

REPORT OF THE COMMITTEE ON DIAGNOSTIC LABORATORY AND VETERINARY WORKFORCE DEVELOPMENT

Co- Chairs: Bob Frost, CA
Bennie I. Osburn, CA

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The Committee on Diagnostic Laboratory and Veterinary Workforce Development (CDLVWD) met on October 12, 2009 at the Town and Country Hotel, San Diego, California, from 7:00 to 10:15 p.m. There were 22 members and 20 guests present. Co-chair Bennie Osburn along with a few Committee members and invited panelists were not able to attend due to their participation in the second annual World Animal Health Organization (OIE) meeting "Evolving Veterinary Education for a Safer World", scheduled in Paris, France at the exact same time as the United States Animal Health Association's (USAHA) meeting.

This is the final year for Bob Frost and Bennie Osburn as Co-chairs. Those who are interested in leading the Committee are asked to contact either Executive Committee liaison Bill Hartmann or President-Elect Rich Breitmeyer.

The Committee sent out four "Call to Action" electronic News Flashes to the USAHA membership in the weeks prior to the meeting to alert members and stakeholders about upcoming veterinary workforce shortage issues and pending or current Congressional legislation. News Flash No. 1, H.R. 2999 the Veterinary Health Workforce and Education Act; No. 2, Shortages in the Federal Veterinary Workforce; No. 3, Veterinary Medicine Loan Repayment Program; No. 4, the Veterinary Services Investment Act.

Over the last few years the Committee has worked on important national issues pertaining to diagnostic laboratories and veterinary workforce shortage. This year, the Committee hosted a panel of experts who had recently testified before Congressional Committees or have spent a number of years researching data for veterinary workforce congressional issues. International panelists were included to portray a global veterinary workforce perspective and emphasize the need for U.S. leadership and a robust veterinary workforce. The panelists assisted the Committee with background information, resolution language and specific target/timing information for resolutions pertaining to the veterinary workforce shortage legislation.

Mary Denigan from the U.S Government Accountability Office (GAO) informed the Committee that Congress requested the study of federal agencies utilizing a veterinary workforce. Twenty-four federal agencies were interviewed in the study that probed what federal agencies are doing about the shortfall. Findings revealed that some agencies are looking at needs but lack a coordinated program with the example of United States Departments of Health and Human Services and the Department of Agriculture not working together. The study found there is a lack of substantive facts and numbers to understand how many veterinarians are needed for routine and surge capacity. Congress is aware of the veterinary workforce deficiencies but reluctant to fund without accurate input. The Committee and panel discussed topics from veterinary pay scale to the ability of veterinarians to be helpful in catastrophic events where there might be a shortage of human physicians.

The complete list of the panelists and Congressional testimonies along with an overview of four USAHA "Call to Action - News Flashes" are included at the end of this report.

Dr. Neville Clark, director of the Center for Foreign and Zoonotic Disease Defense's (FAZD Center) reviewed the FAZD Center "Top Products" and the need for renewed funding. Dr. Clark's report in its entirety is at the end of this report.

Dr. William Wilson gave a report on the relocation of "The Arthropod-Borne Animal Diseases Research Laboratory: Research Program Update and Current Status", William Wilson, Barbara S. Drolet, Kristine Bennett, Myrna Miller, and James Mecham; United States Department of Agriculture, Agriculture Research Services, Arthropod-Borne Animal Diseases Research Laboratory, Laramie, WY 82071. Dr. Wilson's report in its entirety is at the end of this report.

Co-Chair Bob Frost reported on the current status of Wildlife Services (WS)), National Wildlife Research Center's (NWRC) Wildlife Disease Research Building (WDRB) located in Fort Collins, Colorado. USAHA resolutions supporting the WDRB in 2005 and 2007 were met with affirmation by United States Department of Agriculture (USDA) – Animal and Plant Health Inspections Services (APHIS) leadership stating the importance of increased Biosafety Level – 3 facilities to both conduct wildlife research and to carry out critical wildlife disease diagnostics in support of biosafety to humans, domestic animals and wildlife. The WDRB will provide support for diagnostic methods development, vaccine development, risk assessments, and wildlife disease surveillance and monitoring activities. The infrastructure of the new WDRB will include diagnostic and testing capabilities in the areas of mycology, virology and bacteriology, and allow WS to make critical contributions toward minimizing the impacts of wildlife disease. For example, diagnostic methods development will include rapid diagnostics for diseases in wildlife (e.g., avian influenza, histoplasma, rabies, tuberculosis, Wet Nile virus). In addition, activities will focus on development of diagnostic and screening assays for multiple diseases from single samples. The ability to process large numbers of samples for multiple diseases in any surveillance effort will require expanded capabilities for high throughput testing (robotic processing) of samples and controlled biosafety environments for development and validation of multiplex diagnostic methods for zoonotic and animal pathogens. These approaches are geared toward making wide scale surveillance in wildlife cost-effective. Just prior to this meeting the NWRC put out technical bidding documents and will begin negotiations with developers in early 2010.

Committee Business:

The Committee passed the following eight Resolutions and forwarded to the Committee on Nominations and Resolutions:

- Support for Section 1433 Formula Funds for Animal Health and Research
- Support for Regional Centers of Excellence in Food Systems Veterinary Medicine
- Support for Food Animal Residue Avoidance Databank (FARAD)
- Increased Funding for Expanded Research for the Department of Homeland Security National Center for Foreign Animal and Zoonotic Disease Defense
- Review of Compensation for Research and Diagnostic Veterinarians
- Veterinary Medicine Loan Repayment Program (VMLRP)
- Veterinary Public Health Workforce and Education Act
- Veterinary Services Investment Act

PANEL ON VETERINARY WORKFORCE

Bonnie Buntain
Assistant Dean, Government and International Relations
University of Calgary Faculty of Veterinary Medicine
Calgary, Canada
Former Chief Public Health Veterinarian for Food Safety and Inspection Services (FSIS)

Vincenzo Caporale
President of the Biological Standards Commission
The World Organization for Animal Health (OIE)
Paris, France

Mary Denigan
Assistant Director
US Government Accountability Office
Natural Resources and Environment
Washington, DC

Michael Gilsdorf
Executive Vice President
National Association of Federal Veterinarians
Washington, DC

Juan Lubroth
Chief Veterinary Officer
Food and Agriculture Organization (FAO) of the United Nations
Rome, Italy

Hugh Mainzer
Chief Veterinary Officer
United States Public Health Services
Office of the Surgeon General
United State Department of Health Human Services

Tom McGinn
Chief Veterinarian
Office Health Affairs
Department of Homeland Security
Washington, DC

Gay Y. Miller
National Center for Animal Health Emergency Management (NCAHEM)
United States Department of Agriculture
Animal and Plant Health Inspection Service
Veterinary Services
Riverdale, Maryland

Gary Sherman
National Program Leader
Veterinary Medicine
National Institute of Food Agriculture
United States Department of Agriculture
Washington, DC

Preben Willeberg
Chief Veterinary Officer, Denmark 1999-2007

Secretary General of the OIE Scientific Commission for Animal Diseases 2006-2009
Veterinary Global Health Specialist, School of Veterinary Medicine, UC Davis

Norman Willis
Past-President of the OIE International Committee 1997-2000
The Norm Willis Group
Ottawa, Ontario
Canada

Panelists unable to attend who sent statements of support:

Ron DeHaven
CEO/Executive Vice President
American Veterinary Medical Association
Schaumburg, IL

Marguerite Pappaioanou
Executive Director
Association of American Veterinary Medical Colleges

Bernard Vallat
Director General OIE
Paris, France

PANEL – Congressional Testimony

- Mary Denigan – Government Accountability Office - GAO
- Brian Smith for Marguerite Pappaioanou - HR 2999 and 1433 Centers of Excellence (COE)
- Ashley Shelton/David Scarfe for Ron DeHaven Veterinary Investment Services Act (VSIA) – Veterinary Medical Loan Repayment Program (VMLRP) – Food Animal Residue Avoidance Databank (FARAD)
- Mike Gilsdorf – Federal Veterinary Compensation

COMMITTEE "CALL TO ACTION" ELECTRONIC NEWS FLASHES

News Flash No. 1 - Call for Action

HR 2999 - The Veterinary Public Health Workforce and Education Act

The Committee on Diagnostic Laboratory and Veterinary Workforce Development (CDLVWD) has worked for a number of years on the important national issue of veterinary shortages in the U.S. New legislation has recently been introduced that may have significant impact on addressing this. HR 2999, the Veterinary Public Health Workforce and Education Act, is important legislation providing critically needed investments in veterinary public health and veterinary education infrastructure to support our national security and preparedness as well as ensure a safe food supply. The legislation also provides new avenues and incentives for veterinarians to serve in public sector roles where their expertise helps protect human and animal health.

News Flash No. 2 - Call for Action

Shortages in the Federal Veterinary Workforce

The Government Accountability Office (GAO) "report" states that veterinarians are a small but vital part of the federal workforce, playing important roles in protecting people from zoonotic and foodborne diseases, ensuring the health and humane treatment of food animals and helping to keep America's food system safe. The growing shortage of veterinarians is affecting federal agencies and some have already identified insufficiencies in their veterinary workforces. At the Food Safety and Inspection Service (FSIS), for example, the veterinary workforce is finding it difficult to adequately carry out its responsibilities for ensuring food safety and the humane treatment of animals.

Significant changes in recruitment and retention authorities are needed to ensure that this vital workforce is maintained to adequately prevent and respond to significant animal disease incursions and emerging disease threats. Currently the Office of Personnel Management along with federal agencies and veterinary associations are jointly working on assessing and improving the federal veterinary workforce. They have identified the following as issues that need to be resolved: pay, recruiting and retention flexibilities, emergency planning, workforce analysis and planning, talent management and growing veterinary shortages. The number one recruitment tool identified in surveys is greater starting pay flexibility, followed by increased access to student loan repayment. The number one retention tool identified was a more competitive compensation package.

News Flash No. 3 - Call to Action

Veterinary Medicine Loan Repayment Program (VMLRP) - 50 State Animal Health Officials Must Identify Veterinary Shortages - Anticipation Builds for the United States Department of Agriculture (USDA) Call for Shortage Situation Nominations

About 40 veterinarians will be selected by the USDA, Cooperative State Research, Education, and Extension Service (CSREES) to participate in the VMLRP ([7 USC 3151a](#)) in early 2010.

However, before the inaugural awards cycle can begin later this year, each state's State Animal Health Official will need to identify veterinary shortage situations and nominate them to be considered for designation as a veterinary shortage situation by the USDA. Only shortage situations that are officially designated by USDA as having a critical shortage of practicing veterinarians will be eligible for the VMLRP participants. The USDA-CSREES is expected to issue a call for nominations some time later this month, likely mid to late September, in the Federal Register. Once the notice is available, USAHA's CDLVWD, the American Veterinary Medical Association (AVMA) and other stakeholders will alert their members.

News Flash No. 4 - Call to Action

Legislation to Help Solve Veterinary Needs In Key parts of the Nation

VSIA - The Veterinary Services Investment Act will be introduced in the Senate the week of September 20th

This Nation's veterinary workforce is the front line of food safety/security, animal and public health and homeland security. However, we face a shortage of veterinary services in key parts of the country. The VSIA, which will soon be introduced in the Senate, aims to tackle and solve these problems by helping states to address their most pressing veterinary workforce needs. VSIA will bolster sectors of veterinary shortages across the nation in the public, private, industrial and academic sectors. This

legislation would authorize grants to bolster veterinary services and relieve shortage situations in key parts of the country. Awards under the new grant program, which will be administered by the USDA, may be used to support a wide array of activities including:

- recruit and retain practicing veterinarians and veterinary technicians
- increase knowledge in food safety/protection and food animal medicine
- establish mobile and portable veterinary clinics
- conduct assessments that will be needed to designate veterinary shortage
- surveillance of zoonotic and food animal disease
- establish, expand and support veterinary residency, internship and externship programs
- provide continuing education to veterinarians and veterinary technicians

HIGHLIGHTS OF GOVERNMENT ACCOUNTABILITY OFFICE REPORT ON VETERINARY WORKFORCE AND CONGRESSIONAL TESTIMONY OF GAO OF LISA SHAMES, DIRECTOR OF NATURAL RESOURCES AND ENVIRONMENT, GAO

Mary Denigan
Natural Resources and Environment
US Government Accountability Office

February 2009



Highlights of [GAO-09-178](#), a report to the Chairman, Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia, Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

Veterinarians are essential for controlling zoonotic diseases—which spread between animals and humans—such as avian influenza. Most federal veterinarians work in the Departments of Agriculture (USDA), Defense (DOD), and Health and Human Services (HHS). However, there is a growing national shortage of veterinarians. GAO determined the extent to which (1) the federal government has assessed the sufficiency of its veterinarian workforce for routine activities, (2) the federal government has identified the veterinarian workforce needed during a catastrophic event, and (3) federal and state agencies encountered veterinarian workforce challenges during four recent zoonotic outbreaks. GAO surveyed 24 federal entities about their veterinarian workforce; analyzed agency workforce, pandemic, and other plans; and interviewed federal and state officials that responded to four recent zoonotic outbreaks.

What GAO Recommends

GAO is making recommendations to help ensure sufficient veterinarian capacity to protect public and animal health. In commenting on a draft of this report USDA, DOD, OPM, DHS, and Interior generally agreed with our recommendations. HHS generally concurred with the report, but disagreed with a 2007 FDA Advisory Committee report GAO cited, which said that FDA's Center of Veterinary Medicine is in a state of crisis.

To view the full product, including the scope and methodology, click on [GAO-09-178](#). For more information, contact Lisa Shames at (202) 512-3841 or shamesl@gao.gov.

VETERINARIAN WORKFORCE

Actions Are Needed to Ensure Sufficient Capacity for Protecting Public and Animal Health

What GAO Found

The federal government lacks a comprehensive understanding of the sufficiency of its veterinarian workforce. More specifically, four of five component agencies GAO reviewed have assessed the sufficiency of their veterinarian workforce to perform routine activities and have identified current or future concerns. This includes USDA's Animal and Plant Health Inspection Services (APHIS), Food Safety and Inspection Service (FSIS), and Agricultural Research Service (ARS); and DOD's Army. Current and future shortages, as well as noncompetitive salaries, were among the concerns identified by these agencies. HHS's Food and Drug Administration (FDA) does not perform such assessments and did not identify any concerns. In addition, at the department level, USDA and HHS have not assessed their veterinarian workforces across their component agencies, but DOD has a process for doing so. Moreover, there is no governmentwide effort to search for shared solutions, even though 16 of the 24 federal entities that employ veterinarians raised concerns about the sufficiency of this workforce. Further exacerbating these concerns is the number of veterinarians eligible to retire in the near future. GAO's analysis revealed that 27 percent of the veterinarians at APHIS, FSIS, ARS, Army, and FDA will be eligible to retire within 3 years.

Efforts to identify the veterinarian workforce needed for a catastrophic event are insufficient. Specifically, agencies' plans lack important elements necessary for continuing essential veterinarian functions during a pandemic, such as identifying which functions must be performed on-site and how they will be carried out if absenteeism reaches 40 percent—the rate predicted at the height of the pandemic and used for planning purposes. In addition, one federal effort to prepare for the intentional introduction of a foreign animal disease is based on the unrealistic assumption that all affected animals will be slaughtered, as the United States has done for smaller outbreaks, making the resulting veterinarian workforce estimates irrelevant. A second effort lacks crucial data, including data on how the disease would spread in wildlife. If wildlife became infected, as they have in the past, response would be greatly complicated and could require more veterinarians and different expertise.

Officials from federal and state agencies involved in four recent zoonotic disease outbreaks commonly cited insufficient veterinarian capacity as a workforce challenge. However, 10 of the 17 agencies that GAO interviewed have not assessed their own veterinarian workforce's response to individual outbreaks and are thus missing opportunities to improve future responses. Moreover, none of the entities GAO reviewed has looked across outbreaks to identify common workforce challenges and possible solutions.

United States Government Accountability Office

GAO

Testimony

Before the Subcommittee on Oversight of
Government Management, the Federal
Workforce, and the District of Columbia,
Committee on Homeland Security and
Governmental Affairs, U.S. Senate

For Release on Delivery
Expected at 2:30 p.m. EST
Thursday, February 26, 2009

VETERINARIAN WORKFORCE

The Federal Government Lacks a Comprehensive Understanding of Its Capacity to Protect Animal and Public Health

Statement of Lisa Shames, Director
Natural Resources and Environment



GAO-09-424T

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here to discuss our report on the federal veterinarian workforce and the actions needed to ensure a sufficient capacity for protecting public and animal health, which you recently released.¹ As you know, veterinarians play a vital role in the defense against animal diseases—whether naturally or intentionally introduced—and these diseases can have serious repercussions for the health of animals, humans, and the economy. However, there is a growing shortage of veterinarians nationwide—particularly those veterinarians who care for animals raised for food, serve in rural communities, and are trained in public health. This shortage, according to the American Veterinary Medical Association, could hinder efforts to protect humans from zoonotic diseases, which are diseases that spread between animals and humans. The shortage is expected to worsen—partly as a result of space constraints at the country’s 28 veterinary colleges, which can graduate only about 2,500 students a year combined—yet the demand for veterinarians is expected to increase.

Veterinarians play a critical role in ensuring the safety of the U.S. food supply. However, the staffing levels at the Department of Agriculture’s (USDA) Food Safety Inspection Service (FSIS)—where veterinarians help ensure the safety of meat and poultry and the humane treatment of animals during slaughter—have declined since 1995 despite an increasing budget.² In addition, in 2007, we designated the federal oversight of food safety as a high-risk area of government operations because the current fragmented system has resulted in inconsistent oversight, ineffective coordination, and inefficient use of resources.³

In this context, I will focus my testimony today on two key points. First, the Office of Personnel Management (OPM), whose mission is to ensure the federal government has an effective civilian workforce, has not conducted a governmentwide effort to address current and future shortages of federal veterinarians even though 16 of 24 component

¹GAO, *Veterinarian Workforce: Actions Are Needed to Ensure Sufficient Capacity for Protecting Public and Animal Health*, GAO-09-178 (Washington, D.C.: Feb. 4, 2009).

²GAO, *Humane Methods of Handling and Slaughter: Public Reporting on Violations Can Identify Enforcement Challenges and Enhance Transparency*, GAO-08-686T (Washington, D.C.: April 17, 2008).

³GAO, *High-Risk Series: An Update*, GAO-09-271 (Washington, D.C.: January 2009).

agencies that employ veterinarians reported concerns about the sufficiency of their veterinarian workforce. Second, USDA and the Department of Health and Human Services (HHS), which together employ 68 percent of the federal veterinarian workforce, have not assessed the sufficiency of their veterinarian workforces departmentwide even though their component agencies that employ mission-critical veterinarians are currently experiencing shortages of veterinarians or anticipating shortages in the future.

My statement is based on the work we conducted for our recently released report, *Veterinarian Workforce: Actions Are Needed to Ensure Sufficient Capacity for Protecting Public and Animal Health*. Among other things, we surveyed federal departments and their component agencies employing veterinarians to determine the number, salaries, roles, and responsibilities of veterinarians, as well as any concerns these agencies had about the sufficiency of their veterinarian workforce. We then determined the extent to which the departments that employ about 96 percent of federal veterinarians, including USDA and HHS, have assessed the sufficiency of their veterinarian workforce. In addition, we interviewed OPM officials to identify any initiatives it has conducted to address the sufficiency of the federal veterinarian workforce. We conducted our work in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

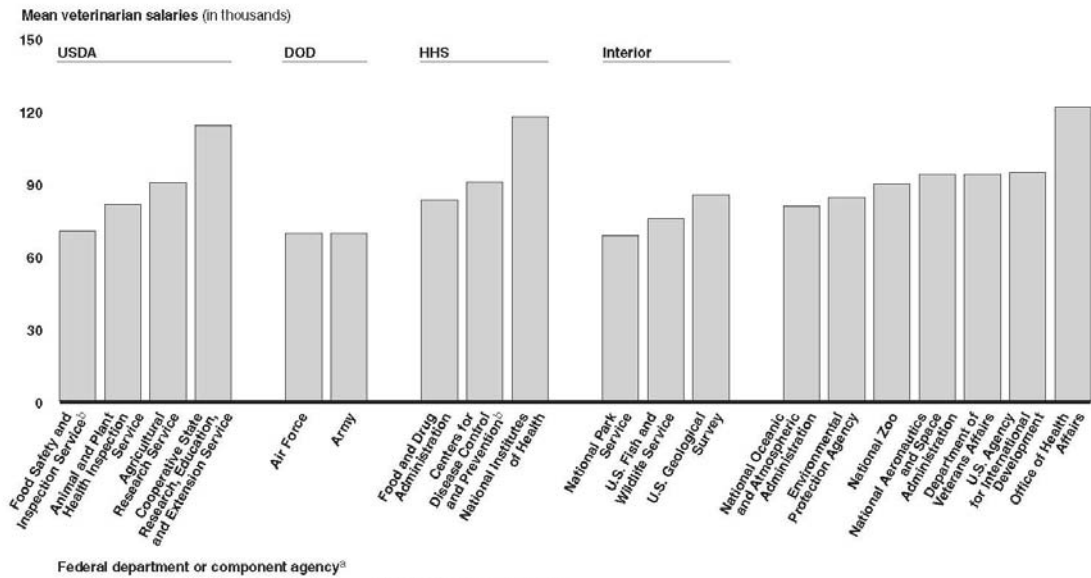
OPM Has Not Conducted a Governmentwide Effort to Address Current and Future Federal Veterinarian Shortages

OPM has not conducted a governmentwide effort to address current and future veterinarian shortages. The lack of a governmentwide initiative is problematic because the majority (67 percent) of the 24 component agencies that employ veterinarians told us they have concerns about the sufficiency of their veterinarian workforce. For example, USDA's FSIS has not been fully staffed over the past decade, and veterinarians working in its slaughter plants told us that this shortage has impaired the agency's ability to meet its food safety responsibilities. Similarly, USDA's Agricultural Research Service (ARS) has experienced difficulty attracting and retaining veterinarians who also have a Ph.D. to conduct critical animal disease research, such as detecting avian influenza and developing vaccines against it. In addition, USDA's Animal and Plant Health Inspection Service (APHIS), whose veterinarians help maintain the health of the nation's livestock and poultry, has identified a potential future

shortage of veterinary pathologists. Furthermore, HHS' National Institutes of Health (NIH) faces challenges recruiting veterinarians that specialize in laboratory animal medicine and pathology. These challenges can be serious because regulations require that veterinarians be available to ensure the proper care of research animals.

Such challenges are likely to worsen as a large number of federal veterinarians become eligible to retire in the near future. For example, APHIS reported that 30 percent of its veterinarians will be eligible to retire by the end of fiscal year 2011. As the shortage grows, those federal agencies that pay veterinarians higher salaries are likely to gain a recruitment advantage. Salaries for individual veterinarians range from \$35,000 for those in the residency program at the National Zoo to \$205,000 for the highest paid veterinarian at NIH. As figure 1 illustrates, mean veterinarian base salaries vary widely across the federal government, from just under \$70,000 at the Department of the Interior's National Park Service to about \$122,000 at the Department of Homeland Security's (DHS) Office of Health Affairs.

Figure 1: Mean Veterinarian Base Salaries at 19 Federal Departments or Component Agencies in Fiscal Year 2008



Source: GAO analysis of agency data.

Note: Salaries do not include locality pay and stipends. In addition, we have not included mean salaries for those agencies with fewer than four veterinarians: the Departments of Energy and Justice; HHS's Office of the Assistant Secretary for Preparedness and Response; and DHS's Directorate for National Protection and Programs. In addition, DHS's Directorate for Science and Technology was unable to provide base salary information before our veterinary workforce report was issued and, therefore, is not included.

^aWe relied on officials from these federal departments or component agencies to identify mean salaries of all veterinarians employed, including civil and military service employees, and contractors, regardless of job title. Because data are means reported by agencies, we could not assess the underlying distribution for outliers or skewness.

^bThis does not include the salaries of the United States Public Health Service Commissioned Corps veterinarians stationed at these component agencies. The Commissioned Corps is a uniformed service that belongs to HHS but fills public health leadership and service roles at several federal agencies.

Our prior work has identified the need for OPM to use its leadership position to help departments and agencies recruit and retain a capable and committed workforce.⁴ During the course of our veterinarian workforce review, OPM officials told us they would initiate a governmentwide effort to address a veterinarian shortage if the departments demonstrated that one exists. Such an effort could include allowing departments to expedite the hiring of veterinarians, as OPM has done in the past for doctors and nurses. Toward the end of our review, OPM officials told us the agency had created a team to determine whether an expedited hiring authority should be granted for all federal veterinarians and that a decision is expected in early 2009. In early 2007, OPM raised the entry grade level for newly hired veterinarians from GS-9 to GS-11.

Neither USDA nor HHS Has Assessed the Sufficiency of Its Veterinarian Workforce across Its Component Agencies

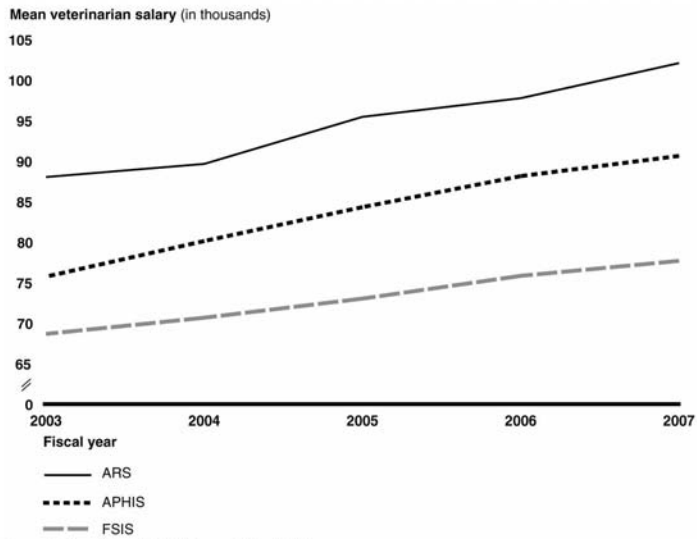
Even though all but one of their component agencies that employ mission-critical veterinarians are currently experiencing shortages of veterinarians or anticipating shortages in the future, officials from both USDA and HHS told us that they have not undertaken a departmentwide assessment of their workforces to gain a broader perspective on trends and shared issues. While USDA regularly collects veterinarian workforce data from its component agencies that employ veterinarians, it does not use this information to assess the sufficiency of the veterinarian workforce departmentwide. According to department officials, workforce assessment is the responsibility of the agencies. However, because USDA delegates this responsibility, it appears to be unaware of the scope of the workforce problems facing its agencies. For example, in its fiscal year 2007 human capital management report, USDA reported that its agencies had met or surpassed certain veterinarian workforce goals but made no mention of the shortages that FSIS and ARS identified in their workforce reports.

One result of this lack of department-level involvement is that USDA agencies compete against one another for veterinarians instead of following a departmentwide strategy to balance the needs of the agencies. According to FSIS officials, APHIS is attracting veterinarians away from FSIS because the work at APHIS is more appealing, opportunities for advancement are greater, and the salaries are higher. In fact, the mean annual salary for veterinarians at FSIS in 2007 was about \$78,000, the lowest among the three key USDA agencies (see fig. 2), whereas the mean

⁴GAO, *Human Capital: Transforming Federal Recruiting and Hiring Efforts*, GAO-08-762T (Washington, D.C.: May 8, 2008).

annual salary for APHIS was about \$91,000 that same year. According to an APHIS human resources official, the agency hired 75 veterinarians from FSIS between fiscal years 2003 and 2007, 17 percent of all new APHIS veterinarians hired.

Figure 2: Mean Veterinarian Salaries at Three Key USDA Component Agencies, Fiscal Years 2003-2007



Source: GAO analysis of Central Personnel Data File data.

Note: Data in this figure reflect locality pay.

In responding to a draft of our veterinarian workforce report, USDA said that because APHIS and FSIS employ the majority of veterinarians within the department, these component agencies will work together, with departmental consultation, as needed, to develop solutions to shared problems. We continue to believe that a departmentwide assessment is necessary.

Similarly, HHS has neither assessed veterinarian workforce needs departmentwide nor instructed any of its component agencies that employ veterinarians—Food and Drug Administration (FDA), Centers for Disease Control and Prevention (CDC), and NIH—to assess their own workforces.

HHS is thus not fully aware of the status of the veterinarian workforce at these component agencies and cannot strategically plan for future veterinarian needs. For example, senior HHS strategic workforce planning officials we spoke with were unaware of a 2007 report by an FDA advisory committee that found that FDA cannot fulfill its mission because of an insufficient scientific workforce. More specifically, the report stated that FDA's Center for Veterinary Medicine is in a state of crisis. This center employs nearly two-thirds of FDA's 152 veterinarians and is responsible for ensuring the safety of veterinary drugs and regulating animal feed, among other things.

HHS officials told us that department-level leadership in workforce planning is important. In fact, in commenting on a draft of our veterinarian workforce report, they said that all HHS operating and staff division heads are now required to have workforce plans in place for their organizations by September 2009. According to these officials, the HHS Office of Human Resources will review these plans to identify opportunities for departmentwide collaboration with regard to strategic recruitment, development, and retention.

Our work also revealed other areas in which the federal government lacks information about the sufficiency of its veterinarian workforce. For example, despite reports of insufficient veterinarian capacity during four recent disease outbreaks, many federal and state agencies have not assessed their workforce response to these outbreaks, and none of these agencies have looked across outbreaks in order to identify workforce challenges that they may have had in common. Without such understanding, the nation's veterinarian workforce may be unprepared not only for future routine outbreaks, but also for catastrophic events. In fact, we found that federal efforts to identify the veterinarian workforce that would be needed during two types of catastrophic events—a pandemic influenza and multiple intentional introductions of foot-and-mouth disease—are insufficient. For example, part of DHS's effort to identify the necessary workforce to respond to a foot-and-mouth disease outbreak lacks crucial data, such as how the disease would spread in wildlife. If wildlife became infected, as they have in the past, the response would be greatly complicated and could require more veterinarians and different types of expertise.

GAO made numerous recommendations in its veterinarian workforce report to help ensure sufficient veterinarian capacity to protect public and animal health. Among these, we recommended that the Secretary of Agriculture direct FSIS to periodically assess whether its level of

inspection resources dedicated to food safety and humane slaughter activities is sufficient. We also recommended that the Secretaries of Agriculture and Health and Human Services conduct departmentwide assessments of their veterinarian workforces to identify current and future workforce needs (including training and employee development) and departmentwide solutions to problems shared by its agencies. We further recommended that the Director of the Office of Personnel Management determine, based on USDA's and HHS's departmentwide veterinarian workforce evaluations, whether a governmentwide effort is needed to address shortcomings in the sufficiency of the current and future veterinarian workforce.

In conclusion, the nation is facing a growing shortage of veterinarians, and component agencies have already identified insufficiencies in their veterinarian workforces. Unless USDA and HHS conduct departmentwide assessments of their veterinarian workforces, they will not fully understand the size and nature of the challenges they face in recruiting and retaining veterinarians with the appropriate skills. This will leave their component agencies without a high-level solution to problems they have so far been unable to solve on their own. Moreover, without departmentwide assessments, OPM will not have the information it needs to assess current and future veterinarian workforce needs governmentwide, and the federal government will be missing opportunities to find common solutions for attracting veterinarians into federal service. If the federal government as a whole does not proactively assess current and future veterinarian workforce needs—for both routine and catastrophic events—it will continue to undermine its ability to protect the health of people, animals, and the economy.

Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions that you or Members of the Subcommittee may have at this time.

GAO Contact and Staff Acknowledgments

For further information about this testimony, please contact Lisa Shames, Director, Natural Resources and Environment, at (202) 512-3841, or shamesl@gao.gov. Key contributors to this testimony were Mary Denigan-Macauley and Michelle K. Treistman. Kevin Bray, Nancy Crothers, and Carol Kolarik also made important contributions. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this testimony.

GAO's Mission

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TESTIMONY OF
Dr. Marguerite Pappaioanou, DVM, MPVM, PhD, Dip ACVPM
Executive Director
Association of American Veterinary Medical Colleges Concerning Protecting Animal and Public
Health: Homeland Security and Federal Veterinarian Workforce

Before the Senate Subcommittee on Oversight of Governmental Management, the Federal
Workforce, and the District of Columbia, of the Senate Committee on Homeland Security and
Governmental Affairs
February 26, 2009

Good morning, Chairman Akaka and Members of the Committee. I am Marguerite Pappaioanou, a veterinarian and Executive Director of the Association of American Veterinary Colleges (AAVMC), which represents all 28 colleges of veterinary medicine and several departments of veterinary science and comparative medicine in the United States, as well as several other veterinary medical educational institutions in the US and abroad. AAVMC provides leadership for and promotes excellence in academic veterinary medicine to prepare the US veterinary workforce with the scientific knowledge and skills, and other essential competencies required to meet societal needs through the protection of animal health, the relief of animal suffering, the conservation of animal resources, the promotion of public health, and the advancement of medical knowledge. Prior to joining AAVMC, I was Professor of Infectious Disease and Epidemiology in the School of Public Health, with a joint appointment in the College of Veterinary Medicine at the University of Minnesota. For 21 ½ years spanning the period from 1983 through 2004, I was a Commissioned Officer of the U.S. Public Health Service, assigned to the US Centers for Disease Control and Prevention as an epidemiologist.

As a federal veterinarian working at CDC, I conducted research on malaria prevention and control, designed and led implementation of disease surveillance for HIV infections, and guided and supported the development of the *US Guide to Community Preventive Services*, in addition to serving as Associate Director of Science and Policy in CDC's Office of Global Health.

I appreciate the opportunity to testify today, with the invitation to respond to the GAO report "Veterinary Workforce—Actions are Needed to Ensure Sufficient Capacity for Protecting the Public and Animal Health"¹. In particular, I will elaborate on the educational, recruiting and retention challenges facing the Federal veterinarian workforce, on past efforts to improve the ability of the Federal veterinarian workforce—which is an essential, but often unrecognized and underappreciated component of the US public health workforce—to prevent and control diseases impacting on human, animal, and environmental health. In particular I will briefly describe all that the US colleges of veterinary medicine are doing to recruit and educate our veterinary workforce to be prepared to serve at local, state, and federal levels to protect human and animal health. I will also provide several suggestions on actions that in my opinion are needed to ensure sufficient US capacity at the federal levels for protecting our public and animal health.

AAVMC commends the Committee, the GAO, and the Federal agencies that contributed to the report for investigating the veterinarian workforce shortage in the federal government and for producing a report with a high level of thoroughness, quality, and offering specific recommendations to address the workforce shortage, which is putting our nations public, animal, and environmental health at risk. We agree with all of the recommendations of the GAO report, and ask that Congress, in its oversight role of the federal workforce, take steps to ensure that the recommendations are implemented fully. It is critical that there be an ongoing, comprehensive assessment and understanding of the sufficiency of our federal government-wide veterinarian workforce, and that there be a plan in place to ensure that the need is met.

AAVMC believes that Congress must provide continued leadership and be actively engaged and involved in implementing solutions recommended in the GAO report to overcome the challenges that are leading to this critical public, animal, and environmental health workforce shortage.

One of the greatest obstacles the veterinarian profession faces is the public's perception of the role and contribution of veterinarians to society. In addition to the important contributions to our nations mental and physical health through the promotion and protection of the health of our beloved companion animals, largely unrecognized are the important contributions veterinarians make to society and public health as outlined in the GAO report.

The opening letter of the GAO report accurately states that veterinarians, and specifically veterinarians employed by the federal government, play a vital role in the defense against animal

diseases—whether naturally or intentionally introduced. Veterinarians are essential for diagnosing, controlling, and eradicating diseases which are spread between animals and humans such as avian influenza, tuberculosis, and salmonella, just to name a few. Veterinarians play a critical role in ensuring the safety of the US food supply and help prevent foodborne illness and assure the humane treatment of animals in the marketing and slaughter process. Veterinarians, especially those in the federal government, are leading the way on cutting edge research that benefits humans, animals, and other living things. For example, USDA's Agricultural Research Service employs veterinary researchers to find new and improved ways to detect and prevent such important diseases as avian influenza, tuberculosis in cattle, West Nile virus in birds, and bovine spongiform encephalopathy or mad cow disease—all of which can and have infected humans.

The recently published Institute of Medicine Report—HHS in the 21st Century: Charting a New Course for a Healthier America²—identified the nation's top health challenges. Among them were developing prevention and treatments methods for diseases that currently lack them (requiring biomedical research scientists – veterinarians -- well versed in comparative medicine and animal models), global threats to health including pandemics, emerging infections often originating in animal populations, bioterrorism (with over 80% of bioterrorism agents of concern spread in nature from animals to humans), natural disasters (which often require preparedness and response of both human and animal health experts), and climate change (requiring a workforce having a broad perspective of the relationship among humans, animals, and the environment), the crumbling public health infrastructure (which is impacting on education of a sufficient veterinary workforce), and social, environmental and behavioral factors affecting health (many of which involve a safe food supply, the human-animal bond, international trade of livestock, poultry, and other factors). As the GAO report and my fellow panelists have documented, without question veterinarians are essential to the multiple agencies within USDA, HHS, DHS, and other Federal departments listed in the report, and therefore, to the Departments at large in fulfilling their missions.

AAVMC, the American Veterinary Medical Association (AVMA), and other institutions have recognized for some time that there is a growing veterinarian workforce shortage that is impacting on the numbers of veterinarians going into federal service to meet the critical public, animal, and environmental health needs being discussed today. The shortage of veterinarians in the federal public and animal health workforce -- the only health professionals educated to address the health needs comparatively, across all species— is just one component of the serious problem facing all segments of the veterinary profession. In fact, there is a significant shortage of veterinarians nationwide, particularly those practicing food supply veterinary medicine (ensuring the health of livestock and poultry pre-slaughter, where the safety of our food supply begins), rural medicine, public health at local and state levels, diagnostic laboratory medicine, and biomedical research.

Veterinary medicine is a small -- and at this point, we would maintain too small --profession. As the size of the need is considered, realize that if you assembled all of the veterinarians in the U.S. you would not fill the FedEx football field just outside Washington, DC!

In contrast to virtually all the other major health professions, where the number of educational institutions has increased with time to match increases in population and societal need, the number of our US colleges of veterinary medicine (28 colleges in 26 states) has not changed over the past 25-30 years, save for a single new college established with private funding in the late 1990s in California. Therefore, the number of graduates nationally has remained at approximately 2600 over the past 30 years despite an increase in the U.S. population by 78 million people, with the associated increase in need for dietary animal protein, new relationships among human, domestic animals and wildlife, and with an increasing companion animal population. The GAO report states that the US Bureau of Labor statistics predicts that demand for veterinarians will increase by 35 percent, or an increase of 24,000 jobs, from 2006 to 2016. Where will all of these new veterinarians come from?

To meet this increased need, either new colleges of veterinary medicine should be established, or the size of our classes in our colleges of veterinary medicine should be increased by substantial numbers. This latter option, although requiring new facilities because current facilities are maxed out in the numbers of students that can be accommodated, is considered the most cost-effective approach. We have impressive numbers of students applying to our colleges each year—with approximately 6,000 students applying for 2500-2600 freshman class slots nationwide each year—but we are turning many qualified, extremely interested and committed, bright, aspiring veterinary students away! The educational facilities needed to educate veterinary medical students are unique.

Specialized teaching, research, and animal care and handling buildings to meet the increasing demand for additional graduates are needed. Over the past three Congresses, AAVMC and the AVMA have advocated for federal support to match and or complement state funding to ensure these educational and research facilities are built in order to meet national preparedness and security needs. Veterinary medical education is a national resource with the 28 colleges in 26 states providing veterinarians, and protecting human and animal health for all of the states and US territories. The AAVMC has compiled the needs of all our colleges to increase class enrollment and has a list of "shovel ready" projects that could help alleviate this critical situation. Federal stimulus money would provide construction jobs and long-lasting employment opportunities at our colleges. Increases in our veterinary workforce at large would also lead to employment of veterinary technicians, and other people. AAVMC is ready to work with the federal government to see that this happens.

Currently our US colleges of veterinary medicine are doing their best with very limited resources to increase class enrollment. They are also working with private and public sector partners to increase awareness of and promote student interest in careers in food safety, public health, animal health prevention and control programs, and biomedical research. These efforts, of which I will briefly describe several exciting programs, have shown that there is no shortage of interest by our veterinary medical students in these key areas.

Currently, 22 of our 28 colleges of veterinary medicine are providing programs and/or joint degree programs in public health. These programs are well subscribed, although the approximate \$35,000-\$50,000 cost of an added year of public health education to the average debt load of \$120,000 accrued during the four year DVM program prevents interested veterinary medical students from pursuing this option. And the low salaries offered by the federal government to veterinarians graduating from these programs makes this option even less viable from a financial perspective.

In other programs, AAVMC continues to partner with the Centers for Disease Control and Prevention (CDC) to sponsor Veterinary Medical Student Day at CDC. Every other year over 300 veterinary medical students and their faculty mentors from all of our 28 colleges of veterinary medicine travel to CDC in Atlanta. There they learn about opportunities and careers in public health, public health disease surveillance, how to conduct outbreak investigations, prevention and control programs, and engage in public health exercises.

In another important partnership, AAVMC and its member institutions collaborate with industry, NIH, and other research institutions to sponsor a Veterinary Summer Scholars Research Program. Each year, between 300-400 veterinary students carry out research projects, and in early August they convene at one of our colleges of veterinary medicine to present their findings, and to learn about opportunities in biomedical research.

In a third important partnership with USDA, our colleges of veterinary medicine each year submit nominations of veterinary medical students to the USDA sponsored Smith- Kilborne Program, which acquaints veterinary medical students with various foreign animal diseases which potentially threaten our domestic livestock animal population. The program includes both classroom presentations on diseases and their implications combined with laboratory experiences. Following the seminar, students share their new knowledge with other students back at home. The Smith-Kilborne Program is conducted at the Cornell College of Veterinary Medicine in Ithaca, NY and the Plum Island Animal Disease Center, Plum Island, NY. AAVMC welcomes opportunities to partner with other federal government agencies to better highlight the multitude of career options available to veterinary medical students.

AAVMC also partners with AVMA, the National Association of State Public Health Veterinarians, and others in hosting a career fair at our annual meeting to present aspiring veterinary students with information on the spectrum of career opportunities in veterinary medicine, focusing on the areas under discussion today.

Despite great interest shown by our students in these areas however, it is as they consider and compare the benefits and costs of different career options, that we lose them to clinical companion animal practice. In graduating with the on average \$120,000 debt load that they incur, with the low salaries offered to veterinarians entering the federal workforce and which continues over time, many graduates feel that they have no choice but to go into clinical practice, or to work in industry, or seek academic research positions that will provide significantly greater salary and benefits, which will allow them to pay back their student loans and to raise families with a reasonable quality of life.

In conclusion, the colleges of veterinary medicine are offering many programs and providing important education and special opportunities to prepare and alert students to career opportunities in food

safety, public health, environmental health, and biomedical research at federal, state, and local levels. But we emphasize that awareness and education alone are not enough to address the workforce shortage documented in the GAO report. It is the attractiveness of the career programs and the level of salary, grade, benefits, opportunities for advancement, and professional growth that are commensurate with the education that veterinarians receive that in the end will be the most important driving factors.

Therefore, we ask Congress to consider the following actions to address the veterinarian workforce shortage putting US public, animal, and environmental health at risk.

We ask the support of Congress to strongly urge the Department of Health and Human Services (HHS) to include veterinarians in their planned strategic department-wide approach to assessing and meeting workforce needs. Veterinarians are critical for HHS to meet its mission given the increasing number of emerging zoonotic diseases, the threat of pandemic influenza and bioterrorism events, food-borne outbreaks involving the human and pet food supply, the impact of the human-animal bond on emergency preparedness and response, and the need for expertise in laboratory animal medicine, animal welfare, and animal models used in finding new cures and therapies. It is because the veterinary profession is small (a consequence of stagnant numbers of veterinary schools and class sizes from lack of adequate investments in veterinary public health infrastructure) that the number of veterinarians employed by HHS overall fails to meet the department threshold number required to be considered (as stated in the GAO report). We maintain that number of veterinarians employed alone is an inappropriate criterion for inclusion—it is having the basic expertise on staff that should be addressed.

We ask that Congress step forward and provide meaningful financial resources to our US colleges of veterinary medicine in ways that will permit meaningful increases in class size sufficient to meet public and private veterinary workforce needs. We greatly appreciate passage of the Higher Education Opportunity Act, enacted in 2008, which was intended to increase capacity at veterinary colleges—but the bill in providing for minor renovations only, will not allow veterinary colleges to build the facilities needed to significantly increase class sizes.

We ask that Congress appropriate much higher levels of funding to the National Veterinary Medical Services Act, enacted originally in 2003, at levels that would allow repayment of a significant portion of debt loads accrued by veterinarians, to a significant number of veterinarians, as a real incentive to attract veterinarians into working in underserved areas, USDA is expected to implement the program this year, and therefore, would be ready to receive increased levels of funding.

We recommend that Congress provide funding for scholarships to support veterinary medical students working toward a degree in public health, or joint or post-doctoral masters or doctoral research degrees needed for careers in biomedical research. Too frequently, scholarship programs aimed at increasing our nation's research capacity, including several by NIH, are restricted to physicians only.

We ask that Congress enact legislation that would ensure that the personnel system grades, salaries, incentive and retention pay of veterinarians working in the federal government be significantly increased—to levels comparable to what veterinarians can earn in private clinical companion animal practice—in order to attract and retain our best and brightest veterinarians to federal service in protecting and promoting our nation's public, animal, and environmental health.

Mr. Chairman, thank you for this opportunity to visit with you and your subcommittee about the need to assure sufficient capacity for protecting public and animal health by an appropriate staffing level of veterinarians across the federal government and in the private sector. The AAVMC and all veterinary medical colleges in the US are keenly aware of the shortage of veterinarians in our federal public and animal health work force and stand ready to partner with Congress to address this issue that affects the health and safety of all Americans.

Sincerely,
Marguerite Pappaioanou, DVM, MPVM, PhD, Dip ACVPM
Executive Director
Association of American Veterinary Medical Colleges

SHORTAGES IN THE FEDERAL VETERINARIAN WORKFORCE

By Michael J Gilsdorf, DVM, MS, BS
National Association of Federal Veterinarians

Background

The National Association of Federal Veterinarians (NAFV) and the American Veterinary Medical Association (AVMA) have been working on ways to improve the recruitment of veterinarians into federal service and retention of federal veterinarians for more than two years. NAFV strives to serve both veterinarians and the agencies they work for by facilitating communication, making suggestions for improvements, and working collaboratively to address issues of concern. The AVMA represents more than 78,000 member veterinarians engaged in every aspect of veterinary medicine. As an advocate for veterinarians in federal service, NAFV and AVMA feel veterinarians are a vital part of the federal workforce, playing important roles in protecting people from zoonotic and foodborne diseases, ensuring the health and humane treatment of food animals, and helping to keep America's meat and poultry safe to eat.

The Government and Accounting Office (GAO) conducted an audit of the Federal veterinary capacity and released a report in February 2009. The report, "*Veterinarian Workforce: Actions are needed to Ensure Sufficient Capacity for Protecting Public and Animal Health*", identified issues of veterinary shortages in the Federal sector and concerns about the Federal government's ability to respond to pandemic and zoonotic threats. Senators Akaka and Voinovich held a hearing on the shortages within federal Veterinarian Workforce in February and asked the federal agencies to develop a plan to resolve future shortages within 6 months. The Office of Personnel Management (OPM) facilitated the creation of Veterinary Medical Officer (VMO) task groups composed of federal agencies, NAFV, AVMA, and the American Association of Veterinary Medical Colleges (AAVMC) to address the issues and concerns raised in the report and at the hearing.

Current Federal VMO Workforce

Recruitment of highly qualified veterinarians for federal service is a critical issue. The federal government lacks a comprehensive understanding of the sufficiency of its veterinarian workforce. There are approximately 3100 veterinarians, working in the federal government. Approximately 1700 are classified in the veterinary medical 701 series. Since over one third of federal veterinarians work in related medical and biological fields, this in itself creates problems in tracking where veterinarians are within the government and assessing the duties that federal veterinarians perform. It also adds to the lack of understanding of how federal veterinarians contribute to the essential functions of the federal government. This indicates that routine government-wide veterinarian workforce assessments are needed.

The GAO report depicts a grave scenario for federal agencies that face an increasing shortage of veterinarians to fill critical positions. For example, the report states that the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) has an on-the-job vacancy rate of up to 35 percent, and the agency's Agriculture Research Service has a 12 percent shortage of mission-critical veterinarians. GAO's analysis revealed that 27 percent of the veterinarians at APHIS, FSIS, ARS, Army, and FDA will be eligible to retire within 3 years. In addition, until the current federal task groups were formed, there were no government-wide efforts to search for shared solutions, even though 16 of the 24 federal entities that employ veterinarians raised concerns about the sufficiency of this workforce. Efforts to identify the veterinarian workforce needs for a catastrophic event are also insufficient.

In a NAFV survey of federal veterinarians, over 90% identified the rigidity of the starting pay scale as a significant barrier to the recruitment of veterinarians into federal service in some agencies. Increased flexibility in setting starting pay levels would enhance many federal agencies' ability to recruit veterinarians. Additionally, federal veterinarians overwhelmingly indicated in the survey that significant increased access to incentives like student loan repayment (the average graduating student loan debt for veterinarians in 2009 was \$129,976. The federal loan repayment program needs to increase the annual and aggregate limits from \$10,000 and \$60,000 respectively. Also, the program needs to be made tax exempt), recruitment bonuses, scholarship programs, retention bonuses, internship programs, direct hiring authority, and improved compensation packages would enhance future recruiting efforts. (It should be noted that Congress has provided \$4.8 million to date and will soon approve another \$4 to \$5 million

for the National Veterinary Medical Services Act which was enacted in 2003 to pay for student loans. The National Institute of Food and Agriculture (NIFA) will soon ask states to nominate veterinary shortage situations for designation and before the end of this year veterinarians will apply for the first 40 awards. The amount of this funding available for veterinary students going into federal public practice is unknown at this time)

Additional federal recruiting incentives, identified by NAFV members, include; treating federal veterinary personnel as professionals, providing appropriate and timely training and continuing education opportunities, and official approval to attend professional meetings related to their official duties. These issues impact recruitment and retention of federal veterinarians.

Proposed Solutions

Government-wide solutions to the shortage of federal veterinarians are needed. Pay, recruitment, and retention authorities among federal agencies are nonexistent or at best, inconsistent. This creates problems in recruitment and retention of veterinarians across all agencies and allows some agencies to obtain veterinarians more easily than others. However, as the shortage of all veterinarians increase, all federal agencies will experience issues in recruitment and retention. Therefore, all agencies employing veterinarians need an array of authorities delegated from OPM in meeting their workforce needs.

USDA and DHHS are in the process of preparing reports to Congress on their workforce needs for veterinarians in the future. OPM has already authorized Direct-Hire authority for all agencies in the spring of 2009. This authority has helped but it is not enough. Agencies will be asking for increased authorities, such as, increases in recruitment incentives of 25% to 50% of base pay for up to 4 years; increasing the amounts and flexibilities given for student loan repayments; paying for employees relocation expenses; offering referral bonus awards; authority to quickly hire veterinarians as intermittents in case of catastrophic events; expanding the ability to offer internships to veterinary students while still in school; establishing waivers for re-employed annuitants; establishing special salary rates for veterinarians- similar to what other medical personnel receive with the Physicians Comparability Act; providing the funding to pay for these flexibilities; expanding coverage for hazardous duty pay to include working with zoonotic diseases; awarding grant money to veterinary colleges to offer more training in public health veterinary medicine; and ability to increase continuing education and advanced degree opportunities.

Conclusion

The strain on resources and the pressure placed on the federal veterinary workforce to meet the existing demands needs to be addressed, especially when the country is facing a greater shortage of veterinarians in the future. Opportunities and challenges to improve and successfully meet critical agency responsibilities and still be prepared in the event of a national emergency will require new and different interventions. Now is the time to take action.

Ninety-one organizations, including many members of the Animal Agriculture Coalition and United States Animal Health Association joined the AVMA/NAFV letter to Congress in February 2009 urging Congress to improved federal recruitment and retention initiatives for veterinarians. We are requesting that OPM grant federal agencies broad recruitment and retention hiring authorities and we are asking for legislation that would allow specialty pay for veterinarians similar to federal physicians pay.

The organizations that joined the Feb. 13, 2009 letter to Congress on Recruitment and Retention of Federal Veterinarians

- Alabama Veterinary Medical Association
- Alaska Veterinary Medical Association
- American Animal Hospital Association
- American Association for Laboratory Animal Science
- American Association of Avian Pathologists
- American Association of Bovine Practitioners
- American Association of Corporate and Public Practice Veterinarians
- American Association of Equine Practitioners
- American Association of Feline Practitioners
- American Association of Food Hygiene Veterinarians
- American Association of Retired Veterinarians
- American Association of Small Ruminant Practitioners

American Association of Swine Veterinarians
American Association of Veterinary Clinicians
American Association of Veterinary Laboratory Diagnosticians
American Association of Wildlife Veterinarian
American College of Poultry Veterinarians
American College of Veterinary Pathologists
American Farm Bureau Federation
American Feed Industry Association
American Horse Council
American Meat Institute
American Registry of Professional Animal Scientists
American Society of Laboratory Animal Practitioners
American Veterinary Medical Association
Animal Agriculture Alliance
Animal Health Institute
Arizona Veterinary Medical Association
Arkansas Veterinary Medical Association
Association of American Veterinary Medical Colleges
Association of Avian Veterinarians
Bayer Healthcare, Animal Health Division
Boehringer Ingelheim Vetmedica, Inc.
California Veterinary Medical Association
Colorado Veterinary Medical Association
Colegio de Medicos Veterinarios de Puerto Rico (Puerto Rico Veterinary Medical Association)
Connecticut Veterinary Medical Association
Delaware Veterinary Medical Association
District of Columbia Veterinary Medical Association
Florida Veterinary Medical Association
Georgia Veterinary Medical Association
Hawaii Veterinary Medical Association
Idaho Veterinary Medical Association
Illinois State Veterinary Medical Association
Indiana Veterinary Medical Association
Institute of Food Technologists
Iowa Veterinary Medical Association
Kansas City Animal Health Advisory Board
Kansas Veterinary Medical Association
Kentucky Veterinary Medical Association
Louisiana Veterinary Medical Association
Maine Veterinary Medical Association
Maryland Veterinary Medical Association
Michigan Veterinary Medical Association
Minnesota Veterinary Medical Association
Mississippi Veterinary Medical Association
Missouri Veterinary Medical Association
Montana Veterinary Medical Association
National Association of Federal Veterinarians
National Milk Producers Federation
National Pork Producers Council
National Renderers Association
Nebraska Veterinary Medical Association
Nevada Veterinary Medical Association
New Hampshire Veterinary Medical Association
New Jersey Veterinary Medical Association
New Mexico Veterinary Medical Association
New York State Veterinary Medical Society

North Carolina Veterinary Medical Association
North Dakota Veterinary Medical Association
Novus International Inc.
Ohio Veterinary Medical Association
Oklahoma Veterinary Medical Association
Oregon Veterinary Medical Association
Pennsylvania Veterinary Medical Association
Rhode Island Veterinary Medical Association
Society for Theriogenology
South Carolina Association of Veterinarians
South Dakota Veterinary Medical Association
Student American Veterinary Medical Association
Synbiotics Corporation
Tennessee Veterinary Medical Association
Texas Veterinary Medical Association
U.S. Animal Health Association
Utah Veterinary Medical Association
Vermont Veterinary Medical Association
Virginia Veterinary Medical Association
Washington State Veterinary Medical Association
West Virginia Veterinary Medical Association
Wisconsin Veterinary Medical Association
Wyoming Veterinary Medical Association

USDA NATIONAL INSTITUTE OF FOOD AND AGRICULTURE (NIFA; FORMERLY CSREES)

Dr. Gary B Sherman
USDA-NIFA

The United States Department of Agriculture (USDA) Cooperative State research Education and Extension Service (CSREES) changed on October 1, 2009 to the USDA National Institute of Food and Agriculture (NIFA), as directed by Congress in the 2008 Farm Bill. While the overarching research, education and extension (REE) missions of CSREES will be retained in the new Institute, significant transformations are ongoing in NIFA's leadership, organizational structure and strategic visioning. One major objective of these changes is to heighten recognition of the critical importance of Agricultural Science to the overall mission of USDA. United States Animal Health Association (USAHA) members may stay abreast of these still-unfolding changes by visiting the USDA and USDA-NIFA internet home pages.

- www.usda.gov
- www.nifa.usda.gov

Presently-authorized, legislatively active, programs administered by USDA NIFA, and of interest to USAHA, include the Veterinary Medicine Loan Repayment Program (VMLRP), Animal Health and Disease Formula Section 1433 (AHD-1433) Program, the Food Animal Residue Avoidance Databank (FARAD), Agriculture and Food Research Initiative (AFRI) and the Minor Use Animal Drugs Program (MUADP; aka NRSP-7).

Other programs of interest to USAHA that have not undergone major changes in 2009 to 2010 include the Extension Disaster Education Network (EDEN), Extension, the Food and Agriculture Defense Initiative (FADI); funding, in part, the National Animal Health Laboratory Network (NAHLN), and NIFA's flagship research and extension formula programs, Hatch and Smith-Lever, respectively.

The following list highlights the NIFA programs for which there have been legislative changes (mainly impacting funding):

VMLRP: The first implementation of this program is rolling out presently and through 2010. Appropriations for FY-10 increased substantially to \$5 M. A total of just under \$10 M has accumulated for this program and these funds are now available to support the launch of this program during 2010. (See also http://www.csrees.usda.gov/nea/education/in_focus/education_if_vmlrp.html)

AHD-Sec 1433 Formula grant program: Appropriations for this program have fallen from about \$5 M per year in 2008 and earlier, to about \$3 M per year in 2009 and 2010. Importantly, this program, which had been absent in the President's budget from 2005-09, was once again proposed for funding in 2010 by the President. However, the President's proposal was identical to last year's Congressional appropriation, reflecting the prior year decrease to \$3 M. It has been noted by many that the decline in AHD-1433 program appropriations has coincided with the increase in VMLRP appropriations. For 2010, Congress finalized appropriation for AHD at \$2.95 M. (See also <http://www.csrees.usda.gov/business/awards/formula/animalhealth.html>)

FARAD: in 2007 and 2008, no funds were appropriated to FARAD and the program nearly closed down all operations. In 2009 and 2010, funding was restored by Congress and for the current fiscal year FARAD was appropriated \$1M. This is the largest appropriation to date but it still falls short of the funding level FARAD PDs indicate is required to fully reap the public food safety benefits of the program. It also falls short of the amount authorized in the 2008 Farm Bill of 2.5 M per year. Thus, FARAD continues to struggle financially. (See also <http://www.farad.org/>)

Minor Use Animal Drugs Program (MUADP; aka NRSP-7): This program has struggled with loss of funding in recent years; however funding was recently restored, albeit at a reduced level. FY-2010 appropriations for this program are \$429,000. This is an approximate 20% decline in funding relative to 2005 and 2006 levels. However, any appropriation is an improvement compared to 2007 and 2008 when Congressional appropriations were zeroed out for the program. This program continues to struggle financially as it works to facilitate Food and Drug Administration approval of orphan veterinary pharmaceuticals and therapeutics for minor species. (See also <http://www.nrsp7.org/>)

AFRI: This is the flagship competitive grants program of USDA-NIFA. The scope of this program is broad and covers animal production and health research as just one of many agricultural science sectors, including crops, water and soil quality, social sciences, etc. This program has enjoyed a \$60 M boost in funding in FY-2010. Under NIFA's new Director, Dr. Roger Beachy, AFRI programs are under major

review and significant changes are anticipated in the RFA slated for released in December 2009 or January 2010. (See also <http://www.csrees.usda.gov/funding/afri/afri.html>)

HR 2999 VETERINARY PUBLIC HEALTH WORKFORCE AND EDUCATION ACT

Ron DeHaven
American Veterinary Medical Association

This is a high priority issue for the American Veterinary Medical Association (AVMA) - Active Pursuit of Passage. This bill would amend the United States Public Health Service Act to enhance and increase the number of veterinarians trained in veterinary public health which is broadly defined and includes biodefense and emergency preparedness, emerging and reemerging infectious diseases, environmental health, ecosystem health, pre and post-harvest food protection, regulatory medicine, diagnostic laboratory medicine, veterinary pathology, biomedical research, rural and government practice, and, the sum of all contributions to the physical, mental, and social well-being of humans through an understanding and application of veterinary science. This bill would:

- 1) Create a competitive grant program used to pay the costs associated with construction, equipment acquisition, and other capital costs relating to expansion of new or existing facilities; paying salaries for faculty to increase capacity; and, developing a veterinary public health curriculum. This is essentially the Veterinary Public Health Workforce Education Act (VPHWEA) from last Congress.
- 2) Establishes within the US Department of Health and Human Services - Health Resources and Services, the new Division of Veterinary Medicine and Public (DVMPH).
- 3) Establishes a veterinary faculty loan repayment program to be administered by DVMPH.
- 4) Establishes a fellowship program for veterinarians in food systems security and veterinary public health to be administered by DVMPH. Fellows could participate in either a year-long or a part-time program.

We are not optimistic that this legislation will pass, as is, in this Congress – however, we could see parts of this legislation attached to other bills. The first section (competitive grants program) was last year's legislation – unfortunately, it was not changed to address the concerns from last Congress' bill, and it is authorizing \$100,000,000 in 2010 and 2011, and \$50,000,000 in 2012 to 2014 (which will be a huge sell in this economic climate – even though this is the only authorizing legislation). However, if the schools are going to significantly increase capacity to address future shortages, they will need federal money.

HR 3519 The Veterinarian Services Investment Act. This is a bill that AVMA staff drafted and has been introduced in the House; Senator Stabenow of Michigan will soon introduce in the Senate. We have many cosponsors lined up in both chambers. This is really addressed more towards veterinary services – especially in shortage situations. It creates a grant program to promote efforts to develop, implement, and sustain veterinary services. This bill will be especially helpful to states as they try to deal with providing veterinary services in shortage situations.

Veterinary Medicine Loan Repayment Program: Call to Action. This call to action is for the states (state animal health official) to identify potential veterinary shortage situations for the loan repayment program. The USDA is expected to put an announcement in the Federal Registry in the next couple of weeks referring to the above. It is essential that all states who want to be part of the program submit their shortage situations to the USDA. Once the announcement is made, we will be communicating with the state animal health officials to ensure that states who want to be part of the program get their information to the USDA. We are very supportive of this and encourage USAHA to aggressively promote the future announcement to the states.

THE NATIONAL CENTER FOR FOREIGN ANIMAL AND ZOOLOGIC DISEASE DEFENSE (FAZD CENTER) - TOP EDUCATION AND OUTREACH PRODUCTS

Neville P. Clarke
FAZD Center

International Scientific Forum to Consider Cutting-edge Innovations for FAZD defense – To find innovative answers to biological threats, an international forum of the world's leading experts was convened to share ideas and explore concepts for the directions that emerging science might take to reduce the impact of exotic economic and zoonotic disease in the U.S. In November 2008, the FAZD Center convened 42 leading U.S. scientists and specialists for the Forum on Science and Biothreats. Speakers discussed novel discoveries and techniques from a range of scientific and technological disciplines, including epidemiology, pathology, microbiology, wildlife ecology, mathematics and computer modeling. Specialists in zoonotic disease responded with "outside the box" discussions on how these discoveries and techniques may apply to detecting, mitigating and recovering from zoonotic outbreaks, epidemics and pandemics. The results of this meeting identified highly innovative opportunities to exploit the emerging science in development of new methods to reduce the impact of exotic economic and zoonotic animal diseases.

Publication of a Field Guide to Disposal of Large Numbers of Dead Animal Following a Catastrophe – In the aftermath of a disaster that kills thousands of animals, responders face a difficult range of site specific choices for the safe and legal disposal of the carcasses. The FAZD Center sponsored the creation and publication of a field guide, "Managing Contaminated Animal and Plant Materials," which won the American Society of Agricultural and Biological Engineers (ASABE) Educational Aids Blue Ribbon Award in the comprehensive publication category. The manual is designed to be used as a reference for training and operations in preparing and disposing of contaminated animal and plant materials. It was produced by the Technical Support Working Group, in conjunction with the U.S. Department of Agriculture and the Environmental Protection Agency, for landowners, private industry, animal producers, and local, state, federal, and military governmental agencies. The manual is available for online download at <http://fazd.tamu.edu/fieldguide>.

Animal Health Network: a System to Alert Non-Commercial Livestock Owners about Disease Outbreaks – During an animal disease outbreak, the most difficult audiences to reach with critical information are the small, non-commercial owners of livestock. And yet these small backyard operations are often the source for devastating outbreaks, such the 2002-03 outbreak of Exotic Newcastle Disease, which began with a smuggled bird, existed in backyard flocks for six months before detection, and eventually led to the destruction of more than 3.5 million birds and the suspension of exports to 34 nations from California, Nevada and Arizona. A pilot program initiated by the Center in six states found that a message of a disease outbreak can flow from the state veterinarian to the feed retailer and customers within 48 hours or less. As it is being adopted nationally, the Animal Health Network has the potential to reach over 2 million non-commercial livestock and poultry operators through a network of 50 state veterinarians, 2,700 extension educators, and 6,700 feed retailers. The Animal Health Network concept has been well received nationally, with adoption in several states – most recently in the state of Michigan. The program has also been endorsed and used by the USDA Extension Disaster Education Network (EDEN), a coalition of state responders supported by the USDA.

Real-Time Science Based Assessment of the H1N1 Pandemic – Beginning immediately after the recognition of the outbreak of type A H1N1 influenza in Mexico, the FAZD Center launched a special web site which organized and reported the literature that provided in depth assessment of the factors involved in the emergence of the disease including a science based assessment of the origin and distribution of the disease including the understanding of the molecular biological basis for its multi-species origin. The FAZD Center provided a daily assessment of the situation that was widely circulated with the Department of Homeland Security (DHS) including the Office of Health Affairs and the National Biosurveillance Information System. The Center is organizing a national task force of leading scientists to assess and project possible future directions of the pandemic and to define gaps in knowledge and evaluate next steps in dealing with this and other influenza viruses.

THE ARTHROPOD-BORNE ANIMAL DISEASES RESEARCH LABORATORY: RESEARCH PROGRAM UPDATE AND CURRENT STATUS

Dr. William Wilson
USDA-ARS-ABADRL

The Arthropod-Borne Animal Diseases Research Laboratory (ABADRL), currently located in Laramie, Wyoming, has an interdisciplinary staff of microbiologists, virologists, entomologists, and veterinarians with a research mission to address insect-transmitted diseases of livestock. The primary emphasis is on arboviruses, including bluetongue virus (BTV), vesicular stomatitis virus (VSV), and Rift Valley fever virus (RVFV), that were identified by the Agriculture Research Service (ARS) Animal Health stakeholders as high priority livestock pathogens. The ABADRL Biosafety Level - 3 (BSL-3) facilities have not been operational since February 2002. To accomplish their continuing BSL-3 inclusive research mission, the ABADRL has established national and international collaborations with scientists who have access to BSL-3 facilities and/or reside where the BSL-3 agents are endemic. The Agriculture Appropriations Congressional Conference bill contains language for ABADRL to be relocated to Manhattan, Kansas where a BSL-3 facility is available. The Ag bill was passed by the House on October 7th, and subsequently passed by the Senate on October 8th, 2009. The relocation will become official upon signature by the President of the United States. The move timeline is uncertain, but will be completed by the end of FY10. The ABADRL continues to have an important research mission that is further supported by additional funding sources such as Department of Homeland Security, ARS Office of International Research Projects, and the Department of State Biosecurity Engagement Program. Additionally, the laboratory has the largest number of national and international collaborations in its history, and continues to have a productive research program addressing the needs of our stakeholders. The ABADRL's research mission has been hindered by the ability to recruit veterinary medical officers, especially senior scientists with vector-borne disease expertise. The unit hopes that the relocation will provide opportunities to address this issue and provide opportunities for veterinary students to gain experience in vector-borne diseases.