

# **Testimony**

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Management, the Federal Workforce, and the District of Columbia

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# Safeguarding Our Nation: The Key Public Health Role of Veterinarians at the Department of Health and Human Services

Statement of

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For Release on Delivery Expected at 2:30 pm Thursday February 26, 2009 Good afternoon Chairman Akaka, Sen. Voinovich, and Members of the Subcommittee. I am Gerald W. Parker, the Principal Deputy Assistant Secretary for Preparedness and Response (ASPR) at the U.S. Department of Health and Human Services (HHS). I appreciate this opportunity to discuss the important role of veterinarians at HHS in helping to protect the health of the American people.

Public health is routinely impacted by the interactions of people, animals, and the environment and veterinarians are uniquely qualified to address the interface of these areas and thus current and emerging health threats. The 21<sup>st</sup> century health security challenges include zoonotic diseases, food- or waterborne illnesses, and bioterrorism. A strong interaction between human and veterinary medicine is necessary for implementing effective public health programs that address the factors influencing the health security such as the international movement of people, animals, and animal products; globalization of food supply chain; antimicrobial resistance of pathogens; climate and environmental changes including those affecting wildlife; interaction between produce production areas and domestic livestock and wildlife; and national and global security.

The lessons we learned from SARS, monkeypox, and avian influenza outbreaks highlighted the global nature of infectious diseases and the need to integrate animal and public health surveillance, epidemiology, and laboratory systems. The

lessons we learned from Katrina included a stronger emphasis on companion animals and how we can better integrate their care in our preparedness planning.

Urbanization, globalization, and terrorism have brought the need for a stronger, larger, more diverse, and more competent public health workforce to the forefront of public planning (Pappaioanou, 2004). A growing number of medical issues are resulting from increasing human –wildlife contact, environmental changes, expansion of international travel, antimicrobial misuse, intensification and integration of food production, and growth of the immunocompromised population.

There has been a renewed focus on the important relationship between public health and veterinary medicine for improving human health, animal health, and food safety. Because veterinarians work at the interface of human, animal, and environmental health, they are uniquely positioned to view health through the lens of public health impact. Changes in land use, creation and operation of large terrestrial and marine food production units, and microbial and chemical pollution of land and water sources, have created new threats to the health of both animals and humans (Zinsstag, Schelling, Wyss, & Mahamat, 2005).

Within HHS, veterinarians play a key role in mission-critical functions not only in ASPR which leads the planning and response activities to fulfill the HHS role as the Lead Federal Agency for Emergency Support Function #8 (ESF-8) under the National Response Framework and HSPD-10, but also at the National Institutes

of Health, the Food and Drug Administration, and the Centers for Disease Control and Prevention. What follows is a brief overview of the veterinary workforce at HHS.

#### Food and Drug Administration (FDA)

FDA employs veterinarians throughout its Centers to ensure the safety of drugs, biologics, devices and foods. The Center for Veterinary Medicine (CVM) employs the majority of FDA's veterinarians. To ensure that its veterinary staff is sufficient to manage day-to-day research and policy work while maintaining the ability to handle potential zoonotic disease outbreaks, FDA's CVM assesses veterinarian workforce requirements and adjusts staffing levels and personnel skillsets accordingly. FDA believes that its veterinarian workforce is sufficient to address its veterinary needs and respond to zoonotic disease outbreaks.

In 2008 CVM completed an analysis of all Center programs to measure the gap between current and optimal performance. That analysis included a process to identify the resources required to close the gap. Regular assessments ensure that CVM resources, including veterinary resources, are appropriately aligned with current and future needs.

If an issue regarding a zoonotic disease were to arise, FDA would tap veterinary resources as needed to address the issue. As the primary role of FDA veterinarians in responding to zoonotic disease outbreaks is to provide

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technical/scientific advice and to coordinate FDA's activities with those of federal, state, and local agencies, FDA believes this flexibility will allow it to handle zoonotic disease outbreaks or pandemics which may place extraordinary demands on FDA's veterinary resources.

FDA's CVM has been successful in attracting, hiring and retaining highly qualified veterinarians. Many FDA veterinarians arrive with significant scientific and clinical experience, as well as advanced educational backgrounds in addition to the Doctor of Veterinary Medicine degree (e.g., Ph.D., M.P.H., M.B.A., and J.D.). Through an integrated and coordinated process, CVM has built alliances and partnerships with private and governmental groups and has developed a recruitment process, which includes attending job fairs at universities and trade shows. These activities have enabled CVM to exceed the FDA's hiring surge goals.

To ensure the continuing capability of its veterinary workforce, FDA provides a variety of professional development opportunities, including access to a robust training program made available through CVM's Staff College. The Succession Plan at CVM offers programs for new and current employees to support them in their efforts to reach their maximum potential by strengthening and increasing their professional competencies. The plan is embedded in a Competency Model, a tool that helps CVM determine what skills are required in particular job

roles/functions to meet the present requirements of the organization, and most importantly, the needs of the future.

FDA's CVM assesses veterinary workforce requirements and makes adjustments to staff levels and staff skillsets to address changing needs. CVM hires and retains qualified veterinary personnel by providing considerable resources to staff to maintain and improve their skills. FDA believes that its veterinarian workforce is sufficient to address current needs and will continue to work through the Department to ensure that veterinarian resources are appropriate to fulfill anticipated future needs.

# National Institutes of Health ((NIH)

In contrast to the situation at FDA, successful recruitment of veterinarians at NIH poses a particular challenge to its workforce needs. Veterinarians at NIH must have board specialization in laboratory animal medicine and veterinary pathology. Achieving specialty certification in both of these veterinary subspecialties is very difficult (~40% pass rate). Also, very few veterinarians are interested in accruing additional debt immediately upon graduation from veterinary school in order to enter an additional residency program.

Consequently, the NIH Intramural Research Program is experiencing a critical shortage of veterinarians to support the agency's broader biomedical research mission,

This shortage will further be exacerbated by anticipated retirements of a number of senior veterinarians in upcoming years. Today there are more job openings than qualified candidates to fill vacant positions. NIH is looking into a long term solution.

#### Centers for Disease Control and Prevention (CDC)

Veterinarians at CDC work to identify, prevent and control public health threats through applied epidemiology, laboratory animal medicine, toxicology, technical assistance and consultation, surveillance, field and clinical investigations, and human-animal interface research. They support public health training and activities among State, local, territorial, tribal and global health programs. Their expertise is utilized in emergency preparedness and response workforce surge capacity following public health disasters, global disease outbreaks and terrorist acts. CDC veterinarians work with our partners at the U.S. Department of Agriculture, Customs and Border Protection under the Department of Homeland Security and Fish and Wildlife Service under the Department of the Interior to identify potential risks associated with the importation of animals and animal products that may cause human disease. Together with their colleagues at the National Wildlife Health Center, a part of the U.S. Geological Survey within the Department of the Interior, CDC veterinarians monitor the occurrence and progression of infectious diseases within wildlife and waterfowl populations. CDC veterinarians also collaborate with veterinarians and scientists at the National Oceanic and Atmospheric Administration (NOAA), part of the U.S.

Department of Commerce to better understand how the complex interactions between freshwater and ocean ecologies, including fish and marine mammals, and human populations can be affected by the occurrence of emerging pathogens and harmful toxins or chemical substances.

Recent outbreaks involving both animals and humans, such as severe acute respiratory syndrome (SARS), West Nile virus, monkey pox, and avian influenza virus, are reminders of the need to view diseases not as affecting only one species, but rather globally with an eye to integrating animal and human health surveillance, epidemiology and laboratory systems and to creating new strategic partnerships among the global public health community.

Veterinarians are a valuable and unique resource at CDC that must be maintained with continued recruitment and training. To this end, CDC has hosted veterinary student days that are designed to introduce students to the CDC's mission of public health and epidemiology and to encourage students to consider public health as a career choice. Similarly, CDC co-hosted with the Association of Schools in Public Health and the Association of American Veterinary Medical Colleges an inaugural conference that explored ways to integrate human and animal health concepts into the training of students in public health and veterinary medicine. CDC also supports a laboratory animal medicine residency program for the training of veterinarians in infectious disease research, as more high-containment laboratories are being built. Graduates of this

residency program become proficient not only in the day-to-day care and treatment of laboratory animals but also in designing scientific experiments, the use of animal models and the administration of lab animal medicine programs. Efforts such as these will ensure that the veterinarian workforce has the capacity to respond to a pandemic or large-scale animal disease outbreak.

Office of the Assistant Secretary for Preparedness and Response (ASPR)

Within HHS and under the National Response Framework, ASPR is responsible for coordinating the Emergency Support Function (ESF) #8 response – Public Health and Medical Services. ASPR provides the mechanism for coordinated Federal assistance to supplement State, local, territorial and tribal resources in response to public health and medical care needs. This may include veterinary and/or animal health issues, when appropriate, for potential or actual emergencies or major disasters.

ESF-8 veterinary assets are capable resources that can rapidly deploy to a disaster or emergency site to address animal-related and public health issues. Disasters and emergencies may include but are not limited to events that may occur naturally (e.g., hurricanes, typhoons, earthquakes, pandemic events and foreign animal disease outbreaks) and events that are man-made or terrorist-caused (e.g., radiological/nuclear contaminations and biological or chemical exposures). The need to provide primary and/or acute care of sick or injured

animal patients in an austere environment for a sustained period of time is considered the norm rather than the exception.

The veterinary arm of ESF-8 provides and/or coordinates Federal veterinary medical, public health and/or other animal-related resources to supplement local and State animal care needs. It also provides assistance in the assessment and re-establishment of animal and public health infrastructures, and in protecting public health following a disaster, emergency or catastrophic event.

There are almost 1,000 diseases that can be transmitted from animals to humans. Hence, surveillance of animals to prevent zoonotic disease transmission in order to protect community health at large will likely remain a critical element in such responses. The Pet Evacuation Transportation and Standards Act amended the Stafford Act to authorize federal agencies, including those participating in ESF-8, to support the care of pets and companion animals following a major disaster.

ESF-8 veterinary resources may also support ESF-11 responses to natural and/or man-made events impacting livestock and other animals. Support of efforts to contain and/or eradicate foreign animal diseases (FAD) or other animal disease outbreaks posing a threat to the agricultural infrastructure, public health or economy of the United States may be rendered.

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Veterinary assistance may also be required to identify safe food sources

following an emergency, disaster or catastrophic event. Veterinarians can

conduct inspections within impacted communities to ascertain whether or not

recommended storage conditions have been maintained to ensure the safe

distribution and consumption of food products. In addition, inspection of food

products for disaster-related contaminants, rodents, insects and other pests is

essential.

Community health initiatives may also require administrative support to track the

incidence of disaster-related illnesses and communicable diseases.

Veterinarians provide additional sets of eyes in this endeavor.

Departmental Assets Available to HHS/ESF-8

The information below reflects veterinary assets available within HHS that may

be mobilized by the Secretary in response to a disaster.

National Veterinary Response Team (NVRT)

These teams are part of the National Disaster Medical System (NDMS).

Their members are capable of administering veterinary clinical care,

performing infrastructure assessments and surveying for issues of public

health concern. Conceptually, a team consists of 26 to 29 members. The

number of individuals deployed is a function of the mission, and team size

may well shrink or expand accordingly. Smaller teams, known as "Strike"

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teams, can provide initial care to a small population. Assessment teams can provide reconnaissance information as an aid to determine event needs.

Residing within the Department of Health and Human Services, the U.S. Public Health Service (USPHS) Commissioned Corps is a team of more than 6,000 full-time, well-trained, highly qualified public health professionals dedicated to delivering the Nation's public health promotion and disease prevention programs and advancing public

health science. The USPHS Corps is composed entirely of officers who

have been commissioned on the basis of their health-related training.

U.S. Public Health Service Commissioned Corps Veterinarians

As one of America's seven uniformed services, the USPHS

Commissioned Corps fills essential public health leadership and service roles not only within HHS but also as part of several of the Nation's Federal Government agencies and programs (the Department of Defense, the Environmental Protection Agency and the Department of Agriculture).

Though there are currently fewer than 100 USPHS Commissioned Corps veterinarians on active duty, these officers work domestically and internationally within HHS (e.g. ASPR, CDC, FDA, NIH and the

Indian Health Service) and other Federal agencies conducting cutting edge biomedical research; ensuring meat and poultry safety through carefully monitored inspection programs; testing and regulating the safety and effectiveness of veterinary drugs and devices; studying the health effects of pesticides, industrial pollutants, and other contaminants on animals and people; and participating in a broad range of other clinical and applied public health activities that link animal health with human health and well being. These officers, like their colleagues in the U.S. armed forces, are subject to duty 7/24/365 and are often deployed from their host agencies in times of national emergencies and disasters.

Several Memoranda of Agreement to expand the recruitment, assignment, and retention of USPHS officers, including veterinarians, are pending final administrative review, approval, and action. The uniformed services have jointly addressed pay incentives to attract and retain increased numbers of licensed veterinarians in public service careers.

## • (Veterinary) Medical Reserve Corps

These members consist of groups of civilian volunteers, organized within their communities, who have agreed to assist in the management of animal issues following a disaster or emergency. • Emergency System for Advance Registration of Volunteer Health
Professions (ESAR-VHP)

The ASPR Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) program is responsible for assisting States in developing volunteer health professional registration programs and developing a national network of State ESAR-VHP programs for use at the local, State or national level. Veterinarians are one of the required professions identified by the ASPR ESAR-VHP program. All states are required to have the ability to register and verify the credentials of veterinarians.

## Non-Departmental Assets Available to HHS/ESF-8

The following reflect veterinary assets outside of HHS that may be called upon via interagency agreement, or through the National Response Framework, to provide veterinary support during an emergency.

# • U.S. Army Veterinary Corps

Bringing both veterinary clinical and public health capability, members of the U.S. Army Veterinary Corps under the Department of Defense may be called upon as a partner of the National Disaster Medical System to support an ESF-8 response. These individuals are trained in zoonotic disease control, as well as in food inspection and food facility inspection, to aid in preventing human illness from food or animal sources. They also

bring significant experience in biomedical research and management of bio-threats.

#### United States Air Force Biomedical Service Corps

The United States Air Force (USAF) Biomedical Service Corps is a multidisciplinary organization comprised of various medical and health specialists. Within this organization are individuals trained as veterinarians but who serve not as clinicians within USAF, but as biomedical service officers. These individuals perform many of the day-to-day public health activities necessary to protect the health of service members through management of communicable disease control programs at Air Force bases around the world. They manage programs to control human immunodeficiency virus (HIV) infection, encephalitis, tuberculosis and other infectious diseases, and monitor and control insect-borne diseases, such as Lyme Disease and Rocky Mountain spotted fever. They also manage vaccination programs against influenza, hepatitis and other human diseases.

#### Conclusion

In the coming year, HHS will put forth a plan to begin a Mission Critical Occupation Review. This will help to determine the adequacy of veterinary staffing within the department. As we make these assessments, full consideration will be given to the interdisciplinary studies veterinarians undertake during their professional training, which make many fully capable of performing

within the department at the highest levels. We recognize that veterinarians serve key roles in research, surveillance and epidemiologic investigations of zoonotic diseases and infectious disease outbreaks. Further, the ability of veterinarians to provide immunizations, dispense medications, and provide basic health screenings, under the supervision of a physician during an emergency,

For your and the Subcommittee's perusal, Mr. Chairman, my testimony is appended with a table that displays the veterinary competencies and capabilities

might be integral to saving lives.

currently in place at HHS.

Thank you for your time and interest. I am happy to answer any questions.

	TABLE OF COMPETENCIES AND CAPABILITIES OF HHS VETERINARY ASSETS					
Requirement	National Disaster Medical System (NVRT)	United States Public Health Service Commissioned Corps	National Institutes of Health	Food and Drug Administration	Centers for Disease Control and Prevention	Veterinary Medical Reserve Corps
Animal Evacuation/Shelter Support Animal Microchip						
Placement and Identification  Monitoring/Support of Animal Transportation Procedures  Shelter Operations	X	X X	X X X	х	x	X X
Health and Medical Needs  Medical Care and Support to Federal Working Animals	х		x			
Medical Care and Support to Companion and Large Animals Animal Shelter Medicine Animal Clinical Laboratory	X		x x x			
Services Animal Biomedical Research Facility Support Mobile Veterinary Services Unit	X		x	х	x	
Animal Welfare Issues Animal Infrastructure Assessment	X X X	x x	x x	х	x	x x
Public Health						
Zoonotic Disease Identification and Surveillance Animal and Human Quarantine	х	х	х		х	
and Disease Containment Animal and Human Food Safety and Surveillance	x x	Х	x x	x	х	
Epidemiological Data Collection		X			Х	
Foreign Animal Disease Outbreak Response Pest and Vector Management	X X	х			х	Х
Deceased Animal and Carcass Disposal Consultation Biohazard Exposure	х		х		х	
Identification and Mitigation		X	Х	<b>X</b>		