



Veterinary Services

Veterinary Services Emerging Disease Framework

Dana Cole, Director
Risk Identification and Risk Assessment Unit

Lee Ann Thomas, Director
Avian, Swine, and Aquatic Animal Health Center

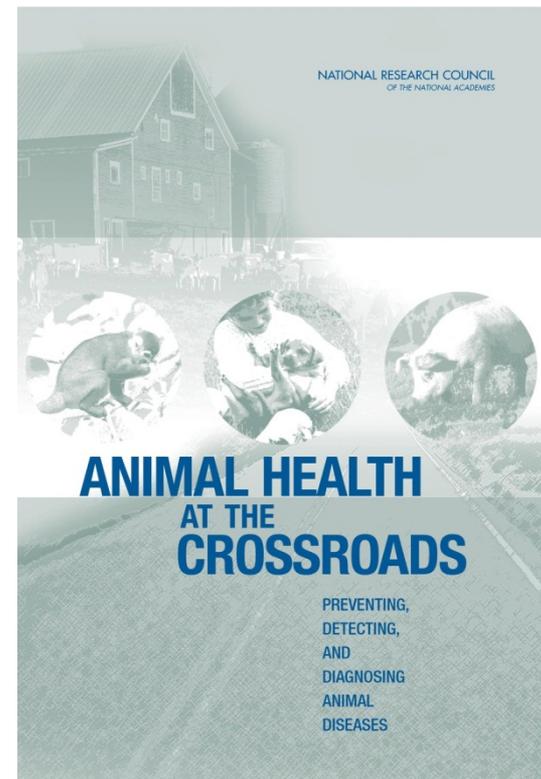


Veterinary

“Today animal health is at a crossroads. The risk of disease is coming from many directions, including the globalization of commerce, the restructuring and consolidation of global food and agriculture productions into larger commercial units, the interactions of humans and companion animals, human incursions into wildlife habitats, and the threat of bioterrorism.”

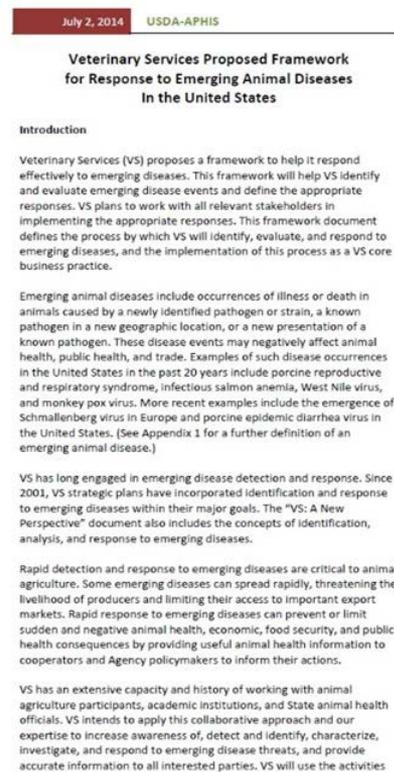
-- *Animal Health at the Crossroads*

The National Academy of Sciences, 2005



VS Framework for Response to Emerging Animal Diseases in U.S.

- Previous efforts:
 - Swine Futures Project; Emerging Animal Health Issues System & Action Plan; VS Strategic Plans
- Current Draft Framework:
 - Developed by VS Executive Team
 - Presented in June 2014 to NASAHO and AAVLD Laboratory Directors
 - Posted to the APHIS website for comments



Rapid detection and response to emerging diseases is a VS core business practice.

Emerging Animal Disease

- VS defines an emerging animal disease as:
 - Any animal disease or infection not known to exist in the United States, including a new strain of a known disease occurring in any animal species, including wildlife;
 - An emerging animal disease with zoonotic potential;
 - Unexpected and unexplained increase in morbidity or mortality of diseased animals; and
 - Evidence of a change in the epidemiology of a known animal disease such as increased pathogenicity, expanded host range, or clinical signs that do not fit the classical picture.

Rapid detection and response to emerging diseases is a core VS business practice.

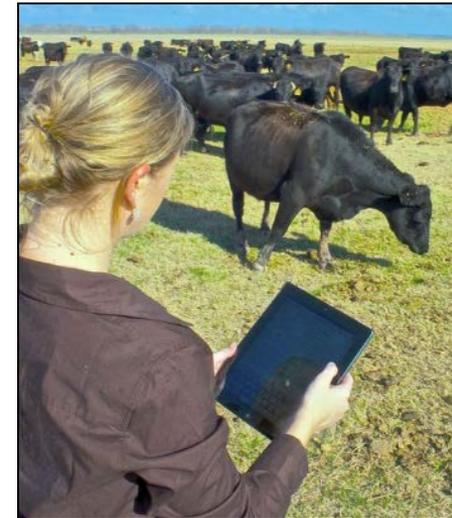
- **Goal 1**: Undertake global awareness, assessment and preparedness for animal diseases or pathogens not currently in the United States that may be of animal or public health concern or have trade implications.
- **Goal 2**: Detect, identify and characterize disease events.
- **Goal 3**: Communicate findings and inform stakeholders.
- **Goal 4**: Respond quickly to minimize the impact of disease events.

G1: Global Awareness, Assessment, and Preparedness

- VS will evaluate and monitor global emerging diseases and develop science-based options for response.
 - For VS, the Center for Epidemiology and Animal Health's (CEAH) Risk Identification Unit has been charged with identifying emerging diseases globally.

G2: Detect, Identify, and Characterize

- VS will employ a variety of surveillance systems to detect emerging diseases, including mandatory reporting.
 - Comprehensive Integrated Surveillance
 - National List of Reportable Animal Diseases (NLRAD)
- VS will collaborate with stakeholders to rapidly investigate and assess emerging diseases.



G2: Detect, Identify, and Characterize

Key Considerations for information sharing and response planning

- Trade impacts
- Food security impacts
- Public Health impacts
- Animal health impacts
- Production impacts
- Environmental impacts
- Geographic scope
- Politics
- Resource intensity
- Available expertise
- Diagnostic capabilities
- Authorities
- Potential for bioterrorism

G3: Communicate Findings and Inform Stakeholders

- While maintaining appropriate data security, VS will serve as the national repository for shared information on emerging disease events.
 - VS will publish analyses and reports that contain aggregated data.

G4: Respond to Minimize Impacts

- “Response” to emerging diseases does not always necessitate depopulation.
 - VS will undertake adaptive responsive measures that may range from information dissemination to full mobilization for rapid eradication.
- VS will lead the development and implementation of emerging disease response options, maintaining flexibility and transparency.

Questions for Discussion

Based on the definitions of emerging animal diseases, are there thresholds that should be established before a disease is considered to be an emerging disease? If so, what should these thresholds be?

(Item from the February 18, 2016 USAHA New Alert Summaries) **Vesicular Stomatitis: An Emerging Equine Disease**

- If you own horses in Colorado, you're probably familiar with VS. Elsewhere, you might get to know it soon enough.



Questions for Discussion

In addition to the 13 criteria outlined, what additional criteria for response should be considered?



Questions for Discussion

What criteria (or combinations of criteria) should VS focus on when determining response activities typically used in control or eradication programs (e.g., movement restrictions, vaccination activities, depopulation)



Questions for Discussion

What evidence should VS consider to determine when (or if) an emerging animal disease is endemic?

QUESTIONS?

