

Veterinarian Shortage Situation Nomination Form

To be completed by the chief State or Insular Area Animal Health Official or his/her designee

Veterinary Medicine Loan Repayment Program (VMLRP)

Nomination of Veterinarian Shortage Situations for the Veterinary Medicine Loan Repayment Program (VMLRP) Authorized Under the National Veterinary Medical Service Act (NVMSA)

Note: Please submit one separate nomination form for each position. See solicitation for number of nominations permitted for your state or insular area.

Location of Veterinary Shortage Area for this Nomination

Note: If this nomination is for a public practice position, please provide the location of the home office or the center of service area.

Location of Veterinary Shortage: Minnesota
(e.g., County, State/Insular Area)

Center of Service Area or
 Location of Position: Minnesota Veterinary Diagnostic Laboratory
 1333 Gortner Avenue, St. Paul MN 55108
(e.g., Address or Cross Street, Town/City, and Zip Code)

Type of Veterinary Practice Area/Discipline/Specialty

Type I Shortage: Private Practice
 Food Animal Medicine (at least 80 percent time)
 Please select **one or more** specialties requested for this position:

- Beef Cattle
- Dairy Cattle
- Swine
- Poultry
- Small Ruminant
- Other _____

Type II Shortage: Private Practice – Rural Area
 Food Animal Medicine (at least 30 percent time)
 Please select **one or more** specialties requested for this position:

- Beef Cattle
- Dairy Cattle
- Swine
- Poultry
- Small Ruminant
- Other : _____

Type III Shortage: Public Practice (at least 49 percent time*)
 Employer: University of Minnesota Position Title: Veterinary
MN Veterinary Diag. Lab. Diagnostician

Please select **one or more** specialty/disciplinary areas.

- Food Safety
- Public Health
- Epidemiology
- Other: Veterinary Pathology and Diagnostics

Please describe the objectives of a veterinarian meeting this shortage situation as well as being located in the community, area, state/insular area, or position requested above (limit your response to 200 words or less).

1. Serve as a food animal veterinary laboratory diagnostician conducting diagnostic evaluations on food animals submitted to the laboratory.
2. Enhance and maintain the safety of the food animal supply in our state and nation by working cooperatively with animal health agencies and organizations to solve disease problems in food animal production.
 - a. Partners include USDA's National Animal Health Laboratory Network, Minnesota's Board of Animal Health, Department of Agriculture, Department of Health, the University of Minnesota School of Public Health and animal agricultural organizations such as Minnesota Milk Producers and Minnesota Pork Producers
 - b. Specific programs include tuberculosis, monitoring wild and domestic ruminants, surveillance and control of TSEs (CWD, Scrapie and BSE), and Salmonellosis
3. Receive advanced training in molecular diagnostics, epidemiology, microbiology, nutrition and anatomic histopathology allowing for diagnosis and detection of emerging food animal diseases.
4. Maintain, collaborate and build outreach and extension programs by summarizing and reporting diagnostic data and disease trends to livestock stakeholders including practicing veterinarians, nutritionists, industry professionals and livestock producers.
5. Train the next generation of livestock veterinarians challenged by the expansion and consolidation of livestock enterprises. Teach students and practitioners to implement, interpret, and efficiently use current and new diagnostic methods.

Please describe the activities of a veterinarian meeting this shortage situation and being located in the community, area, state/insular area, or position requested above (limit your response to 200 words or less).

The Minnesota Veterinary Diagnostic Laboratory (MVDL) examines approximately 15,000 food animal cases each year. A majority of those submissions are swine, followed by dairy, beef, and poultry. Submissions are sent from multiple states across the United States, Canadian provinces, and occasionally other countries. The swine expertise at the MVDL is known worldwide. The MVDL has a wide range of expertise and critical diagnostic tools including electron microscopy and advanced molecular diagnostic methods to track and describe pathogen changes.

An effective food animal diagnostician requires residency and PhD training that focuses on advanced diagnostics and pathology. The position includes performing necropsies, interpreting laboratory results, understanding the strengths and weaknesses of diagnostic assays, maintaining quality assurance and control of diagnostic methods, training veterinary students in food animal disease and diagnostics, interpreting histological lesions, writing necropsy and histopathology reports, and communicating with veterinarians and livestock producers. Additionally, specialty training for the detection of foreign animal diseases through programs located at Plum Island Animal Disease Center is necessary. Lastly, a diagnostician reports and describes their findings and research at local, regional, and national conferences focused on livestock diseases and production.

Please describe any past efforts to recruit and retain a veterinarian in the shortage situation identified above (limit your response to 100 words or less).

High debt loads incurred during veterinary school, combined with lower incomes in food animal diagnostic pathology compared to industry, make recruitment and retention of food animal diagnosticians increasingly challenging. A MVDL pathologist resigned several months ago for a better paying position in private industry; the lab continues to search for a suitable candidate. Few individuals with this training are available and retention is critical. Funding from the VMLRP program provides an incentive for retaining or attracting diagnosticians with veterinary school debt. Maintaining a critical mass of diagnosticians is essential for livestock health and production across Minnesota and the United States.

Please describe the risk of this veterinarian position not being secured or retained. Include the risk(s) to the production of a safe and wholesome food supply and to animal, human, and environmental health not only in the community but in the region, state/insular area, nation, and/or international community (limit your response to 250 words or less).

For years, the American Association of Veterinary Laboratory Diagnosticians and the American College of Veterinary Pathologists have recognized a shortage of Diagnostic Veterinary Pathologists, particularly in the food animal sector (Cockerell et al., *Veterinary Pathology*, 2009). These pathologists are at the forefront of disease surveillance and identification. Importantly, Minnesota’s food animal production is some of the highest in the nation. Minnesota is ranked #1 in turkey, #3 in swine, in the top ten for milk production, and is the 7th largest livestock producing state in the US. Minnesota’s economy is based in a large part on this agricultural sector (livestock is a \$6 billion industry).

Disease outbreaks could have a devastating effect not only on Minnesota’s agricultural sector and its economy, but potentially at a national and international level since Minnesota is the 6th largest agricultural exporting state in the US. The MVDL has a track record for training food animal pathologists working in areas of disease control and prevention on a statewide and national scale. Funding from the VMLRP program will allow the MVDL to become even more competitive in recruiting veterinarians into underserved areas. If we do not continue to train food animal diagnostic pathologists, the negative impact on animal health and food safety could be substantial. At a relatively minor cost, the loan forgiveness program can help to ensure that food animal diagnosticians are available in adequate numbers to meet the current and future challenges in disease control and food safety.

Please indicate whether you consider this situation/position a candidate for a “service in emergency” agreement (limit your response to 100 words or less). Please see solicitations for additional information regarding the obligation of participants who enter into the “Service in Emergency” agreement.

Not applicable at this time.

Authorized State or Insular Area Animal Health Official or designee:

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Public reporting for OMB control number 0524-0046 is estimated to average two hours, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information, unless it displays a current valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to NIFA, OEP, 800 9th St. SW, Washington, DC 20024, Attention Policy Section. Do not return the completed form to this address.