

Foreign Animal Disease (FAD) Response Introduction to FAD Preparedness and Response Plan

The Imperative for Foreign Animal Disease Preparedness and Response (FAD PRoP)

Why Prepare?

An FAD outbreak in the United States will have many consequences. Animal health, and animal agriculture will be threatened; an FAD outbreak may impact the security, cost, and safety of our Nation's food supply. Preparing for and responding to FADs—such as highly pathogenic avian influenza (HPAI), classical swine fever (CSF), Newcastle disease (ND), and foot-and-mouth disease (FMD)—are critical actions to safeguard animal health, public health, the environment, and the nation's economy. Additionally, the social and psychological impact on producers, owners, and consumers can be significant.

FAD PRoP is the comprehensive U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services preparedness and response strategy for FAD threats.
www.aphis.usda.gov/fadprep

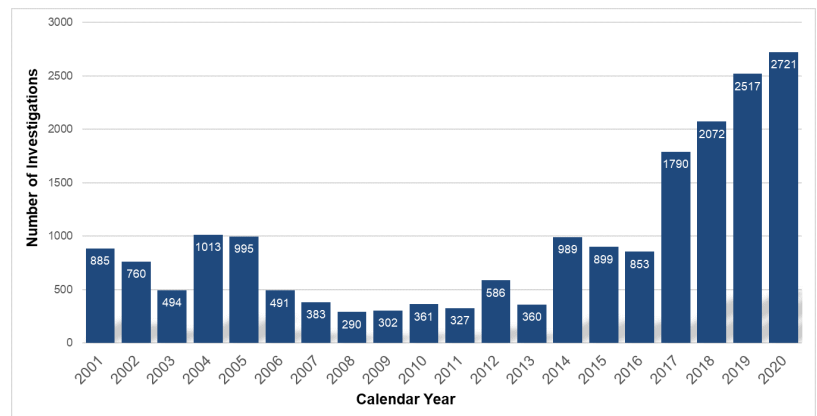
Historic and Potential Future Consequences of an FAD Outbreak

The 2001 FMD outbreak in the United Kingdom had an estimated impact between \$12–18 billion.¹ The United States has been free of FMD since 1929, but studies have estimated an incursion of FMD would result in detrimental economic losses; one study reached as high as \$228 billion.² The impact would come from lost international trade and disrupted interstate trade, as well as from costs directly associated with the eradication effort, such as depopulation, indemnity, carcass disposal, and cleaning and disinfection. In addition, there would be direct and indirect costs related to foregone production, unemployment, and losses in related businesses.

Between 2014 and 2015, the United States experienced its largest FAD outbreak, HPAI. Estimates suggest the outbreak had a \$3.3 billion impact on the U.S. economy, with \$1.6 billion in direct losses from depopulated poultry flocks.³ In part, this was a consequence of partial or full trade embargoes from over 30 countries; there was a reported decline in poultry and egg exports of 14 percent from January to June 2015. With these restrictions, egg prices were the highest observed in over 30 years (adjusted for inflation).

FAD Investigations from 2001–2020

In the past 20 years, there have been over 13,000 possible FAD or emerging disease incidents investigated by APHIS Veterinary Services and State collaborators throughout the United States. In most years, only a small percentage of those were confirmed by the investigation to be an emerging disease or FAD, but as noted above, the introduction of a single contagious FAD can result in serious consequences. It is imperative we continue to remain vigilant to protect the health and safety of U.S. agriculture.



¹ Thompson, D., Muriel, P., Russell, D., Osborne, P., et al. (2002). Economic costs of the foot and mouth disease outbreak in the United Kingdom in 2001. *Revue scientifique et technique-Office international des epizooties*, 21(3), 675-687; Grubman, M.J., & Baxt, B. (2004). Foot-and-mouth disease. *Clinical Microbiology Reviews*, 17(2), 465-493. DOI: 10.1128/CMR.17.2.465-493.2004; USDA FAS. (2007). U.K. foot-and-mouth disease – recovery timetable, the economic impact and who pays? *Global Agriculture Information Network, UK7020*. Retrieved from <https://apps.fas.usda.gov/gainfiles/200708/146292150.pdf>.

² Oladosu, G., Rose, A., & Lee, B. (2013). Economic impacts of potential foot and mouth disease agroterrorism in the USA: a general equilibrium analysis. *Journal of Bioterrorism & Biodefense*, S12:001. DOI:10.4172/2157-2526.S12-001.

³ Greene, J.L. (2015, July). Update on the highly-pathogenic avian influenza outbreak of 2014-2015. *Congressional Research Service*, R44114. Retrieved from <https://www.fas.org/sgp/crs/misc/R44114.pdf>.

The Goals and Mission of FAD PReP

In the event of an FAD outbreak in the United States, the three response goals are to

1. *detect, control, and contain the disease in animals as quickly as possible;*
2. *eradicate the disease using strategies that seek to protect public health and the environment, and stabilize animal agriculture, the food supply, and the economy; and*
3. *provide science- and risk-based approaches and systems to facilitate continuity of business for non-infected animals and non-contaminated animal products.*



Achieving these three goals will allow individual livestock facilities, States, Tribes, regions, and industries to resume normal production as rapidly as possible. The objective is to allow the United States to regain disease-free status without the response effort causing more disruption and damage than the disease outbreak itself.

FAD PReP Documents and Materials

FAD PReP is not just one, standalone FAD plan. It provides collaborations, products, and services for preparing for and responding to animal health emergencies.

The following categories provide an overview of the different types of FAD PReP documents and materials available—all found online at www.aphis.usda/fadprep:

- Disease Response Plans & Strategies
- Disease Response Policies
- Strategic Plans/Manuals (Concept of Operations)
- National Animal Health Emergency Management System (NAHEMS) guidelines
- Industry Manuals
- Critical Activity Standard Operating Procedures
- Ready Reference Guides
- APHIS and VS Emergency Management
- and much more!

Challenges & Lessons Learned

Challenges of Responding to an FAD

Responding to an FAD event—large or small—may be complex and difficult, challenging all stakeholders involved. A response effort must have the capability to be rapidly scaled to the incident. This may involve many resources, personnel, and countermeasures.

Establishing commonly accepted and understood response goals and guidelines, as accomplished by the FAD PReP materials, will help to broaden awareness of accepted objectives as well as potential problems.

Lessons Learned from Past FAD Outbreaks

In order to achieve successful outcomes in future FAD response efforts, it is important to identify, understand, and apply lessons learned. FAD PReP uses these lessons as a foundation for developing documents and materials:

- Provides unified State-Federal-Tribal-industry planning that respects local knowledge.
- Ensures there are clearly defined, obtainable, and unified goals for response.
- Employs science-based and risk-management approaches that protect public health, animal health, the environment, the food supply, and the U.S. economy.
- Ensures guidelines, strategies, and procedures are communicated and understood by responders and stakeholders.
- Resolves competing interests prior to an outbreak and addresses them quickly during an outbreak.
- Ensures there is the capability for rapid detection and effective FAD tracing.
- Acknowledges that high expectations for successful outcomes may require the rapid scale-up of resources during an event.

Questions, Comments, Concerns?

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