

**House Agriculture & Rural Affairs Committee  
Hearing on the veterinary workforce shortage  
Testimony of Dr. Erin Luley, Assistant Director, Animal Health and Diagnostic Services  
Presented on behalf of the Pennsylvania Department of Agriculture  
October 11, 2023**

Good Morning Chairman Pashinski, Chairman Moul, and members of the committee.

We are grateful for the opportunity to discuss with you all the current veterinary workforce shortage and ways we believe this shortage could be mitigated or alleviated for the benefit of our agriculture industry. Our mission at the Department of Agriculture is to, above all, bolster a robust food and animal safety network to ensure the long-term vitality of our food system, and that cannot be done without a change to the current veterinary profession.

In our testimony, we will highlight the current challenges that we are facing in attracting and retaining a skilled veterinary workforce and touch upon solutions that we feel can help draw new interest to the practices of veterinary medicine and encourage the growth of practices in rural communities.

The United States is a nation of agriculture. It is rich in both our history and culture, but deeply engrained in the fabric of our lives and communities. As a nation, we have uniquely positioned ourselves as a global leader in both growing and producing food for not only ourselves, but the world. We have undertaken this massive level of global responsibility, and there is pressure on the United States to deliver.

Pennsylvania is a major contributor to that mission and responsibility. Agriculture is at the heart of our economic and cultural landscape, and PA is recognized as a national and global leader in the agriculture and food industry. According to Team Pennsylvania's 2018 Economic Impact Study, nearly 580,000 Pennsylvanians – or one in 10 jobs – are in the agriculture and food industry, generating over \$132.6 billion in total economic impact.

Of the total economic impact, \$27.5 billion is directly related to large animal agriculture, comprising not only of our beef and dairy industry, but also pork, equine, and other large animals. We are ranked sixth in the nation for plant product and dairy product exports (USTR, 2017). We continue to lead the country in specialty crop, dairy, poultry, and egg production. Food items from Pennsylvania and the rest of the US have a strong reputation for consistency and safety, and we must uphold that commitment.

However, we cannot do so without a robust food safety system, bolstered by a strong workforce. Like many others, the agricultural industry has been affected by workforce shortages. We are competing with other more well-funded, well-organized sectors to attract the same types of specialized and technical labor necessary to support our industry. This pinch is felt heavily in the field of veterinary medicine. We are facing a workforce shortage of both companion and large animal veterinarians, with the hardest hit sector being rural, large animal veterinarians. This shortage, if left unchecked, has critical consequences for the commonwealth's security, economy, and community development.

Veterinarians, veterinary assistants, and veterinary technicians are considered on Pennsylvania's most in-demand occupations list as compiled by the Department of Labor and Industry. Each of these professions is projected to experience an increase in demand above 11% by 2030, with licensed veterinarians the highest at 14.6%. Focusing on veterinarians, from 2012-2022 veterinary jobs grew from 3,173 in 2012, to 3,266 in 2022, a change rate of 3% or 94 jobs. During the decade, 3,195 job openings were available, with an average of 320 per year. The demand of this profession and the number of veterinarians available and entering the field is vastly disproportionate, with demand significantly higher than there are veterinarians to fill it.

The outbreak of Highly Pathogenic Avian Influenza (HPAI) in Pennsylvania in 2022 has illustrated the importance of having qualified veterinarians available and ready to assist with animal health emergencies when they arise. As conversations around biosecurity and strengthening our responses in anticipation of the next animal health emergency, it is more critical than ever to support our veterinary workforce.

Pennsylvania is home to over 1.3 million cattle and 1.3 million hogs. We do not know when the next animal health emergency will breach Pennsylvania's borders or what that threat will be, but we do know we must be prepared to not only protect our animals but protect our food system, our economy, and our citizens. If our veterinary workforce is not adequately staffed and prepared, in the event of an animal health emergency, there could be catastrophic consequences for Pennsylvania, the United States, and the global food system.

We know that Pennsylvania's agriculture industry isn't going anywhere, in fact, it's growing. Over the next decade, more than 75,000 new and replacement jobs will become available in the agriculture and food industry in PA. This industry is tied to our heritage and culture in the commonwealth, and we need to do what we can to keep it here. Without an appropriate workforce to support it, agricultural operations will be moved out of state, and that includes large animal agriculture.

Additionally, Pennsylvania is home to over 150 colleges and universities, including Pennsylvania State University and its College of Agriculture Sciences, and the University of Pennsylvania with its Veterinary Medicine School. We have long been a leader in education, producing students that not only stay in Pennsylvania, but take their knowledge across the country and the globe. We have leveraged these universities to produce cutting edge research technologies that continue to develop every day and are supported in part by the commonwealth. These are also the educational institutions that will be instrumental in producing and preparing the next generation of the veterinary workforce. We must leverage their unique position in solving this shortage and as a partner towards promoting long term health of the profession.

The shortage of veterinarians, if left unchecked, will have detrimental effects on Pennsylvania's agricultural industry. From animal health and bio security, to export capacity and economic viability, to food security and ability of families to feed themselves, we will see ramifications of this shortage only continue to increase unless we take this seriously. Workforce shortages cannot be solved overnight, however there are concrete steps and recommendations that can be put in place to best alleviate this shortage and continue to ensure Pennsylvania's agriculture thrives.

The Department has identified three umbrella areas that we believe are causing the pinch: the cost burden of education, the unsustainable model of the veterinary profession, and quality of life.

#### *Cost Burden of Education:*

Veterinary school is expensive. On top of a college education, it is not uncommon to see veterinarians entering the field with six figures of educational debt. According to the American Veterinary Medical Association (AVMA), 83% of vet students from the class of 2020 graduated with student loans. The average vet school debt was \$188,853, not including any debt students may have accrued from their undergraduate degree. This is an immediate barrier to entry for individuals looking to pursue a veterinary profession who do not qualify for scholarships or do not want to be burdened with a high amount of student debt.

Additionally, student educational debt is growing 4.5 times as fast as income for new veterinary graduates. Nineteen percent of veterinary students graduated with a debt-to-income ratio of zero, but 20% graduated with a ratio of 4:1, with the mean debt-to-income ratio being 2:1. However, the news is not all bad. Of the class of 2020 graduates, 94% had secured full-time employment or had accepted a position in advanced education by two weeks before graduation (AVMA, 2020). Of the class of 2022 at PennVet, 121 out of 123 students passed the NAVLE, creating a passage rate of 98%. The prior graduation year had a pass rate of 100%.

The number of students applying to attend veterinary school remains stable, even experiencing slight increases each year. However, veterinary school is extremely competitive due to a limited number of seats per incoming class. In Pennsylvania, the University of Pennsylvania School of Veterinary Medicine receives approximately 1,300 applications per year for the 130 seats available per class, creating an acceptance rate of about 9-10% per year. Similarly small class sizes with a disproportionate number of applicants are found throughout the 32 accredited veterinary schools in the United States. Due to limitations of university funds, and overcorrections of previous veterinarian workforce bubbles, and the desire by education institutions to accept students who demonstrate their ability to have a successful outcome, class sizes remain disproportionate to the number of applicants.

#### *Quality of Life:*

The veterinarian shortage is predominantly affecting the Northwestern and Southwestern counties of Pennsylvania, which include some of our most remote and rural populations.

The veterinarian sector is not alone in seeking additional individuals in these rural communities to provide necessary services. These areas face workforce shortages of teachers, healthcare workers, and other service providers needed to provide a productive quality of life. However, veterinarians are needed as these areas contain a large number of dairy herds and other food

animals. As discussed above, the ramifications if left unchecked could have a drastic impact for Pennsylvania's food system.

Rural areas also lack opportunities for growth outside of veterinarians. Considerations such as lower performing school districts, lack of other job opportunities or upward mobility, distance from commodities and services, and overall poorer quality of life discourage individuals from moving to these areas after obtaining their education.

Additionally, veterinary practice is a mentally demanding profession. Just as we are seeing with our human healthcare workers, veterinary professionals are leaving the industry due to burnout and compassion fatigue at higher rates. They are transferring to more flexible, less mentally draining, often telework based, industries. We must provide these professionals with additional support and more balanced work schedules so they are able to properly recover after a days work.

Rural veterinary practices need to adapt to be more supportive of new graduates. Though mentorship is one component which is addressed, a practice culture that supports work-life balance, provides competitive benefits, fosters ongoing learning, supports diversity, and provides a safe working environment is necessary to prevent veterinarians from shifting toward companion animal medicine, where these attributes are becoming standard.

Many efforts in recruitment into these shortage areas have focused on veterinary students with a rural and/or agricultural background. However, not only does this limit the number of possible candidates, it also potentially limits the benefit of fresh perspectives coming into these positions. Recruitment efforts should not be limited to students with a rural or agriculture background but should also include urban and suburban students and should begin before these students enter veterinary school. Community support is also essential to attract and retain a new veterinarian to a rural practice. If rural communities wish to see animal agriculture profit from the expertise of a veterinarian in the community, there must be some local support to attract and retain a veterinarian in these areas.

#### *Existing Resources:*

There are some existing resources in place to help alleviate the workforce shortage. However, these federal programs are oversubscribed and underfunded.

The USDA, through NIFA, currently has two programs in place designed to alleviate the workforce shortage, the Veterinary Services Grant Program (VSGP) and the Veterinary Medical Loan Repayment Program (VMLRP).

The Veterinary Services Grant Program (VSGP) designed to help mitigate food animal veterinary service shortages in the U.S. and its territories. This program is designed to support education and Extension activities that will enable veterinarians, veterinary students, and veterinary technicians gain specialized food animal skills and to enhance practices. There are two types of grants for VSGP: Education, Extension, and Training (EET) and Rural Practice

Enhancement (RPE). In FY 2016, \$2.4M was made available for VSGP. The Education, Extension, and Training (EET) grants are made available on a competitive basis to qualified entities to develop, implement, and sustain veterinary services through education, training, recruitment, placement, and retention of veterinarians, veterinary technicians, and students of veterinary medicine and veterinary technology. The Rural Practice Enhancement (RPE) grants are made to establish or expand veterinary practices in rural areas. The RPE grants have a three-year duration and directly support veterinary clinics by providing up to \$125,000 for the purchase of equipment or other practice enhancements for veterinary clinics that serve food animals in designated veterinary shortage areas. In 2021, NIFA received a total of 51 applicants for VSGP granting awards to 17 of the 51 for a total of \$3 million.

The Veterinary Medicine Loan Repayment Program (VMLRP) pays up to \$25,000 each year towards qualified education loans of eligible veterinarians who agree to service in a NIFA-designated veterinarian shortage situation for a period of three years. The Veterinary Medicine Loan Repayment Program (VMLRP) was created out of concerns over shifts in the veterinary medicine workforce that have left many food and fiber livestock and poultry producers, especially those in remote locations, without access to adequate—or any—veterinary medical services. VMLRP addresses one element of that concern—the soaring levels of educational debt that put food animal practice out of financial reach for many new and mid-career veterinarians.

In 2022, VMLRP received 130 applications, including both new and renewal applications. Of those, 89 were awarded over \$8.9 million in funding for an award rate of 68.5%. The average veterinary student debt for new awardees was \$163,576. Two of the awards granted were given to graduates of PennVet.

#### *Recommendations:*

Based on our understanding of the needs of the profession and current available resources, the Department makes the following recommendations to pursue with the objective of alleviating this workforce shortage:

#### *Build Upon Current Programs:*

The Department recommends the state fund an additional three years of loan forgiveness for veterinarians who qualified for VMLRP. This would assist with alleviating shortages by providing more aid to individuals looking to enter veterinary practice. Additionally, it would extend the number of years veterinarians must remain in rural practice from three years to six total years, helping them become even more integrated into their community.

Another recommendation is that the commonwealth pursue a program similar to the Maine Veterinary Medicine Loan Program, which is a competitive, need-based, forgivable loan for Maine students pursuing a career as a veterinarian. Borrowers may have a portion of their loan forgiven for each year of eligible return service. Applicants must be a Maine resident admitted to

an institution of veterinary medicine in a program of study leading to a Doctor of Veterinary Medicine degree and show evidence of a desire to practice veterinary medicine related to livestock or emergency and critical care in an area of Maine with insufficient veterinary services, or to practice veterinary medicine of any type in an underserved geographic region. Students are eligible for up to \$25,000 per year for loans made prior to academic year 2023-24 and \$35,000 for loans made beginning in academic year 2023-24 for a period of up to four years. No interest accrues while the recipient is in an eligible medical program. During repayment, the interest rate can be as low as 0% and is based on location and type of practice and/or population served.

The Department also recommends considering the creation of two new or expanded grant programs to help cover non-education expenses accrued with starting veterinary practice. The first program would include relocation expenses and housing or living stipends for individuals pursuing rural, large animal veterinary practice. This would assist in incentivizing individuals to move to these areas and assist with relocation costs, which can be expensive. Additionally, funds could be used to help individuals start their new lives in these rural communities by purchasing or renting homes.

The second program would target start up equipment expenses for those who want to begin rural, large animal veterinary practice. This would assist with the “real costs” of opening a veterinary practice, as the cost of trucks, equipment, and other supplies can be hefty. Additionally, this would not focus solely on loan repayment. Loan forgiveness and repayment only goes so far, and we must incentivize individuals to pursue this profession simply beyond that metric. Barriers to entry are far too great for the average graduate to viably consider entering the type of practice we desperately need.

#### *Expand Educational Opportunities:*

In order to alleviate the veterinary shortage, we need to produce more licensed, practicing veterinarians.

The Department recommends the General Assembly and PA State Board of Veterinary Medicine explore the credentialing of a mid-level licensed professional. Using human health as a model, we have seen success through utilization of an intermediate between nurses and medical doctors. That same model can be emulated in the veterinary field to help bridge the gap between DVM's and CVT's. Under this structure, we envision veterinarians employing up to 6 mid-level professionals under their supervision, similar to the human health model. This would then allow the veterinarians to dedicate their time to medical emergencies, more complex issues, or surgeries, while mid-level professionals are able to provide routine animal care. Additionally, this would provide more opportunities for individuals who want to enter the veterinary field, but do not want to pursue a full DVM education. This would also provide additional earning potential for individuals who are seeking more growth in the profession.

We know that it is essential to the workforce pipeline to get kids early while they are in K-12 education. The veterinary workforce does not begin after high school. The Department

recommends that additional dollars should be allocated for animal science and STEM programs in K-12 schools. We must introduce our students to the sciences prior to college. This will better prepare them for the future to enter a pre-veterinary program and ultimately veterinarian school.

The Department continues to explore what is next for agriculture and what our future initiatives should be shaping up to be. As we look towards the new horizons, we believe that the agriculture education and workforce pipeline will be top priority. This includes more workforce funding, aged funding, ag in youth support and programs, expansion and growth opportunities for existing agriculture industry operations and people who want to start new ones, support for innovative ideas and out of the box thinking that will propel us forward, and a true vision for agriculture in the 21<sup>st</sup> century.

#### *Enhance Quality of Life:*

The Department recommends the pursuit of a strategy of comprehensive rural development in order to make rural areas of Pennsylvania and the United States a more opportune place to live, work, and play. We must continue rural development to make these areas more appealing as communities to build a career, raise a family, and live a life within. This includes raising our minimum wage, making childcare more affordable, and adequately and equitably funding our schools.

Additionally, the Department recommends our federal partners increase support for mental health and burnout resources. Behind retirement, veterinarians are leaving the profession due to burnout and mental stress. We must increase our support for the very people that ensure our animals are healthy and directly contribute to a thriving food system.

#### *Federal Assistance:*

The Department has been engaging with our partners at the USDA, NIFA, and with members of our Congressional Delegation to explore a potential pilot program or additional funding allocation with the federal Farm Bill. We are fortunate to have a partner and champion in Chairman GT Thompson, who truly understands this issue and its implications for our commonwealth.

#### *Conclusion:*

The future does not have to be bleak for the veterinary profession. The Department believes that if these steps are undertaken, we can make headway in alleviating the veterinary workforce shortage. This is going to take all of us, state, federal, and local partners to achieve. The Department will continue to engage the USDA, our Congressional Delegation, Pennsylvania General Assembly, Governor's Office, educational partners and accredited veterinary schools, and stakeholders in order to ensure a robust, comprehensive strategy is pursued.