Meeting Surge Capacity Needs within the US Veterinary Workforce

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disease outbreaks?

• Notice: This information has been gathered from various sources and has not been verified by all the agencies involved.

• If discrepancies are found, please let me know.
Do we have adequate veterinary workforce surge capacity to respond to major animal health and public health disasters and disease outbreaks?

Is data available to answer this question?
Do we have adequate veterinary workforce surge capacity to respond to major animal health and public health disasters and disease outbreaks?

If we cannot answer this question, we do not know our nation’s core emergency management capabilities, including Prevention, Protection, Mitigation, Response, and Recovery.
What is meant by Surge Capacity?

“Surge” means the swift deployment and response of experienced experts and other specialized personnel. Surge capacity is used when there are unforeseen emergencies, disasters, or crisis.
What is meant by Public Health Surge Capacity?

The capacity to implement core public health activities such as mass prophylaxis and vaccination, risk communication and epidemiologic investigation, and other activities.
What is meant by Diagnostic Surge Capacity?

The capacity to implement core diagnostic laboratory services with access to additional resources, personnel, and materials needed for surge sample collection and laboratory sample testing.
If the US had a Major Animal Disease Outbreak or Public Health Event, Who would lead the effort?

**Major animal disease outbreak** –
- Nationally APHIS VS would be in charge
- State Animal Health Authorities would be in charge locally
- DHS would help coordinate

**Major zoonotic disease, public health event, or food defense issue** -
- Nationally DHHS would be in charge
- State Public Health Authorities would be in charge locally
- DHS would help coordinate
What is the state of the veterinary workforce surge capacity now?

Let’s look at the segments of the US veterinary workforce

- APHIS/Veterinary Services
- Department of Health and Human Services
- FEMA
- FSIS
- State Veterinary Response Teams
- Non-Government Veterinary Response Teams
- Veterinary Diagnostic Laboratories
- Canadian Veterinary Reserve (CVR) Example
The VS workforce has been reduced 11% since 2009 from about 1850 total employees to 1650.

31% of the VS workforce are veterinarians.

The VS VMO workforce has decreased by 8% from about 562 in 2009 to less than 520 in 2013.
**APHIS/Veterinary Services**

**Veterinary Workforce**

**Surge Capacity**

- The VS budget has been reduced by more than $53 million

- 64% of the VS VMO workforce is located in regional or field offices

- 6% of the VS VMO workforce are working in the laboratory and 14% in headquarters
APHIS/Veterinary Services
Veterinary Workforce
Surge Capacity

49% of the VS VMO’s are over 55 years of age

27% of the VS VMO’s are over the age of 60

10% of the VS VMO’s are over the age of 65

23% of the VMO’s are eligible to retire
APHIS/Veterinary Services
Veterinary Workforce
Surge Capacity

VS has had a retirement trend of 3-4% per year for the past 5 years with a total of 75 veterinarians retiring.

VS has also hired 76 veterinarians over the past 5 years.

Most were hired between 2009 and 2011 with less than 16 hired in 2012 and 2013 because of budget cuts.
APHIS/Veterinary Services
Veterinary Workforce
Surge Capacity

All of this means that APHIS/VS has fewer than 250 deployable veterinarians to immediately respond to a major animal health event and 4 Incident Command teams

APHIS/VS also has the National Animal Health Emergency Response Corps (NAHERC)
NAHERC assists the Federal and State response to domestic and international animal disease outbreaks, threats, or natural disasters
APHIS/Veterinary Services
Veterinary Workforce
Surge Capacity

NAHERC staff can be activated and supplement existing Federal and State employees for periods of three weeks for domestic deployments or 30 days for international deployments.

Deployments can be extended if necessary.

These positions are paid upon activation of the NAHERC and include overtime, lodging, per diem, and travel expenses.
APHIS/Veterinary Services
Veterinary Workforce
Surge Capacity

NAHERC has approximately 1000 veterinarians who have volunteered

There is an online training site created by the Center for Food Security and Public Health, located at Iowa State University in the College of Veterinary Medicine
DHHS
Veterinary Workforce
Surge Capacity

For responses to state and local public health emergencies, DHHS has the following volunteer opportunities for skilled Health professionals:

Emergency System for Advance Registration of Volunteer Health Professions
National Disaster Medical System (NDMS)
Medical Reserve Corps (MRC)
Citizen Corps
Commission Corps
Emergency System for Advance Registration of Volunteer Health Professions (ESAR-VHP)

*This* 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 ESAR-VHP program.

All states are required to have the ability to register and verify the credentials of veterinarians.
DHHS
Veterinary Workforce
Surge Capacity

National Disaster Medical System (NDMS)

NDMS assists state and local authorities in dealing with the medical impacts of major peacetime disasters primarily through coordination efforts
DHHS
Veterinary Workforce
Surge Capacity

*National Disaster Medical System is comprised of five response teams:*
Disaster Medical Assistant Team (DMAT)
Disaster Nurse Response Team (NNRT)
National Pharmacy Response Team (NPRT)
Disaster Mortuary Operational Response Teams (DMORT)
National Veterinary Response Team (NVRT)
National Veterinary Response Team (NVRT)
Each response team has a set number of authorized positions within their team.
Each team has required types of specialists needed to fill these vacant positions for their team.
Each response team position has pre-requisite training requirements that must be met before individuals can apply.
If accepted, individuals become intermittent part-time Federal employees upon deployment on a mission.
DHHS
Veterinary Workforce
Surge Capacity

National Veterinary Response Team (NVRT)
There are 200 members on 5 NVRT that are now being combined into 1 NVRT with 10 regions

Regional NVRT leaders engage with the State Veterinarians either directly or through the NVRT members in the respective states
Medical Reserve Corps (MRC)
The MRC is community-based and works to locally organize and utilize volunteers
MRC volunteers supplement existing emergency and public health resources
MRC volunteers include medical and public health professionals such as physicians, nurses, pharmacists, dentists, veterinarians, and epidemiologists
Medical Reserve Corps (MRC)
The Medical Reserve Corps units have about 2100 volunteer veterinarians
Citizen Corps

Citizen Corps includes everyone, not just health professionals, to embrace the personal responsibility to be prepared.

They receive training in first aid and emergency skills.

They support local emergency responders, disaster relief, and community safety efforts.
DHHS
Veterinary Workforce
Surge Capacity

U.S. Public Health Service Commissioned Corps Veterinarians
Commissioned Corps is a team of more than 6,000 full-time, well-trained, highly qualified public health professionals (100 veterinarians) dedicated to delivering the Nation's public health promotion and disease prevention programs and advancing public health science
DHHS
Veterinary Workforce
Surge Capacity

The USPHS Corps is composed entirely of officers who have been commissioned on the basis of their health-related training.

They are deployable similar to the military.
Federal Emergency Management Agency (FEMA)
Surge Assistance

FEMA is an agency of the United States Department of Homeland Security.

The agency's primary purpose is to coordinate the response to a disaster that has occurred in the United States and that overwhelms the resources of local and state authorities.

The governor of the state in which the disaster occurs must declare a state of emergency and formally request from the president that FEMA and the federal government respond to the disaster.
Federal Emergency Management Agency (FEMA)
Surge Assistance

National Response Framework Emergency Support Function (ESF) Annexes:

ESF #6 - Mass Care, Emergency Assistance, Temporary Housing and Human Services

ESF #8 - Public Health and Medical Services

ESF #11 - Agriculture and Natural Resources
Federal Emergency Management Agency (FEMA)
Surge Assistance

Response Core Capabilities:
Core capabilities are the distinct elements needed to achieve the National Preparedness Goal

There are 14 covered in the National Response Framework:

- Planning
- Public Information and Warning
- Operational Coordination
- Critical Transportation
- Environmental Response/Health and Safety
- Fatality Management Services
- Infrastructure Systems
- Mass Care Services
- Mass Search and Rescue Operations
- On-Scene Security and Protection
- Operational Communications
- Public and Private Services and Resources
- Public Health and Medical Services
U. S. Army Veterinary Corps
Surge Assistance

U. S. Army Veterinary Corps
Brings both veterinary clinical and public health capability 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.
U. S. Army Veterinary Corps
Surge Assistance

U. S. Army Veterinary Corps
The US Army has one Veterinary (VET) detachment on call with NORTHCOM

Their mission is to provide support in national emergencies

That would include a total 58 person detachment with eight veterinary corps officers
The Army might be able to provide one more of those detachments if they aren't engaged in multiple DoD supports such as Afghanistan and Iraq at the same time.

The Army’s fixed facility support veterinarians may also be available to support by including up to fifteen additional officers.

Support is dependent on the combination of multiple time and mission requirements of DOD.
USDA/FSIS reported that between 34 and 42 series 701 VMO’s retired each year during the past 5 years for a total of 184 individuals (70 in the last 2 years) out of 1000 total.

However, FSIS also hired 436 veterinarians in the past 5 years (but only 110 in the past 2 years because of budget cutbacks).

FSIS still has an 11% veterinarian vacancy rate (110 out of 1000).

Most FSIS veterinarians would not be deployable in an ESF 8 or ESF11 emergency.
SART - State Animal Response Teams
Interagency state organizations dedicated to preparing, planning, responding and recovering during animal emergencies in the United States

A public private partnership, joining government agencies with the private concerns around the common goal of animal issues during disasters

SART programs train participants to facilitate a safe, environmentally sound and efficient response to animal emergencies on the local, county, state and federal level

The teams are organized under the auspices of state and local emergency management utilizing the principles of the Incident Command System (ICS)
In addition to SARTs, there are many other types of organizations at the State level including:

CART- County Animal Response Team (# of veterinarians ?)
VMRC- Veterinary Medical Response Team (# of veterinarians ?)
VRT- Veterinary Response Team (# of veterinarians ?)
SAADRA- Southern Agriculture & Animal Disaster Response Alliance (# of veterinarians ?)
NASAAEP- National Alliance of State Animal and Agricultural Emergency Programs (# of veterinarians ?)

There are also others
Non-Government Veterinary Surge Assistance

The American Veterinary Medical Associations- Veterinary Medical Assistance Teams (VMAT) serve as first responders to ensure high-quality care of animals during disasters and emergencies.

There are 140 members in the VMAT that includes veterinarians, technicians, and others.
Non-Government Veterinary Surge Assistance

When requested by a state, VMATs provide operational assistance in emergency response programs to state animal health authorities, and organize and provide training preparedness programs to animal health authorities, veterinary medical associations, and other relevant organizations, including:

Early assessment of veterinary conditions and need

Primary field care to augment overwhelmed local capabilities

Emergency-related lectures and training for state veterinary associations, professionals and colleges, regarding emergency animal medical assistance
The purpose of the study was to forecast future supply and demand for private practice veterinarians; identify research gaps; and develop modeling capacity for private practice veterinarians.

The study reported that current state of private practice veterinary profession has an excess capacity estimated to be 12.5% in 2012 (equivalent to ~11,250 veterinarians) and will be 11-14% by 2025.
Veterinary Diagnostic Laboratory Surge Assistance

In preparation for a major animal health surge event, the National Animal Health Laboratory Network (NAHLN) laboratories are trained, proficiency tested, and follow standardized testing protocols for the following diseases:

- Avian Influenza (AI)
- Bovine Spongiform Encephalopathy (BSE)
- Chronic Wasting Disease (CWD)
- Classical Swine Fever (CSF)
- Exotic Newcastle Disease (END)
- Foot and Mouth Disease (FMD)
- Pseudorabies Virus (PRV)
- Scrapie
- Swine Influenza Virus (SIV)
- Vesicular Stomatitis Virus (VSV)
Veterinary Diagnostic Laboratory
Surge Assistance

Laboratory capacity was not available and depends on the disease outbreak
The Canadian Veterinary Reserve (CVR) is a national voluntary group of trained veterinarians that was created by the Canadian Veterinary Medical Association to provide supplemental veterinary resources (“surge capacity”) to the Canadian Food Inspection Agency (CFIA) in the event of a foreign animal disease outbreak in Canada that exceeds the veterinary response capacity of the CFIA.
The CVR is a pool of trained non-government veterinarians ready to assist first responders in large scale animal emergencies. In FAD outbreaks or civil emergencies, the urgent requirement for human resources can exceed what governments and government agencies can be realistically expected to provide.

The CVR offers an invaluable “surge capacity” to the people “on the ground” so that animal emergencies can be dealt with as quickly, effectively, and completely as possible.
Canadian Veterinary Reserve

Because the CVR provides a public good, the Canadian Food Inspection Agency (CFIA), which has a clear mandate for dealing with reportable FADs, provides the fiscal resources to fund the CVR.

Since 2006, 140 reservists have received initial training.

A compensation package has been developed so that reservists and their private practices neither suffer financially nor profit excessively while reservists are being trained or deployed.
Meeting Surge Capacity Needs within the US Veterinary Workforce

In Summary:
There are numerous veterinary response groups established to respond to animal health and public health disasters/events.

In several instances we have estimates of veterinary workforce capacity.

However, there is not a national assessment of the veterinary workforce surge capacity in the US.
Meeting Surge Capacity Needs within the US Veterinary Workforce

In Summary:
An national assessment is needed to determine if the veterinary workforce surge capacity is adequate

It is proposed that all veterinary and animal health groups and stakeholders join together to conduct such as assessment

This assessment information can be used to establish workforce needs and identify permanent funding gaps and resolve those gaps to maintain the workforce

A cost/benefit analysis could then be conducted to show the benefit of maintaining the veterinary workforce