



CVMA – Canadian Veterinary Workforce Study Summary of Key Findings

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Introduction





- Global Leader in Ag and Animal Health Market Research
- Based in the U.K. with a local office in Guelph, ON



- Colin Siren, Senior Vice President
- Nearly 20 years of market research experience, 16 focused on animal health sector
- Lead researcher on Bayer Veterinary Care and Usage Study, Merck Veterinary Wellbeing Study
- North American client service role for PetTrak, our network of over 7,000 veterinary clinics across Canada

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Review of Methodology and Scope

Background





• In 2019, CVMA expressed an interest in conducting a workforce study of Canadian veterinarians:

There was anecdotal evidence of demand exceeding supply.

Some provinces had announced interest in commissioning local research

CVMA believed a national assessment was needed

Other Members of Project Team





Al Mussel

Economist, Agri-Food Economic Systems

- Al's areas of research expertise are farm management, agricultural marketing, and agricultural policy.
- For fifteen years, Al served as Senior Research Associate at the George Morris Centre.
- Prior to that Al worked as an economist in the milk procurement division of Land O'Lakes, Inc. in Minnesota.

John Volk Senior Consultant, Brakke Consulting

- Brakke Consulting is the leading consultancy serving the global animal health industry and veterinary markets.
- John is a life-long student of the veterinary profession and the author of five landmark studies on the US veterinary profession. Among those studies were the Bayer Veterinary Care Usage Study (2011-2013) that identified factors contributing to declines in companion animal demand for veterinary services; and the Merck Animal Health Veterinary Wellbeing Study (2018) that examined mental health and wellbeing of veterinarians.

Methodology





In-person Project Briefing Meeting

Review of Secondary Economic, Market and Pet/Livestock Population Data Expert Panel Discussions for Each of Companion Animal and Livestock Analysis Online Survey with Companion Animal, Livestock and Mixed Practice Veterinarians.

Presentation of Final Results

Included in-depth interviews with most provincial VMA's, examination of veterinarian population trends, summary statistics of veterinary college graduating classes and annual certificate of qualification exam statistics.

Included a range of key stakeholders for each of companion animal and livestock practice. Online survey with 1,019 Canadian practicing veterinarians utilizing the CVMA membership directory. The majority of surveys were completed well in advance of implementation of social distancing measures (Feb 21 – Mar 16).

NOTE REGARDING SCOPE





- The primary scope of this study is to examine the workforce needs of veterinarians working in companion animal, equine, mixed or livestock practice.
- Some statistics were gathered and reported for veterinarians employed in other capacities (e.g. industry, government, academia, etc.). These have been gathered to assess degree to which these careers impact supply of veterinarians available for work in practice.
- This study does not assess demand for non-practicing veterinary careers.

Before we Begin...

Today's "Shortage Crisis" can be Tomorrow's "Oversupply Crisis"





Vet shortage nearing 'crisis' level

Animal welfare group sounds alarm, B.C. urged to hike funding for training

JENNIFER SALTMAN

Over the last three to five years, Dr. Rob Ashburner has been forced to turn a growing number patients away from his Vancouver veteri- tors including retirements, he said,

increased, and when emergencies not training enough veterinariarise, schedules have to be juggled and appointments rearranged.

"We're booked solid," said Ashburner, who opened the West King 30 years ago.

The reason Ashburner is so busy is rooted in a shortage of yets. The shortfall is due to a number of facbut "in general I think the feeling The wait for a routine visit has among veterinarians is that we're

> Canadian Veterinary Medical Association conducted a labour mar-shortage.

ket study that found a significant shortage of vets across all regions of the province and in most types of practice. The shortages are worst outside of major urban areas Edward Animal Clinic more than and in specializations other than small and exotic animals, such as large animals, poultry, fur bearers, fish pathologies and public-sector

There are nearly 1,600 veterinarians employed in the province. and it's estimated that, if demand continues to grow, B.C. will need more than 100 new vets each year Last year, the B.C. chapter of the to keep up. That's in addition to those needed to cover the current

The Paws for Hope Animal Foundation called the shortage "alarming," in an emailed statement and said unless something is done soon, things will only get

"In an already overburdened sector, as the veterinarian shortage increases, access to veterinary care will decrease," said executive director Kathy Powelson.

"This will create the potential for a crisis in animal welfare, particularly, in areas where veterinarian shortages are already impacting access to service."

SEE VET ON A2

Too many veterinarians? AVMA panel tackles hot topic

Experts argue whether oversupply issues will push the veterinary profession to the brink.







Study: Is there a veterinarian shortage? Yes. Could we fix it immediately? Yes.

Veterinary economist crunches the numbers to quantify the difference between open veterinary positions and DVMs seeking employment.



By Kristi Reimer Fender, News Channel Director



Impact of the COVID Crisis





The Conference Board of Canada

Focus Areas >

Services >

Insights ~

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Focus Area - Canadian Economics

Job postings plummet in March, slide continues in April April 27, 2020

Sharp. Deep. Unprecedented.

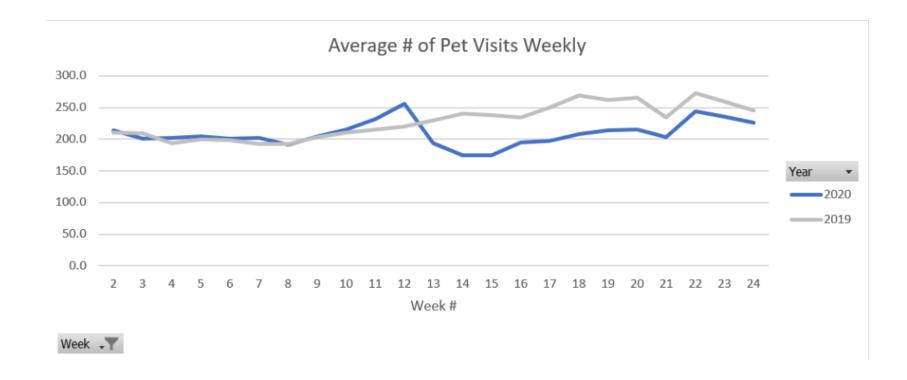
April 15, 2020

U.S. and global economies slammed by COVID-19
April 9, 2020

Impact of the COVID Crisis







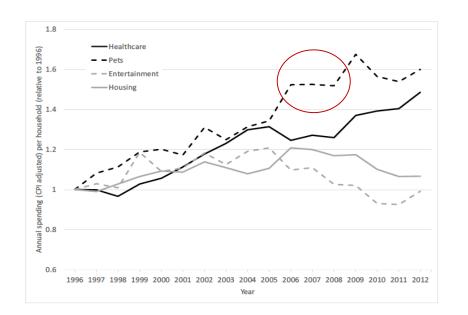
Lessons Learned from AVMA when Estimating Demand for Veterinary Services

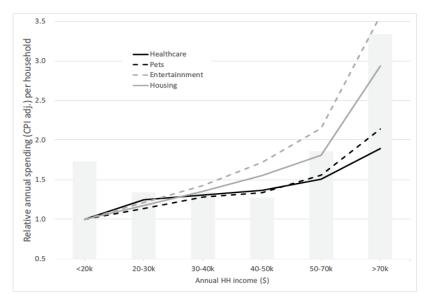




Disposable Income

- From 2000 to 2018, disposable income in the US grew at a compounded annual rate of 4.29%. However, from 2007 to 2010, in the teeth of the recession, per-household disposable income grew at only 2.52%. Unemployment reached modern highs, meaning that many households had little if any disposable income.
- The next two charts provide important perspective on the claim of pets to disposable income:





Understanding Demand and Capacity for Veterinary Services in Canada

UNDERSTANDING SUPPLY OF VETERINARIANS







Graduates from Foreign Vet Schools

Increase Hours Worked

Delegation of Non-veterinary Tasks

Technology and Automation



Capacity of Veterinarians in Practice to Meet Demand

Within this capacity is the balance needed to meet the needs of CA and LA practice as well as regional needs. Retire

Reduce Hours Worked

Take Non-practicing Positions

Leave Veterinary Profession Altogether

Emigration

Administration/ Regulatory

Practice Management and Day to Day

UNDERSTANDING DEMAND FOR VETERINARIANS







Number of Buyers/ Households

Number of Pets/ Horses

Disposable Income

Cost of Veterinary Services



Demand for Veterinary Capacity



Livestock Animal

Number of Buyers/Livestock Operations

Value of Animals

Need for Targeted vs. Herd Care

Cost of Veterinary Services

Review of Canadian Veterinarian Supply

Canadian Veterinarian Population

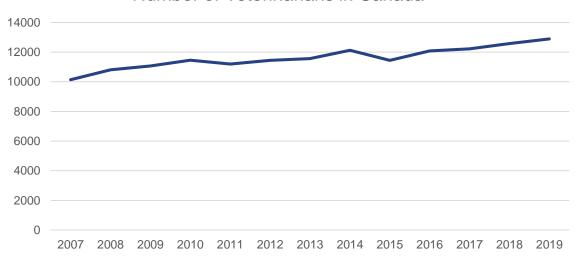




Analysis of CVMA Membership Statistics

- CVMA has monitored the number of veterinarians in Canada since 2007, based on data provided by provinces.
- In 2019, CVMA reports there are 12,886
 veterinarians employed in practice, up from 10,139
 veterinarians in 2007, representing a CAGR of
 2.0%.

Number of Veterinarians in Canada



Canadian Veterinarian Population

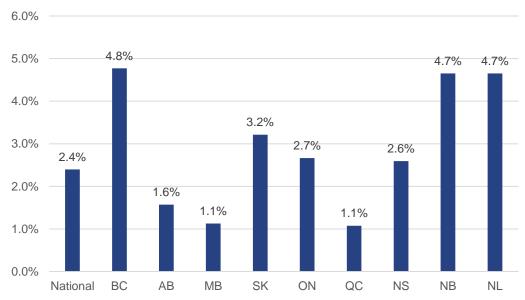




The graph below shows CAGR of total veterinarians for each province over this same period (territories not shown due to very small base size).

While the number of veterinarians has increased in all provinces since 2015, the rate of change differs significantly by province. Results are particularly concerning in Alberta, Manitoba and Quebec.

CAGR - Veterinarian Population 2015-2019



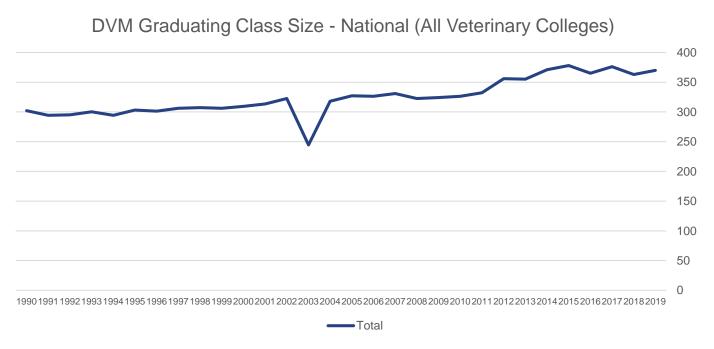
Analysis of New Graduate Data

Canadian Veterinarian Population – New Graduates





- Records for all Canadian veterinary schools are available as far back as 1990 and indicate that, since 2012, approximately 350 DVM's graduate each year.
- In 2015, the graduating class size was approximately 3.3% of total veterinarians; by 2019 this rate had dropped to 2.9%.

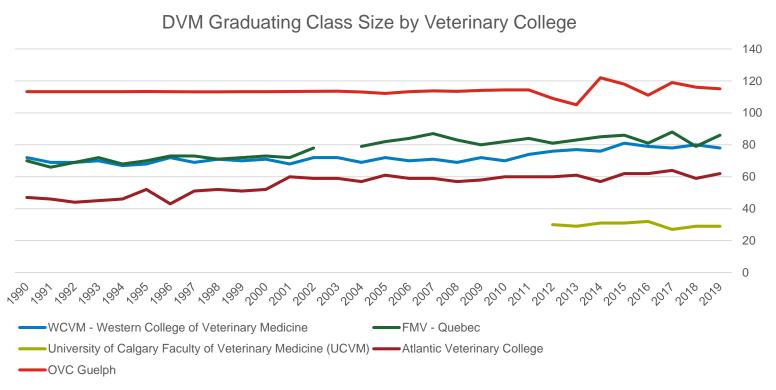


Canadian Veterinarian Population – New Graduates





• Atlantic Veterinary College is the only veterinary school that has substantially increased graduating class size over time.

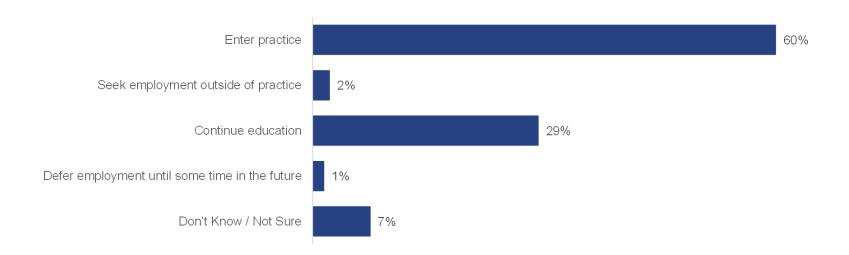


Canadian Veterinarian Population – New Graduates





Graduating class sizes are a sound estimate for potential pool of new hires, however, not all graduates immediately enter
practice.



Internationally Trained Veterinarians

Certification of Qualification Candidate Data





Analysis of certificate of qualification candidate data reveals the importance of international schools when understanding the total influx of new Canadian veterinarians each year. Total number of certificate of qualification candidates has increased significantly from 450 in 2014 to 591 in 2019. Although a relatively short period of time, this represents a CAGR of 5.6%. Growth is almost entirely derived from candidates who attended accredited international veterinary schools.

Year	Canadian Veterinary Schools	International, Non-Accredited	International, Accredited	Total
2019	349	65	177 (includes 15 U.S.)	591
2018	329	77	125 (includes 23 U.S.)	531
2017	332	98	121 (includes 27 U.S.)	551
2016	338	81	52 (includes 23 U.S.)	471
2015	338	138	18	494
2014	323	76	51 (includes 16 U.S.)	450

Analysis of Retirement/Attrition Assumptions

Canadian Veterinarian Population – Retirement/Attrition





• It is possible to identify a realistic range of rate of expected retirements based on length of career. The table below illustrates the average expected rate of retirements based on career lengths of 30, 35 and 40 years.

Avg. Career Length	Avg. Estimated Annual Rate of Retirement		
30 years	3.3% per year		
35 years	2.9% per year		
40 years	2.5% per year		

Average age retirement for self-employed Canadians is 67 years (Statistics Canada – 2018)

- It is important to note, however, that economic forces can accelerate, or delay, retirements in the short-term. Recent examples of this can be found in the United States:
 - Between 2008 and 2013, sizeable declines in investment and real estate values reduced retirements.
 - More recently, and experienced in Canada, consolidation of veterinary clinics has lead to record clinic values that, when combined with a strong financial market increase retirements.

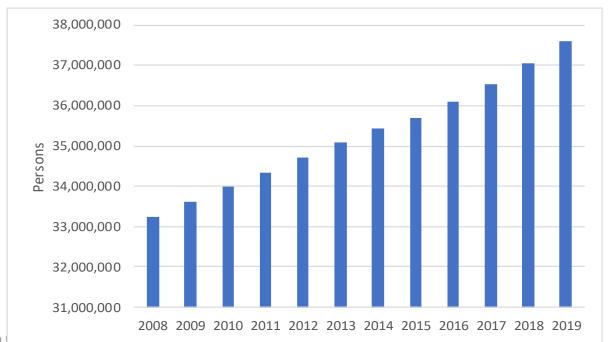
Demand for Veterinary Services

Estimating Demand for Veterinarians – Population Growth and Household Formation





Population growth and Household formation are two key factors that influence pet and/or horse acquisition. Over the period 2006-2016 the number of Canadian households increased at a CAGR of 1.16% while the Canadian population grew at a CAGR of 1.31% (Statistics Canada). Canada's population growth rate for 2018/2019 was 1.4%, the highest since 1989/90 (1.5%) and is the highest among G7 countries. It is more than twice the United States and United Kingdom and exceeds the growth rates of both Germany and France. (https://www150.statcan.gc.ca/n1/daily-quotidien/190930/dq190930a-eng.htm)



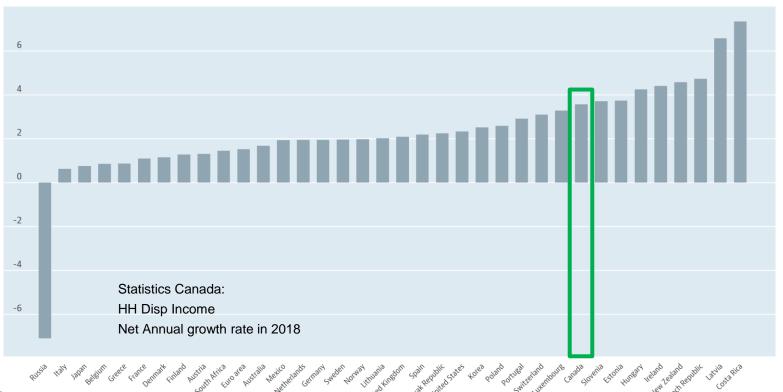
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Estimating Demand for Veterinarians – Disposable Income





Over time, total disposable income in Canada has grown at a steady rate, particularly since 2002. Disposable income increased at a CAGR of 3.7% between 2010 and 2019 and is the highest among G7 countries.

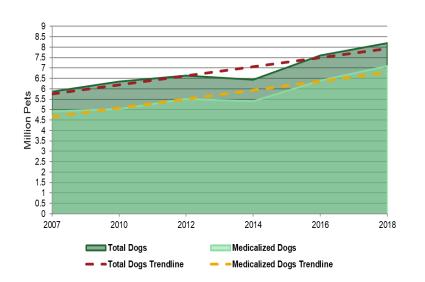


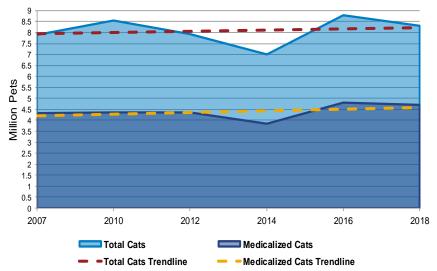
Estimating Demand for Veterinarians





Since 2007, the population of medicalized dogs (dogs who visit a veterinarian at least once per year) has increased from 4.5 million to 7.1 million. Over this same period, the population of medicalized cats has held steady at approximately 4.7 million. The rate of growth in medicalized dog population alone represents a CAGR of 3.8%.





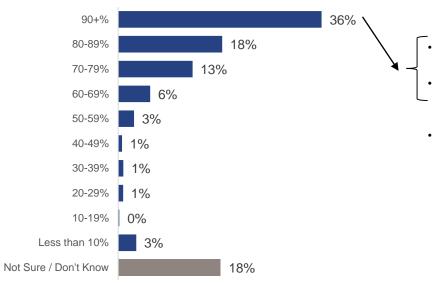
Survey Results Confirming Stretched Capacity of Veterinarians in Canada

Clinic Appointment Capacity Booked – September to November 2020





A sizeable proportion of veterinarians indicate their clinics were at 90%+ capacity during September-November of 2019.



Highest in British Columbia (46%), Saskatchewan (48%) and Quebec (45%). All other provinces range from 23% - 32%.

Clinics that are >2 hours from an urban centre, and clinics in small cities are more likely to be over 90% capacity. Urban clinics and clinics near urban areas are the least likely to be over capacity.

No significant differences by practice type

Demand1. During September, October and November 2019, approximately what percentage of your available client appointments or farm calls were filled each week? Base: Currently employed veterinarians (n=1019)

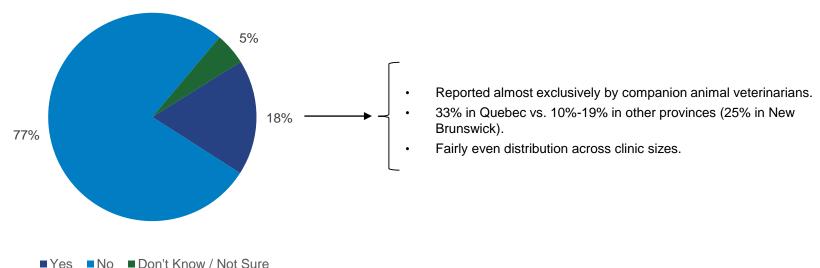
Prevalence of Having Scaled Back Hours of Operation due to Shortage of Veterinarians





Nearly one-in-five veterinarians indicate they have scaled back hours of operation due to a lack of availability for a veterinarian to work those hours, a trend almost exclusively found in companion animal clinics.

While relatively uncommon in most provinces, one-third of veterinarians based in Quebec reported reducing clinic hours due to a lack of resource availability to work those hours.



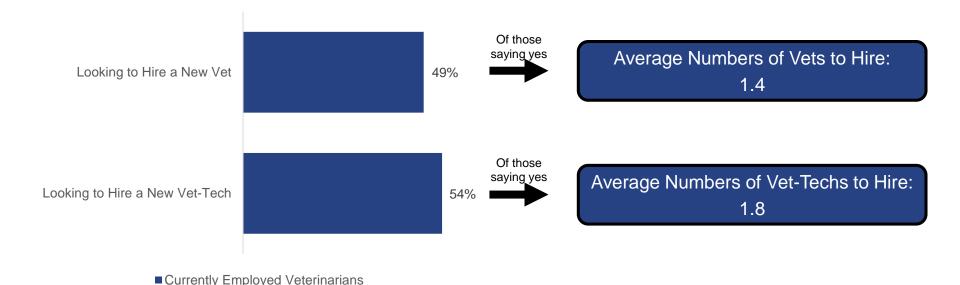
Demand3. Thinking back over the past year, has your clinic scaled back its hours of operation due to a lack of availability of veterinarians to work those hours? Base: Currently employed veterinarians (n=1019)

Prevalence of Open Veterinarian Positions in Canada





About half of veterinary clinics are currently looking to hire a veterinarian and/or a veterinary technician. Likelihood to have an open position available is slightly higher in companion animal clinics than in livestock clinics.



Demand4. Does your clinic currently have openings for additional veterinarians or veterinary technicians? **Base: Currently employed veterinarians (n=1019)**

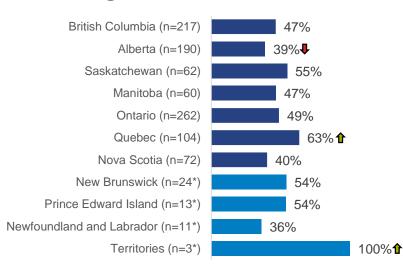
Prevalence of Open Veterinarian Positions in Canada, by Location



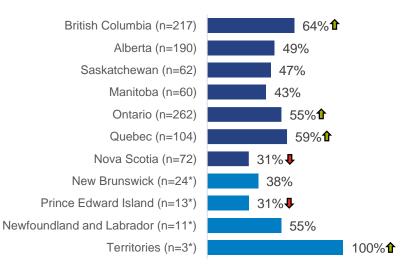


Quebec and Saskatchewan report the highest prevalence of open veterinarian and/or technicians.

Looking to Hire a New Veterinarian



Looking to Hire a New Vet Tech



Demand4. Does your clinic currently have openings for additional veterinarians or veterinary technicians? **Base: Currently employed veterinarians (n=1019)**

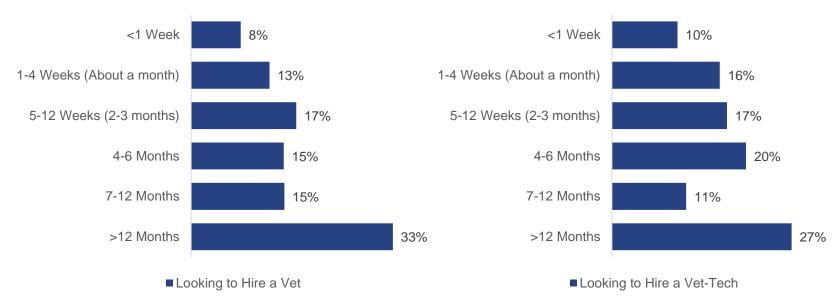
^{* -} Caution Small Base Sizes

Duration of Looking to Fill Posted Positions





Approximately half of those with an open position for a veterinarian indicate it has been open for longer than seven months. Veterinarians in Alberta, Saskatchewan and Quebec report longer waits for positions to be filled.



Demand5. How long have you been actively searching to fill the positions? **Base:** Currently looking to hire (Vet n=488, Vet-Tech n=537)

In Summary...

IN SUMMARY





Companion Animal

Leading up to the COVID crisis, Canada was experiencing exceptional household and population growth. From 2006-2016, the number of households grew at a CAGR of 1.3%. The population grew at 1.4% (the highest rate of growth since 1989/90), the highest among G7 countries.

Disposable income has been rapidly growing, with a CAGR of 3.7% between 2010 and 2019, also the highest among G7 countries.

According to CAHI, the population of animals has also increased significantly in recent years, particularly for dogs (at a rate nearly equal to disposable income growth).

The pre-COVID environment is conducive to an increasingly high demand for companion animal veterinary services.

IN SUMMARY





Food Animal

The prospects for the Canadian beef and hog sector were optimistic, leading up to the COVID crisis due to forecasted increased demand, and individual animal value, related to African Swine Fever in China and Southeast Asia. While this is good news for this sector, it is unlikely to result in significantly larger numbers of livestock operators, or decision-makers.

Dairy and poultry production will be dependent on changes in quota volumes. There is not a short-term expectation of a significant increase in the number of operations in these supply-managed species.

The pre-COVID environment for food animal veterinary services is not materially different from recent years, except for competition from companion animal medicine for attracting new veterinary graduates.

IN SUMMARY



Survey results confirm that companion animal veterinarians are stretching their capacity to meet increased demand, at least pre-COVID:

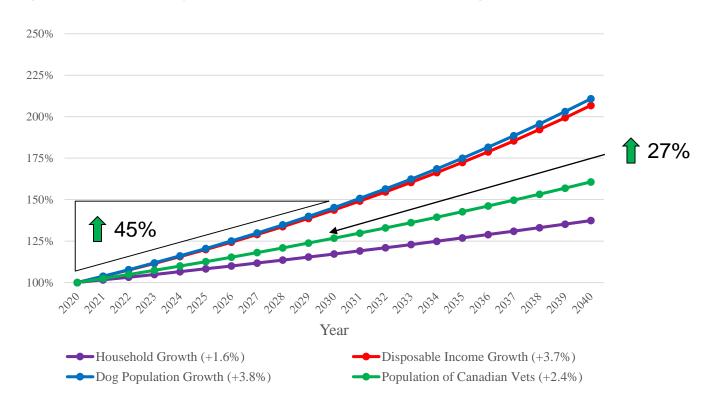
- There is broad recognition of the shortage of veterinarians/veterinary technicians as an issue faced by the veterinary profession, especially in Quebec.
- About half of clinics indicating >80% of appointments were booked, especially in Saskatchewan, British Columbia, and Quebec.
- Almost one-in-five clinics have scaled back hours of operation due to a shortage of veterinarians to fill shifts, especially in Quebec.
- Almost one-in-five clinics report "frequently" turning patients away, especially in Quebec, Saskatchewan, and British Columbia.
- Half of the clinics are looking to hire a new veterinarian, and half are looking to hire a new veterinary technician, with the average looking to hire 1.4 veterinarians and 1.8 veterinary technicians.
- Many veterinarians indicate open positions take more than six months to fill.

Recommendations





When examining workforce study results, it is best to take the long view...



Recommendations





- The emerging COVID economic crisis likely will reduce demand for veterinary services to some extent in the near term, but an eventual veterinarian supply crisis awaits. CVMA and related stakeholders must align and recognize that underlying capacity issues present now will be exacerbated during an eventual economic recovery. A long-term strategy to grow the Canadian veterinarian population at an annual rate of 3.5-4.0% is needed. A parallel strategy to address the shortage of veterinary technicians is also required, which may provide quicker returns due to the shorter time required to graduate veterinary technicians.
- Canadian veterinary colleges are graduating veterinarians at a rate currently equal to retirement. CVMA and related stakeholders should investigate forecasting the degree to which the supply of internationally trained veterinarians can be a reliable and manageable source of growth. CVMA should align with the government and universities to develop a longterm plan for a sustainable increase in veterinarian graduates.
- Of all provinces, Quebec is experiencing the greatest degree of stretched veterinarian resources and capacity. Developing a solution for Quebec is more complicated due to the sizable pet population, robust food animal sector, and French language requirements. CVMA should partner with stakeholder organizations to identify partnership opportunities in Francophone international schools and look for expansion of FMV.
- There is no cost-effective and easy solution for the absence of veterinary care in remote areas. The gap in threshold client demand to support veterinary services is at least as important as the willingness of veterinarians to service these areas.
 CVMA should investigate the degree to which telemedicine and training of local "nurse practitioners" can suffice for day-today well-care needs.

Thank you!

Colin Siren

Sr. Vice President, Canada



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