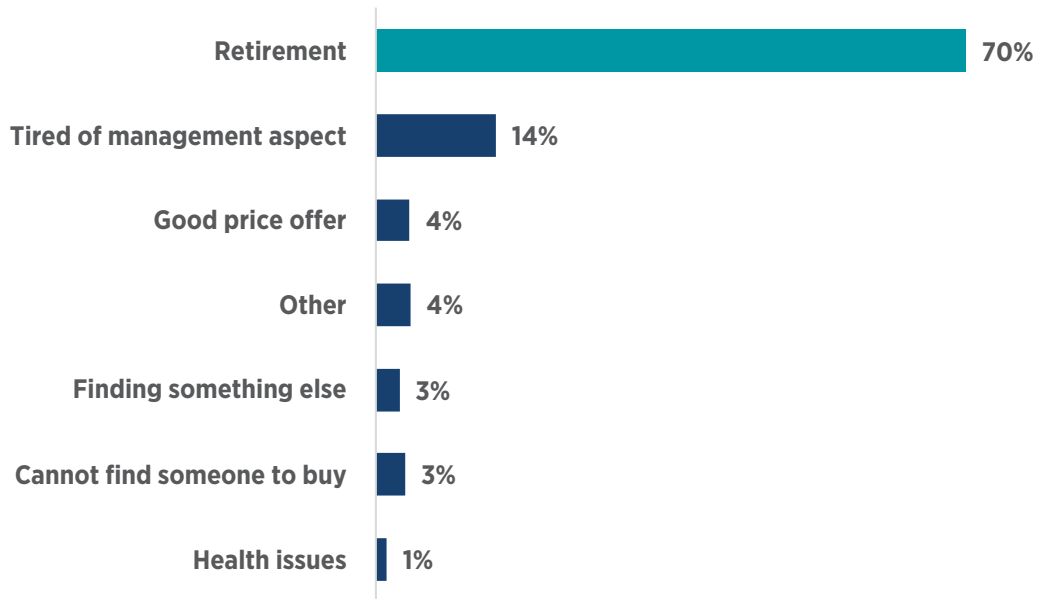
WHEN ARE YOU PLANNING ON SELLING YOUR PRACTICE?



39% of practice owners considered selling their practice within the next 1-5 years.

The biggest reason for owners planning to sell their practice was retirement (70%), followed by “Tired of the management aspect of the practice” at 14%.

TOP REASON FOR OWNERS PLANNING TO SELL THEIR PRACTICE



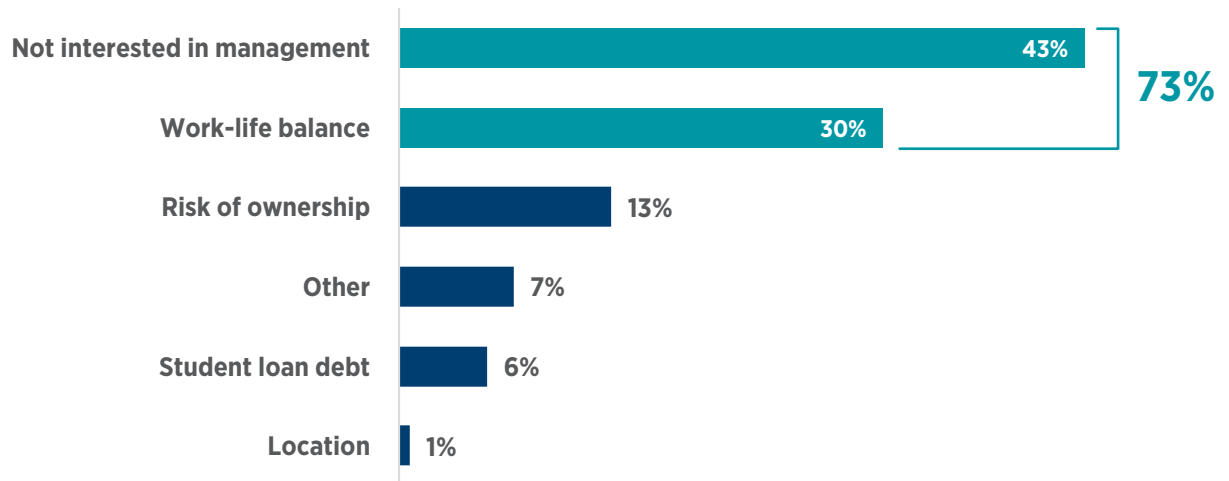
While some corporations/consolidators offer ownership shares, depending on the company, management aspects of the practice (e.g., human resources, marketing, and communications) are usually run outside of the practice. Independent private practice ownership provides full autonomy in these and other aspects.

35% of non-owners reported wanting to purchase or co-own a veterinary practice.



36% of associates, **30%** of medical directors, and **27%** of relief/contract veterinarians reported wanting to purchase or co-own a practice.

PRIMARY REASON FOR NO INTEREST IN BUYING A PRACTICE



Interest in ownership

Not many veterinarians were interested in practice ownership, but this wasn't simply due to financial aspects or risks of ownership. The leading reason was a lack of interest in management aspects of the practice (43%), followed by work-life balance (30%).

What it means

- There is a need across the profession to address the growing discontent amongst veterinarians.
- Veterinarians are working on average 45 hours per week, and they are continuing to want to work fewer hours for a lower level of compensation. The pandemic has taken its toll, and burnout continues to increase, especially in private practice. Only 46% of veterinarians are pretty to very satisfied with the profession, and 44% have considered leaving the profession.
- Mental health and work-life balance are two key reasons veterinarians want to leave. To reduce employee turnover, practice owners can promote a healthy work environment through gestures such as offering flexible work hours, supporting designated break times during work, and encouraging employees to use their sick and vacation leave (and other benefits) when needed. Non-owner veterinarians are encouraged to choose the practice or place of business that supports wellbeing and work-life balance.
- Practice ownership offers benefits beyond being one's own boss or paying oneself, such as lower burnout and higher satisfaction than other job positions. The practice is also something that can grow and can become a valuable asset in the future.

Market for veterinary services

This section presents trends in veterinary business in the U.S. from 2009 to 2019, including changes in the number and size of veterinary practices, and how practices are structured legally. Most of the data presented in this section are from the U.S. Census Bureau, which releases statistics each year on the veterinary services sector; 2019 is the latest year available. In addition, the Herfindahl-Hirschman Index (HHI, a commonly used measure of market concentration) was used to estimate the level of market concentration. The terms “establishments” and “practices” are used interchangeably here.

Trends in veterinary business

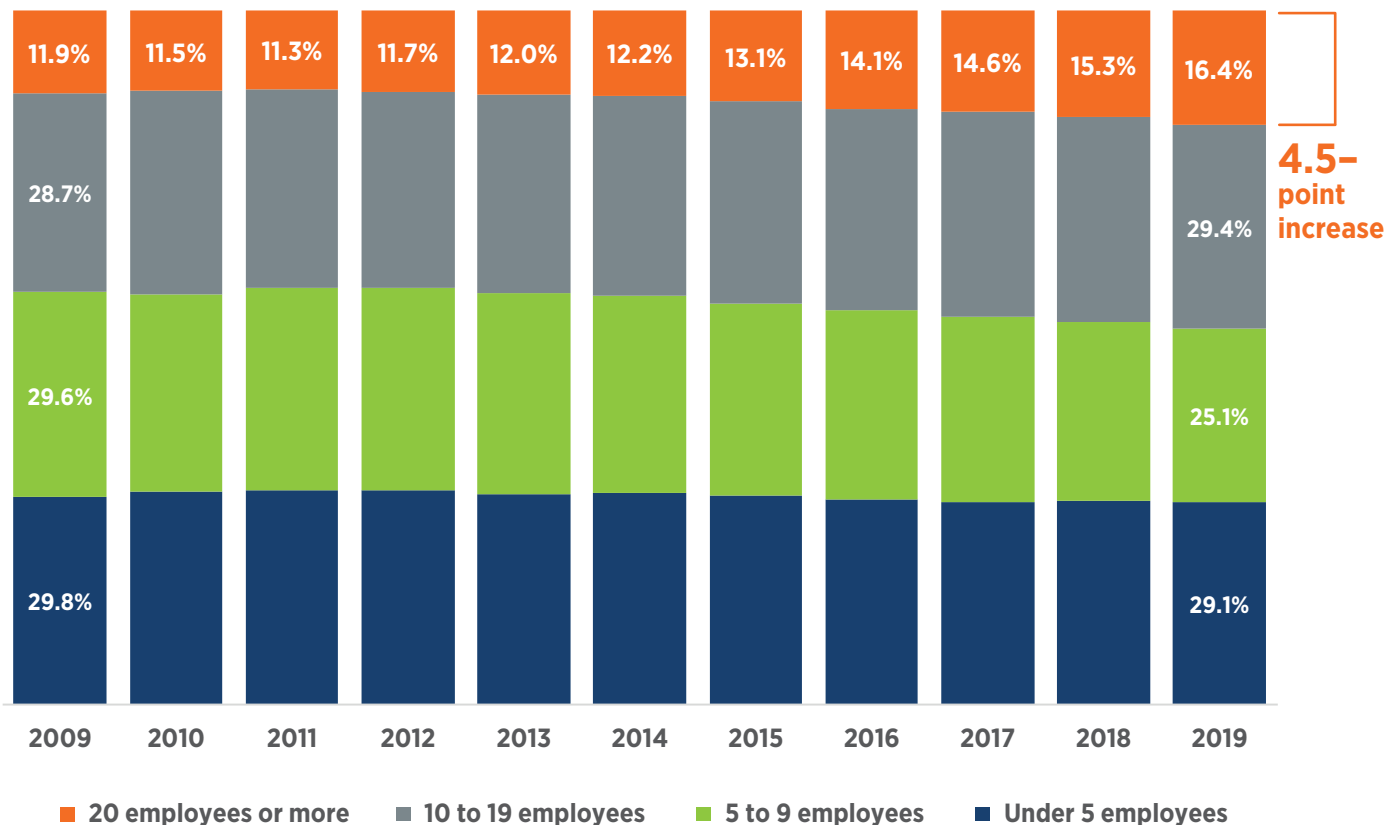
Increasing number of practices

In 2019, the U.S. Census Bureau estimated the number of veterinary establishments in the country at around 32,000. This number has increased substantially during the last 10 years, adding on average 400 new practices each year.



The share of veterinary establishments with 20 or more employees grew by **4.5 percentage points** from 2009 to 2019

DISTRIBUTION OF VETERINARY PRACTICES BY NUMBER OF EMPLOYEES



Practices are getting larger

Practices with fewer than 10 employees represented 54% of all veterinary establishments in the U.S., but this percentage appears to be declining over time. Between 2011 and 2019, the share of establishments with fewer than 10 employees declined from 60% to 54%. During that same period, the share of establishments with 20 or more employees grew from 11.9% to 16.4%.

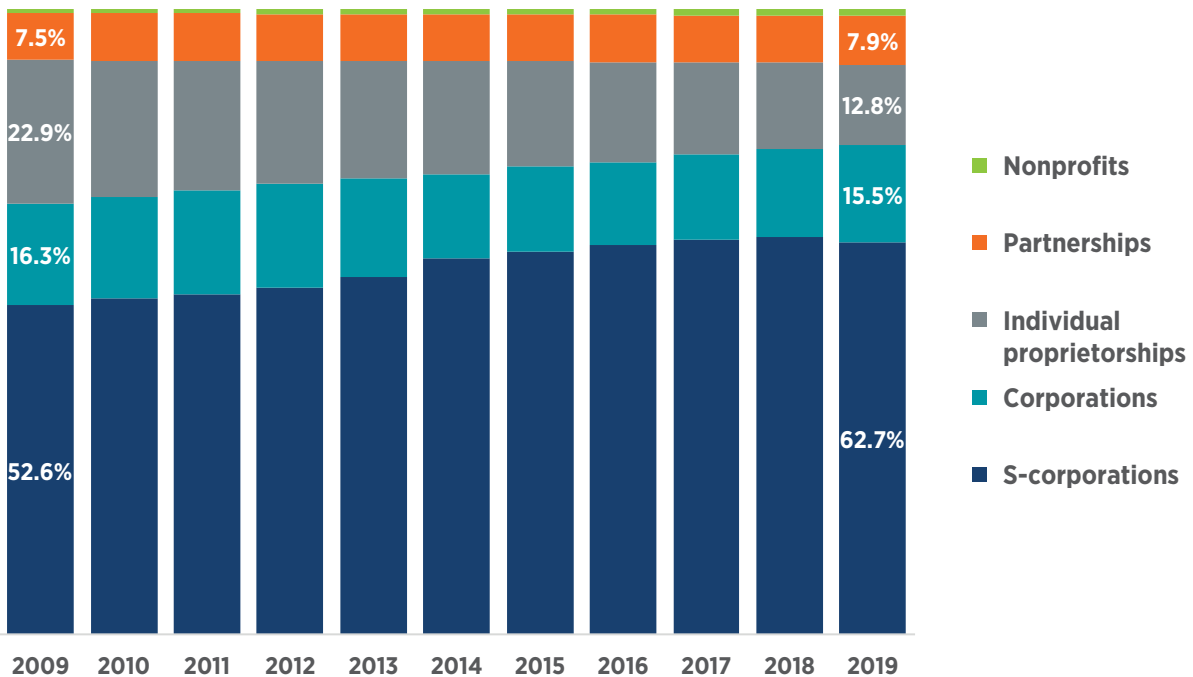
Corporate practice numbers increase, while individual proprietorships decline

Corporate entities, whether conglomerate-owned (also known as C-corporations) or falling within the IRS classification S-corporation, remained the largest form of business among animal health care providers in the U.S. Individual proprietorships decreased in representation from 22.9% in 2009 to 12.8% in 2019. Partnerships remain an option, but the share of these entities has plateaued at just under 8%.



In 2019, more than **3 in 4** veterinary establishments were identified as belonging to either corporate conglomerates or entities filing taxes as S-corporations.

U.S. VETERINARY PRACTICES GROUPED BY LEGAL FORM OF BUSINESS

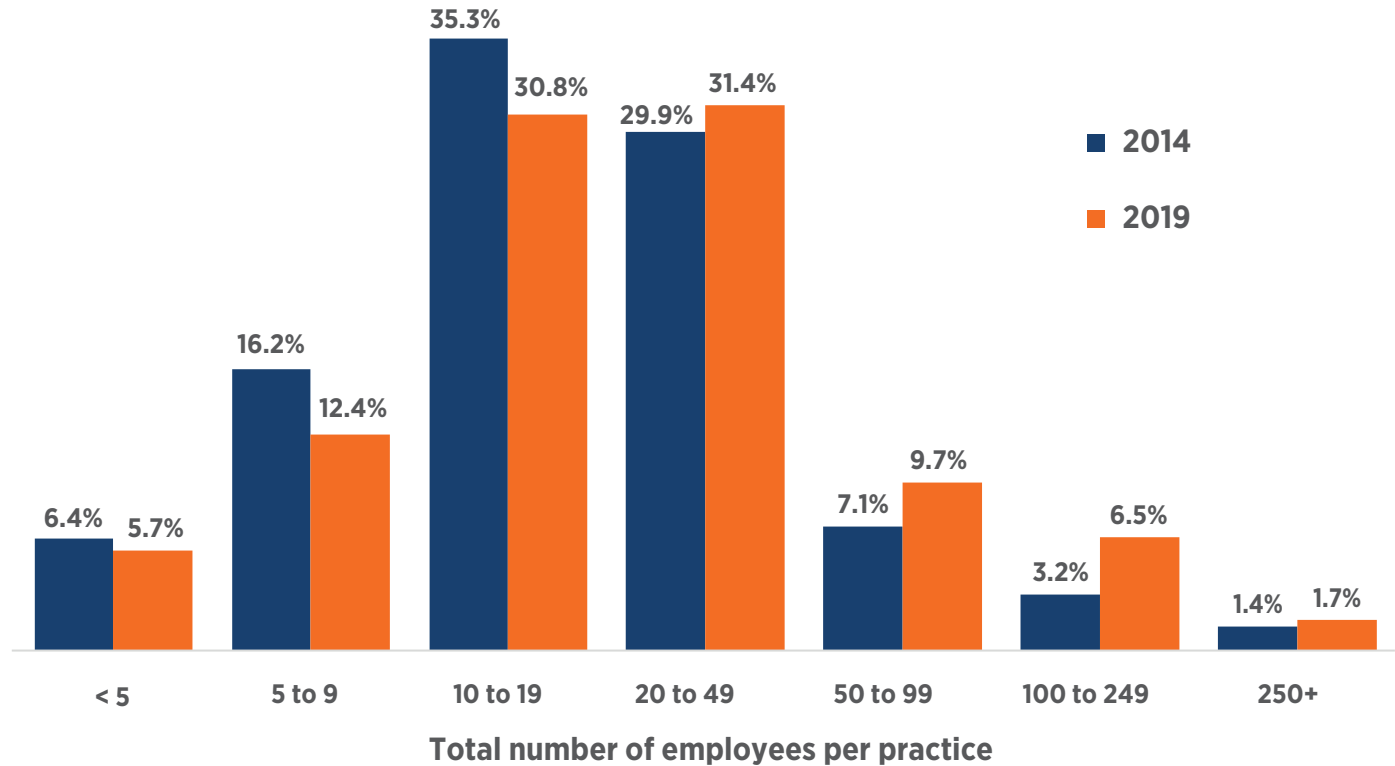


Other non-corporate entities accounted for a relatively small proportion (under 1%) of the sample.

Estimating market concentration

The HHI estimate for 2019 was around 2,259, which, according to the U.S. Department of Justice, signals a moderately concentrated market. Establishments with fewer than 10 employees accounted for 54% of practices in 2019, but generated approximately 18.1% of industry output.

MARKET SHARE OF VETERINARY PRACTICES IN 2014 AND 2019



Market share is defined as the percentage contribution to total industry sales.

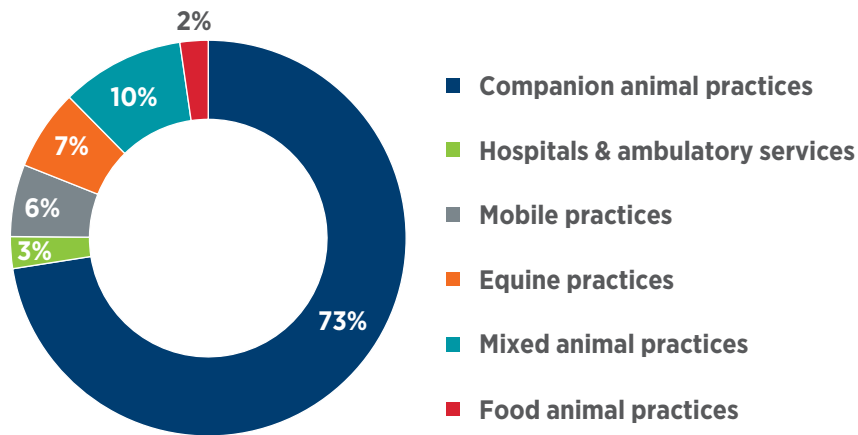
What it means

- The market is slowly deviating from a competitive market. As concentration reaches higher levels, suppliers could exercise market power.
- Prices and quantities in the markets for veterinary services could change as a result.
- To increase the odds of success, smaller practices can implement three strategies:
 - Specialize to maintain a fair share of the market
 - Increase technical efficiency to lower costs and boost profits
 - Improve staff engagement to increase productivity

Veterinary practice economics

This section presents trends in key practice metrics such as practice type and size, number and type of employees, number of clients/patients, gross revenue, production, and productivity, as determined through the AVMA Practice Owner Survey.

DISTRIBUTION OF PRACTICE OWNERS BY TYPE OF VETERINARY PRACTICE IN 2021



Data for companion animal, food animal, equine, and mixed animal practices represent brick-and-mortar hospitals only (i.e., excluding mobile practices and practices with both hospitals and ambulatory services). "Hospitals and ambulatory services" includes practices that have both brick-and-mortar hospitals and ambulatory services, regardless of species focus.

Practice physical structure



From 2017 to 2021, the average veterinary practice increased in size by approximately **300 square feet** on average, and the average number of exam rooms increased from **3.3** to **3.6**.

AVERAGE VETERINARY PRACTICE SIZE

TOTAL SQUARE FEET:
3,900

NUMBER OF EXAM ROOMS:
3.6

Practice operations

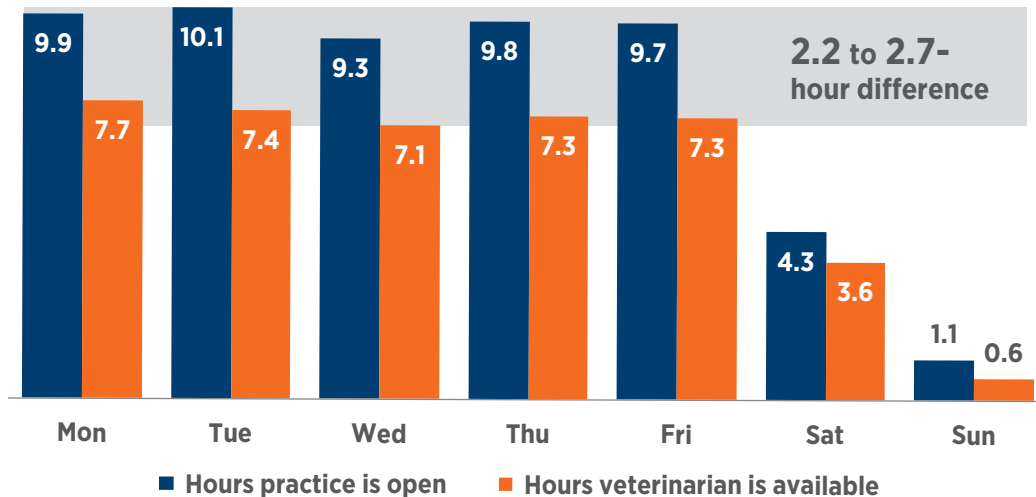


Most veterinary businesses operated nearly **6 days per week** and almost **10 hours per day**.

AVERAGE PRACTICE HOURS OF OPERATION

Practice type	Days/week	Hours/week
Food animal	6.1	71
Equine	5.9	63
Mixed animal	5.8	55
Companion animal	5.7	54
Mobile	5.3	50

MEAN NUMBER OF HOURS OPEN FOR BUSINESS, BY DAY





On average, veterinarians were available for scheduled appointments about **7 hours** on weekdays, **3 hours** on Saturday, and **less than 1 hour** on Sunday.

Veterinarian work hours

In 2021, there was a two-hour gap each day (Monday-Friday) between the number of hours the practice was open and the number of hours a veterinarian was available to see patients.

Management skills are critical

Running a veterinary practice requires management skills. Some practices reported having access to technical support, including practice management guidelines, through American Animal Hospital Association (AAHA) accreditation. Other practices used other available tools for managing their businesses, including the AAHA/Veterinary Management Groups (VMG) chart of accounts, which provides efficient ways to capture and assess financial health of the business. Some others relied on the services of contract consultants.

MANAGEMENT RESOURCES UTILIZATION

Certified public accountant or consulting entity	88.5%
AAHA/VMG chart of accounts	21.3%
AAHA accreditation and associated tools	13.6%

Technology

Technology can increase staff productivity, improve workflow, and reduce production costs. Yet, technology is not highly adopted in the U.S. veterinary industry. In this analysis, practice owners were asked to identify among a specified list of highly recommended technologies, the ones they have available in their practices.

TECHNOLOGY UTILIZATION

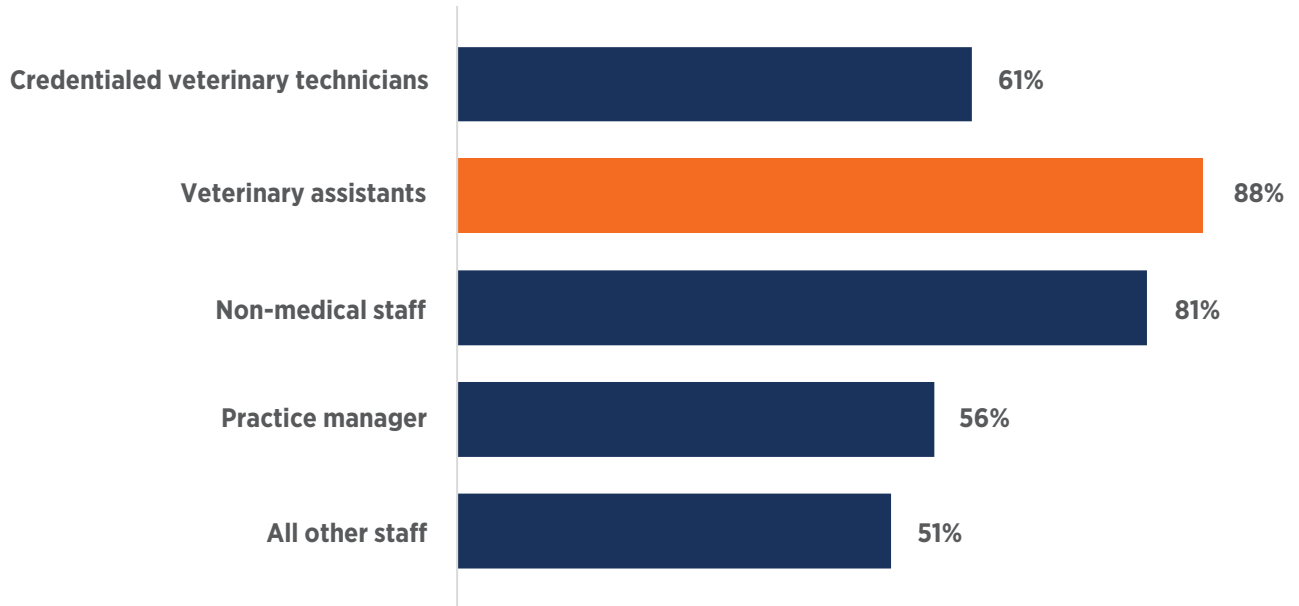
Electronic medical record software or practice management software (PIMS)	89%
Communications software that integrates with PIMS	49%
Online appointment scheduling system	44%
Telehealth*	25%
Digital inventory management system	9%

*Any virtual consultation or communication with clients that generates revenue

Employment and labor

A practice manager's role is to improve efficiency in the practice through better resource management. Only 56% of veterinary practices used a practice manager in 2021. Although 61% of practices reported using credentialed veterinary technicians in 2021, veterinary assistants (including non-credentialed staff working as technicians) and non-medical staff were far more common at 88% and 81%, respectively.

STAFF UTILIZATION



"Veterinary assistants" includes non-credentialed staff working as technicians. "Non-medical staff" includes receptionists or client service staff and kennel and animal caretaker staff.

PRACTICE MANAGER UTILIZATION

COMPANION ANIMAL PRACTICES:	56%
AMBULATORY PRACTICES:	50%
MIXED ANIMAL PRACTICES:	45%
EQUINE PRACTICES:	37%
MOBILE PRACTICES:	14%

VETERINARY TECHNICIANS

WHO THEY ARE:

Credentialed veterinary technicians and veterinary assistants

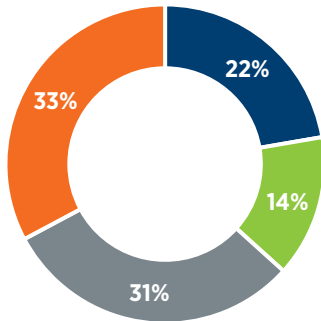
WHAT THEY DO:

Play a key role in veterinary service as part of the practice team, performing a variety of technical and medical tasks in support of veterinarians and their clients

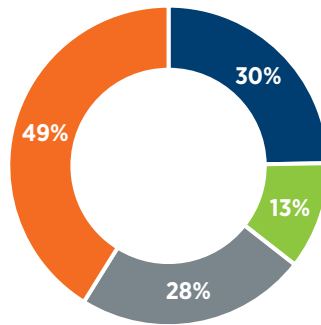
In 2021, veterinary assistants (VAs) accounted for the largest percentage of labor hours at companion animal practices, practices with hospital and ambulatory services, and mixed animal practices. At these same practices, veterinarians accounted for 22% to 33% of labor hours. However, for equine and mobile practices, veterinarians accounted for 50% and 47% of labor hours, respectively. Credentialed veterinary technicians (CVTs) accounted for the lowest percentage of labor hours, ranging from 4% to 14%.

LABOR SHARE BY STAFF AND PRACTICE TYPE

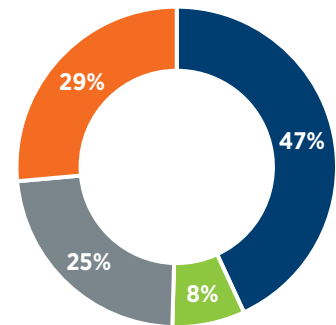
Companion animal practices



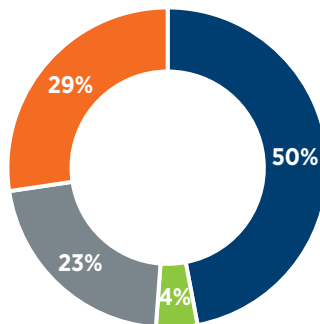
Hospitals & ambulatory services



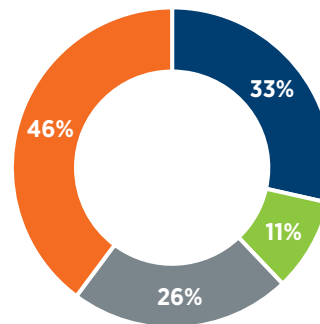
Mobile practices



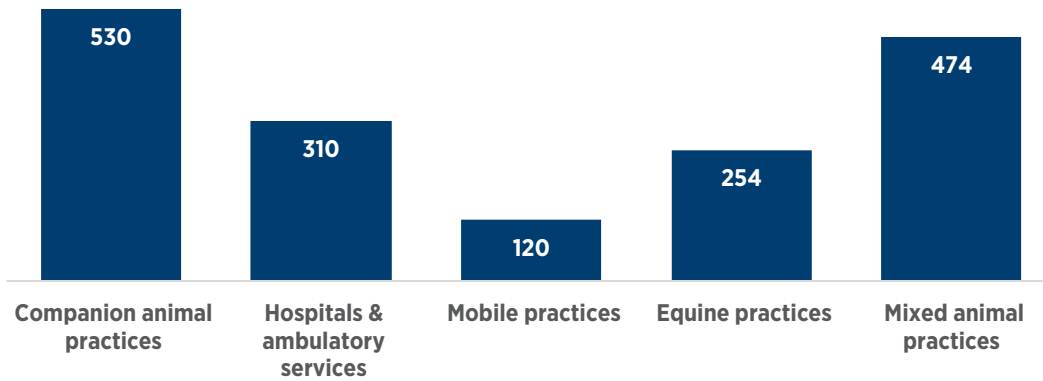
Equine practices



Mixed animal practices



MEAN TOTAL WEEKLY STAFF LABOR HOURS



THE AVERAGE NUMBER OF FULL-TIME-EQUIVALENT STAFF VARIES GREATLY ACROSS PRACTICE TYPES

Practice type	Veterinarians	CVTs	VAs	Non-medical staff
Companion animal	3.2	2.1	4.4	4.7
Hospitals & ambulatory services	2.5	1.1	2.3	2.5
Mobile	1.5	0.3	0.8	0.6
Equine	3.5	0.3	1.6	1.5
Mixed animal	4.2	1.4	3.3	3.9

RATIOS OF FULL-TIME EQUIVALENT NON-VETERINARIAN STAFF TO VETERINARIANS IN 2021

Practice type	Staff-to-veterinarian ratio	CVT-to-veterinarian ratio	VA-to-veterinarian ratio
Companion animal	3.7 : 1	0.6 : 1	1.5 : 1
Hospitals & ambulatory services	12.0 : 1	0.3 : 1	0.9 : 1
Mobile	0.9 : 1	0.1 : 1	0.5 : 1
Equine	1.0 : 1	0.1 : 1	0.4 : 1
Mixed animal	1.8 : 1	0.2 : 1	0.7 : 1

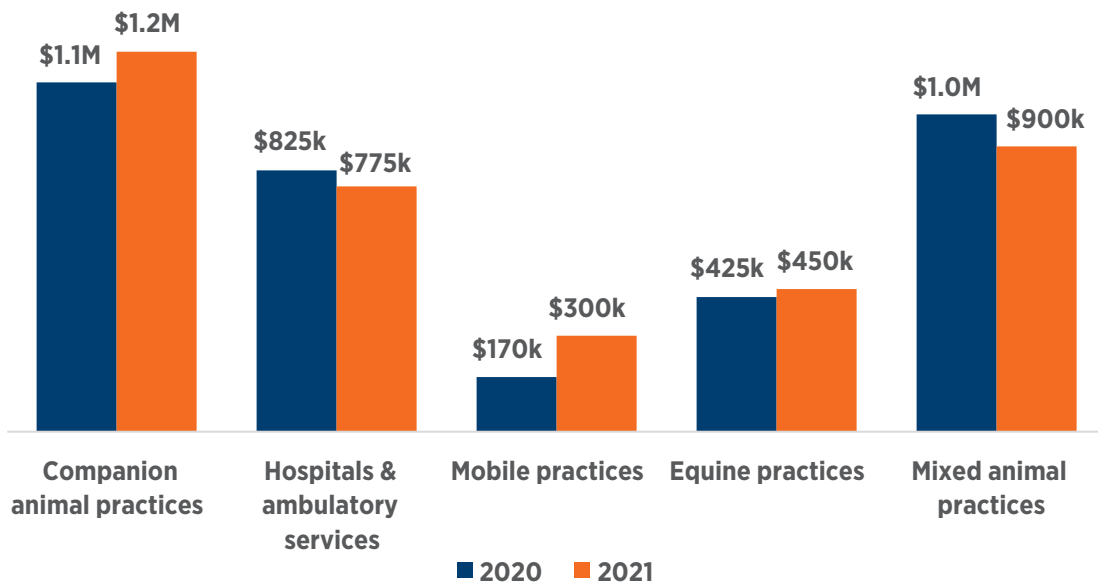
Revenue and expenditures



Median gross revenue in 2021 **increased** relative to 2020 for companion animal, mobile, and equine practices.

Hospitals and ambulatory services reported the highest median gross revenue at \$1,200,000, followed by mixed animal practices (\$900,000). Mobile practices (\$300,000) had the lowest mean gross revenue in 2021.

MEDIAN GROSS REVENUE BY PRACTICE TYPE IN 2020 AND 2021



HIGHEST REVENUE-GENERATING SERVICES

EXAMS AND CONSULTATIONS

Largest share of revenue for all practice types (19.1–28.2%)

COMPANION ANIMAL PRACTICES

- Laboratory (13.1%)
- Surgery and anesthesia (13.0%)
- Vaccinations (12.2%)
- Dentistry (6.9)
- Imaging (6.2%)

HOSPITALS & AMBULATORY SERVICES

- Surgery and anesthesia (13.9%)
- Laboratory (11.2%)
- Vaccinations (10.5%)
- Dentistry (9.8%)
- Imaging (5.3%)

MOBILE PRACTICES

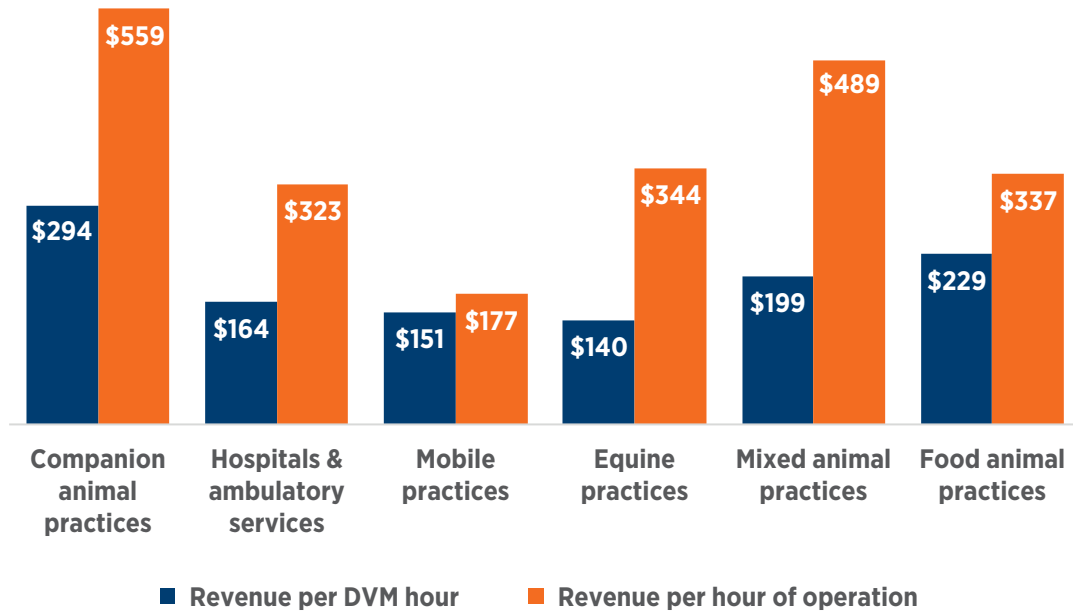
- Surgery and anesthesia (14.3%)
- Vaccinations (12.1%)
- Imaging (10.2%)
- Laboratory (7.6%)

Practice owners were asked to estimate the percentage contribution of selected activities to the practice's gross revenue.

Production and productivity

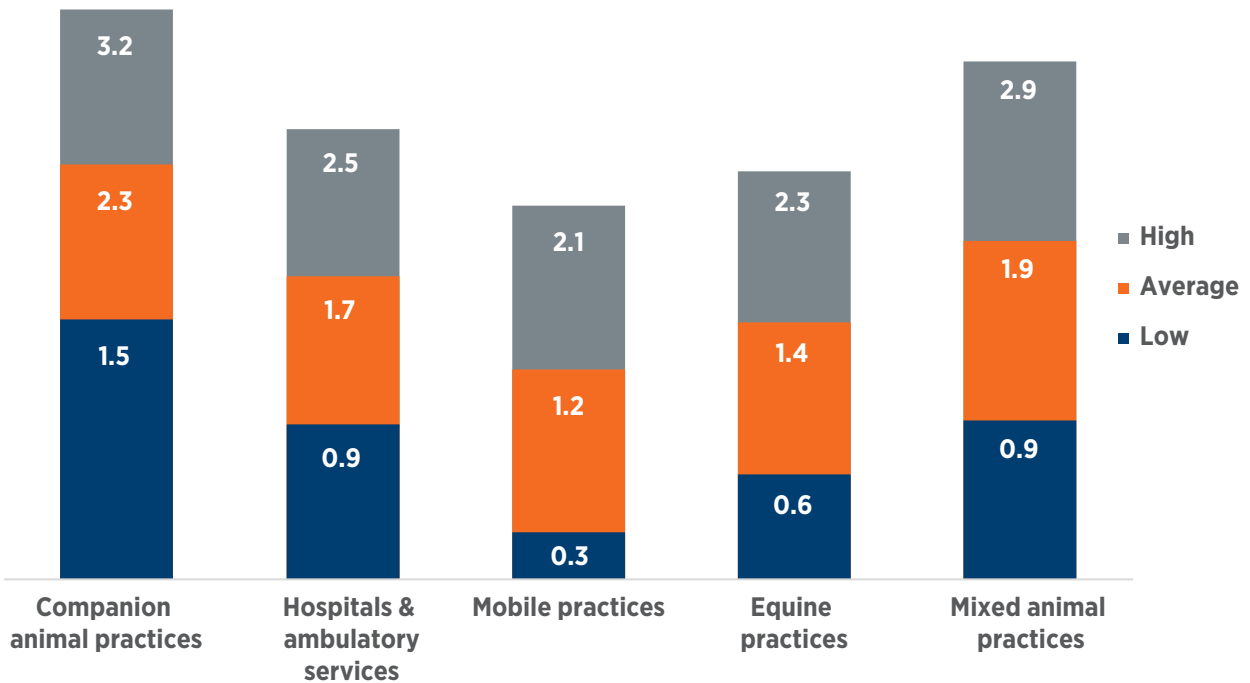
Companion animal practices brought in the highest revenue per DVM hour (\$294) and the highest revenue per hour of operation (\$559). Food animal practices had the second highest revenue per DVM hour (\$229). All other practice types were between \$140 and \$199 per DVM hour.

REVENUE PER DVM HOUR AND REVENUE PER HOUR OF OPERATION



Companion animal practices saw the most patients per hour, with approximately one more patient per hour than mobile and equine practices. A veterinarian in companion animal practice saw on average 2.3 patients per hour. On the other hand, the average was 1.7 patients per hour in hospitals and ambulatory services, 1.2 in mobile practices, 1.4 in equine practices, and 1.9 in mixed animal practices.

MEAN NUMBER OF PATIENTS PER DVM HOUR



“Low” is at least one standard deviation below the mean, and “High” is at least one standard deviation above the mean. The range between these two cut points captures 68% of incomes.

What it means

- Time and space management are major challenges for some practices.
- Optimizing both physical space and efficiency in time management (when possible) could lead to significant improvement in productivity.
- Opportunities exist for practices owners and managers to integrate technology and invest in professional development to improve productivity and efficiency.
- The low utilization rate of modern technology such as online appointment scheduling, communications software, digital inventory management systems, and telehealth could restrict practice growth.
- Data concerning utilization of certified veterinary technicians reveal opportunities to rely on these highly trained and skilled staff more than is currently being done. Certified veterinary technicians have all the necessary skills to support veterinary practices and high-quality patient care, and can help practices run smoothly and efficiently, allowing veterinarians to focus on matters that require their advanced veterinary medical education.
- Better staff utilization could increase technical efficiency and improve productivity and revenues.
- Clear labor division can promote an understanding of duties and expectations by each staff member.

Practice ownership

This section covers practice owner satisfaction, views on competition and expansion, use of social media, and demographics.

Impact of the COVID-19 pandemic on veterinary practices

Perceived level of competition within the business area

Overall, 32.0% of practice owners said that there were fewer competitors in their business area before the COVID-19 pandemic, and 59.3% stated the same when asked how they feel about competition during the pandemic. The pandemic lockdown prompted some businesses to close, leading to fewer competitors in some areas. On the other hand, 17.2% of practice owners said there were many competitors in their business area before the pandemic, and 11.8% stated the same when asked about competition during the pandemic.

IMPACT OF THE PANDEMIC ON EMPLOYMENT

14.2% of practices lost **associate veterinarians**.*

32.3% of practices lost **veterinary technicians**.*

*Quit, laid off, or relocated

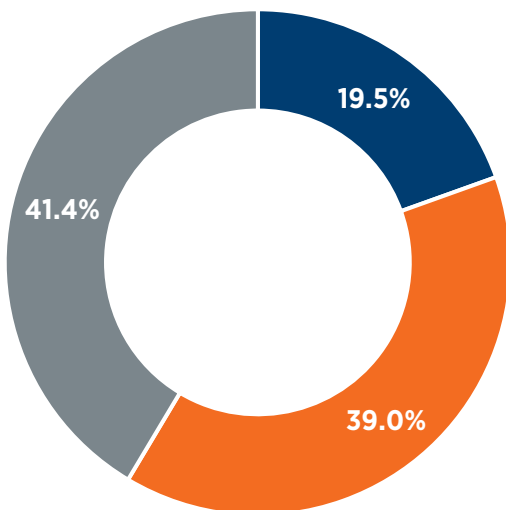
IMPACT OF THE PANDEMIC ON PRACTICE REVENUE

77.1% of practices witnessed an **increase** in revenue between 2020 and 2021.

15.3% of practices witnessed a **decrease** in revenue between 2020 and 2021.

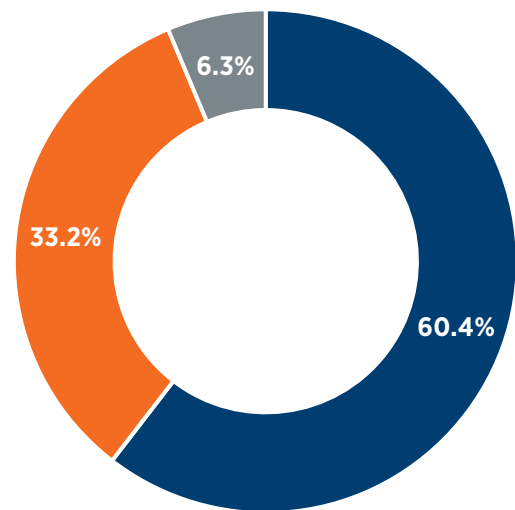
REVENUE IN 2021 VERSUS 2020

Practices with lower revenue



■ Up 25% or more ■ Up 1% to 10%
■ Up 11% to 25%

Practices with higher revenue



■ Down 1% to 10% ■ Down 25% or more
■ Down 11% to 25%

Use of social media

Opportunities exist to **increase use of social media** to increase visibility, educate and stay connected with clients, and attract new clients at a relatively **low cost**.

USES OF SOCIAL MEDIA

MOST COMMON

Contribute to a blog: **88%** Post videos: **68%**
Post job openings: **72%** Share success stories: **58%**
Share specials: **71%**

LEAST COMMON

Share pictures of pets: **50%** Attract new clients: **54%**
Post community service announcements: **51%** Communicate with clients: **56%**

Practice owner demographics and experience

DEMOGRAPHICS OF PRACTICE OWNERS

GENDER

50.4% of practice owners are men, and **49.6%** are women.

AGE

Average age is **55.6** years overall, **52.8** years for women, and **58.4** years for men.

REGION OF THE U.S.

23.1% are from the South, **15.3%** the Midwest, **13.4%** the West, and **10.9%** the Northeast.

RACE

63.3% are white/Caucasian, **1.4%** multiracial, **1.2%** Asian, **0.5%** Black/African American, **0.2%** American Indian/Alaska Native, **0.1%** Native Hawaiian/Pacific Islander, and **0.7%** other.

SPECIES FOCUS

64.0% own companion animal exclusive practices, **17.1%** companion animal predominant practices, **9.9%** mixed animal practices, **6.8%** equine practices, and **2.2%** food animal exclusive practices.

Percentages may not sum to 100% because of unanswered questions.

PROFESSIONAL EXPERIENCE OF PRACTICE OWNERS

VETERINARY EXPERIENCE

32.7% graduated from veterinary school between 1980 and 1989, **31.7%** between 1990 and 1999, **15.1%** between 2000 and 2009, **10.1%** before 1980, and **9.9%** in 2010 or later.

OWNERSHIP EXPERIENCE

Average length of practice ownership was **19.5** years overall, **16.8** years for women, and **22.2** years for men.

What it means

- Low rates of social media usage for certain purposes highlight opportunities to improve practice performance in areas such as marketing and client relationship development.
- Demographic data suggest opportunities to increase representation of women in practice ownership to more closely match their distribution in the veterinarian population, and to increase representation of people of color as well. Efforts that encourage practice ownership and provide support for ownership, especially targeting women and people of color, can help improve equity and diversity in veterinary medicine and strengthen the profession.

Market for veterinary education

Data source: 2021 AVMA Senior Survey

The AVMA Senior Survey is an annual survey of fourth-year veterinary students, administered two to three weeks prior to their graduation. In 2021, students graduating from the 30 U.S. veterinary schools and colleges with a graduating class that year, and from two Caribbean AVMA-Council on Education accredited veterinary schools,

were invited to participate via email. Follow-up emails were sent to encourage completion and submission of the survey. The overall response rate was 84.3% for U.S. schools and 30.2% for Caribbean schools. Overall, 1 out of 3 U.S. schools had a 100% response rate.

RESPONSE RATE BY VETERINARY SCHOOL, 2021

School	Number of grads	Number of respondents	Response rate
Auburn University	114	114	100.0%
Colorado State University	147	84	57.1%
Cornell Veterinary College	107	105	98.1%
Cummings SVM at Tufts University	96	68	70.8%
Iowa State University	148	106	71.6%
Kansas State University	115	81	70.4%
Lincoln Memorial University	120	120	100.0%
Louisiana State University	84	84	100.0%
Michigan State University	113	87	77.0%
Midwestern University	108	78	72.2%
Mississippi State University	91	91	100.0%
North Carolina State University	96	96	100.0%
Oklahoma State University	93	49	52.7%
Oregon State University	71	60	84.5%
Purdue University	83	83	100.0%
Texas A&M University	134	134	100.0%
The Ohio State University	153	111	72.5%
Tuskegee University	59	37	62.7%
University of California – Davis	137	137	100.0%

School	Number of grads	Number of respondents	Response rate
University of Florida	105	83	79.0%
University of Georgia	116	116	100.0%
University of Illinois	134	111	82.8%
University of Minnesota	105	96	91.4%
University of Missouri – Columbia	115	112	97.4%
University of Pennsylvania	123	90	73.2%
University of Tennessee	90	84	93.3%
University of Wisconsin	99	83	83.8%
Virginia Tech & University of Maryland	128	128	100.0%
Washington State University	127	71	55.9%
Western University of Health Sciences	100	91	91.0%
Total for all 30 U.S. schools	3,311	2,790	84.3%
Caribbean schools			
Ross University	441	107	24.3%
St. George's University	184	82	44.6%
Total for both Caribbean schools	625	189	30.2%

Market for veterinarians

Data sources

- Census data: Census of Veterinarians portion of the 2021 AVMA Census of Veterinarians and Veterinary Practice Owner Survey. In calculations of average income, values less than \$25,000 or greater than \$500,000 were excluded. In calculations of average hours worked per week, values less than 85 and greater than 0 hours per week were used.
- Veterinarian population data: 2021 AVMA membership database
- U.S. population data: U.S. Census Bureau

Census of veterinarians

To perform the Census of Veterinarians, a random sample of veterinarians was extracted from the AVMA membership database. Each selected veterinarian was sent a link to the Qualtrics-based survey via email. The survey was distributed on March 25, 2021, and stayed open through April 30, 2021. A follow-up email was sent to survey recipients once a week for four weeks to encourage completion and submission of the survey. By the end of the four-week period, 3,556 participants had returned at least a partially completed survey. The final response rate for the 2021 Census of Veterinarians (not including those in the practice owner sample) was 22%. Respondents included a higher percentage of women (78%) than in the veterinarian population (AVMA membership; 61%). Respondents had a similar distribution to AVMA membership with regards to gender by graduation year (AVMA membership: female 2010-2021 graduates, 80%; female 2000-2009 graduates, 72%; female 1990-1999 graduates, 61%).

AVERAGE VALUES AND DISTRIBUTION OF SELECTED VARIABLES FOR VETERINARIANS PARTICIPATING IN THE 2021 CENSUS OF VETERINARIANS

Characteristic	Weekly hours worked	Change in hours desired to work ¹	Compensation ²	Burnout score	Consider leaving veterinary profession	Percent female	Years of experience
All	45.6	-10.4	\$118,460	28.3	44.4%	77.5%	11.3
Full-time (35 or more hours)	48.8	-12.0	\$121,489	28.5	42.3%	76.2%	10.9
Part-time (less than 35 hours)	24.1	2.8	\$95,036	27.1	58.2%	88.2%	14.8
Private practice ³	44.8	-10.5	\$120,580	28.8	45.6%	79.0%	10.9
Public practice ⁴	48.5	-9.5	\$110,671	27.5	39.9%	74.0%	12.1
Employment type							
Owner	50.0	-16.4	\$162,122	27.8	36.9%	59.1%	16.7
Associate	44.4	-10.4	\$111,395	29.0	46.3%	83.1%	9.2
Male owner	53.0	-15.2	\$196,251	26.7	29.2%		17.2
Female owner	47.9	-17.3	\$135,952	28.5	42.1%		16.4
Male associate	47.5	-8.9	\$139,806	28.2	41.6%		10.1
Female associate	43.7	-10.7	\$106,575	29.2	47.2%		9.1
Hospital director	44.6	-11.3	\$148,809	27.8	38.6%	79.8%	14.5
Relief or contract worker	33.2	-0.3	\$105,539	26.5	59.7%	82.8%	14.8
Career stage							
Early (23 to 34 years old)	48.0	-10.5		29.3	41.7%	82.7%	4.1
Mid (35 to 44 years old)	44.0	-8.7		28.6	49.5%	80.7%	11.4
Late (45 years old or over)	43.6	-11.1		26.5	42.4%	72.6%	21.6
Employment sector							
Food animal (exclusive)	50.5	-10.6		25.5	36.1%	58.5%	7.9
Mixed	50.6	-9.6		27.3	33.1%	69.7%	7.8
Companion animal (predominant)	45.3	-8.1		29.1	43.5%	74.1%	10.2
Companion animal (exclusive)	43.3	-11.0		28.9	47.4%	81.3%	11.5
Equine	54.3	-11.0		28.1	49.0%	77.6%	9.5

Average values and distribution of selected variables for veterinarians participating in the 2021 Census of Veterinarians continued

Characteristic	Weekly hours worked	Change in hours desired to work ¹	Compensation ²	Burnout score	Consider leaving veterinary profession	Percent female	Years of experience
Exotic	51.7			29.7	30.8%	87.5%	11.0
Federal gov't (civil service)	45.7	-8.1		24.9	37.8%	77.6%	12.9
Uniformed services	53.7	-10.6		25.5	45.5%	59.3%	11.5
College or university	51.2	-14.0		28.7	42.4%	71.9%	14.3
State or local government	43.1	2.2		26.6	39.5%	64.7%	13.5
Industry or commercial organizations	46.1	-4.3		24.6	34.3%	67.9%	14.3
Not-for-profit organizations	40.8	-8.6		27.6	47.1%	84.9%	13.1
Advanced education	56.7	-19.0		29.6	39.0%	78.4%	3.9
Research contractor	41.0			25.3	36.4%	83.3%	11.5
Other veterinary employment	47.3	-7.0		27.7	35.4%	74.5%	13.0
Independently owned single practice	42.9	-7.9		28.8	46.0%	85.5%	9.6
Independently owned group practice	45.2	-10.5		28.3	43.6%	80.6%	10.3
Group corporate practice	43.9	-11.3		29.1	100.0%	80.7%	10.4
General medicine	44.2	-10.3		28.7	45.3%	79.5%	11.2
Emergency	46.7	-13.4		30.1	51.4%	78.5%	9.9
Specialty/referral	48.9	-14.7		28.7	38.1%	70.8%	11.9
BEA region⁵							
Far West	46.0	-11.1		28.7	47.5%	79.2%	11.6
Great Lakes	45.0	-11.8		28.9	45.2%	83.8%	11.5
Midwest	45.9	-9.5		28.4	38.6%	80.5%	10.9
New England	44.0	-11.5		28.8	44.1%	86.1%	11.8
Plains	45.4	-10.8		27.6	44.2%	82.2%	11.3
Rocky Mountain	44.9	-10.4		28.3	55.8%	76.8%	10.9
Southeast	45.4	-9.7		28.1	44.7%	79.1%	11.3
Southwest	46.0	-12.0		28.1	39.3%	76.4%	11.3

¹The change in hours desired to work excludes those who reported no change in their desired hours.

²Compensation is reported only if between \$25,000 and \$500,000.

³Private practice includes veterinarians in food animal, mixed animal, companion animal, equine, or exotic animal practice.

⁴Public practice includes veterinarians in government positions, college or universities, industry/commercial organizations, not-for-profits, advanced education (including internships and residencies), contractors, or other veterinary employment.

⁵BEA = Bureau of Economic Analysis

Market for veterinary services

Data sources

- U.S. veterinary practice population: U.S. Census Bureau data on veterinary services sector 541940 (<https://data.census.gov/cedsci/all?q=veterinary%20services>). These data provide statistics on the number of veterinary practices (defined by the Census Bureau as veterinary establishments) and the distribution of practices by employee size and by legal type of business as well as the geographical distribution of the practices.
- Practice owner population: 2021 AVMA Veterinary Practice Owner Survey. Labor was measured as the total number of hours worked per week. For each category of staff, the number of hours was estimated by multiplying the average hours worked per week by the number of staff. Total labor was estimated by summing up the labor of all staff.

All practice owners included in the AVMA membership database were invited via email to participate in the Census of Veterinarians and Veterinary Practice Owners Survey, as described for the Census of Veterinarians. In total, 2,891 practice owners returned at least a partially completed survey, for a response rate of 21%.

To be included in this report, respondents were required to be working in the veterinary profession for all of 2020 and to have an independently owned private practice. A set of restrictions was then applied to practice owner responses to identify and manage potential outliers and missing values. For continuous variables, the statistical rule of two standard deviations above and below the mean (normality rule) was applied to identify outlying values. In a few cases, obvious outliers were first dropped, or the 5% bottom and top observations were dropped before applying the normality rule. In addition, respondents were classified into homogeneous categories to allow between-group analysis, and categories were dropped from the study sample if they had fewer than 10 observations (e.g., exotic animal practice). In the end, a total of 2,271 practice owners were included in the analysis.

Statistical analysis

Respondents were classified into five categories with respect to the type of veterinary business they owned: companion animal practices, hospitals and ambulatory services, mobile practices, equine practices, and mixed animal practices.

Frequency analysis was used to describe practices and owners with respect to categorical variables. For continuous variables with a relatively normal distribution, average values are reported. For continuous variables with a non-normal distribution, median values are reported instead.

