

# INTRODUCING FAD PReP

## THE PUBLIC, PRIVATE, ACADEMIC PARTNERSHIP

# FAD PReP

Foreign Animal Disease  
Preparedness & Response Plan

National Center for Animal  
Health Emergency Management



UNIVERSITY OF MINNESOTA

CENTER FOR ANIMAL HEALTH  
AND FOOD SAFETY



United States Department of Agriculture • Animal and Plant Health Inspection Service • Veterinary Services

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# The Imperative for Foreign Animal Disease Preparedness and Response

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## FOREIGN ANIMAL DISEASES MATTER

Preparing for and responding to foreign animal diseases (FADs), like highly pathogenic avian influenza (HPAI) and foot-and-mouth disease (FMD), are critical measures to safeguard our nation's animal health, public health, and food supply.

There are significant potential consequences of an FAD outbreak in the United States. For example, the 2001 FMD outbreak in the United Kingdom cost an estimated £8 billion (\$13 billion) and reduced the British gross domestic product by 0.2 percent. Studies have projected a likely cost of between \$6 billion and \$14 billion for a U.S. outbreak contained to California. In addition to the economic impact, the social and psychological impact on both producers and consumers would be severe.



## CHALLENGES OF RESPONDING TO AN FAD EVENT

An FAD outbreak in the United States may result in emergency regulatory intervention by Federal, State, and Tribal authorities. The intervention will depend on the disease agent, circumstances of the outbreak, and consequences of the outbreak. In responding to FAD emergencies, responders and stakeholders go through a life cycle of “forming, storming, norming, and performing.” Frequently, FAD outbreak response involves large, diverse, and geographically dispersed teams that are assembled quickly and expected to react rapidly.

However, depending upon the situation, not all responders and stakeholders will have the information and specific knowledge required for a successful FAD response. Some response activities and countermeasures are complex, and require significant planning and preparation prior to an event. Moreover, if an FAD outbreak becomes large or widespread, the response

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must be swiftly scaled up, involving many times more resources, personnel, and countermeasures. These challenges are significant, and make responding to an FAD—large or small—a very complex and difficult effort.

## LESSONS LEARNED FROM PAST FAD OUTBREAKS

Despite the difficulties in responding to an FAD outbreak, past events both in the United States and other countries have allowed us to learn important lessons that can be applied to preparedness and response efforts. To achieve successful outcomes in future FAD outbreaks, it is vital to identify, understand, and apply these lessons learned:

- ◆ Provide a unified State-Federal-Tribal-industry planning process that respects local knowledge.
- ◆ Ensure the unified command sets clearly defined and obtainable goals.
- ◆ Have a unified command that acts with speed and certainty to achieve united goals.
- ◆ Employ science-based and risk-management approaches that protect public health and animal health, stabilize animal agriculture, the food supply, and the economy.
- ◆ Ensure guidelines, strategies, and procedures are communicated and understood by responders and stakeholders.
- ◆ Acknowledge that high expectations for timely and successful outcomes (and high consequences for failure) requires the:
  - rapid scale-up of resources and trained personnel for veterinary activities and countermeasures, and
  - capability to quickly address competing interests before or during an outbreak.
- ◆ Execute FAD tracing, which is essential for the efficient and timely control of FAD outbreaks.

## FAD PREP MISSION AND GOALS

The significant threat and potential consequences of FADs, and the challenges and lessons-learned of effective and rapid FAD response, have led to the development of the Foreign Animal Disease Preparedness & Response Plan, also known as “FAD PREP.” The mission of FAD PREP is to raise awareness, expectations, and develop capabilities surrounding FAD preparedness and response. The goal of FAD PREP is to integrate, synchronize, and de-conflict preparedness and response capabilities as much as possible before an outbreak, by providing goals, guidelines, strategies, and procedures that are clear, comprehensive, easily readable, easily updated, and that comply with the National Incident Management System.

In the event of an FAD outbreak, the three key goals of FAD PREP are to: *(1) detect, control,*

and contain the FAD in animals as quickly as possible, (2) eradicate the FAD using strategies that seek to 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.

## FAD PREP DOCUMENTS AND MATERIALS

FAD PREP is not just one, stand alone FAD plan. Instead, it is a comprehensive U.S. preparedness and response strategy for FAD threats. This strategy is provided and explained in a series of different types of integrated documents, as listed and illustrated below.

### *FAD PREP Suite of Documents and Materials*



Note: NAHEMS = National Animal Health Emergency Management System, SOP = standard operating procedures.

### ◆ **Strategic Plans—Concept of Operations Documents**

- *Animal and Plant Health Inspection Service (APHIS) Framework for Foreign Animal Disease Preparedness and Response:* This document provides an overall concept of operations for FAD preparedness and response for APHIS, explaining the framework of existing approaches, systems, and relationships.
- *National Center for Animal Health Emergency Management (NCAHEM) Stakeholder Coordination and Collaboration Plan:* This plan describes NCAHEM strategy for enhancing stakeholder collaboration and identifies key stakeholders.
- *NCAHEM Incident Coordination Group Plan:* This document explains how APHIS headquarters will organize in the event of an animal health emergency.

### ◆ **Continuity of Business Plans (Developed by public-private-academic partnerships)**

- *Secure Egg Supply Plan:* The SES Plan uses proactive risk assessments, surveillance, biosecurity, and other requirements to facilitate the market continuity and movement of eggs and egg products during an HPAI outbreak.

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- *Secure Milk Supply Plan*: Currently under development, this plan will help facilitate market continuity for milk and milk products during an FMD outbreak.

- ◆ **FAD PReP/NAHEMS Guidelines and Industry Manuals**

- *NAHEMS Guidelines*: These guidelines describe many of the critical activities, and can be considered as a competent veterinary authority for responders, planners, and policy-makers.
- *Industry Manuals*: These documents describe the complexity of industry to emergency planners and responders and provide industry a window into emergency response.

- ◆ **Disease-Specific Response Plans**

- Response plans are intended to provide disease-specific information about response strategies. These documents offer guidance to all stakeholders on capabilities and critical activities that would be required to respond to an FAD outbreak.

- ◆ **FAD PReP Standard Operating Procedures (SOPs)**

- For planners and responders, these SOPs provide details for conducting 23 critical activities such as disposal, depopulation, cleaning and disinfection, and biosecurity that are essential to effective preparedness and response to an FAD outbreak. These SOPs provide operational details that are not discussed in depth in strategic documents or disease-specific response plans.

For individuals who do not have access to the APHIS intranet, these documents are available on the external FAD PReP website: <https://fadprep.lmi.org>. New users will need to follow the link—“Need access? Click [here](#) to submit your request?”—to establish a user name and password. For individuals who have access to the APHIS intranet, these documents are available on the internal APHIS FAD PReP website: <http://inside.aphis.usda.gov/vs/em/fadprep.shtml>.

## WHAT'S NEW IN FAD PReP?

Many new FAD PReP documents were released in 2010, including the *FMD Response Plan: The Red Book* (November 2010), and numerous NAHEMS Guidelines and SOPs. However, one of the most important new additions to the FAD PReP suite of materials is a continuity of business plan that will mitigate the impacts of an HPAI outbreak: *The SES Plan* (2010). This continuity of business plan is featured on the next page.

## The Secure Egg Supply Plan (SES Plan) (2010)

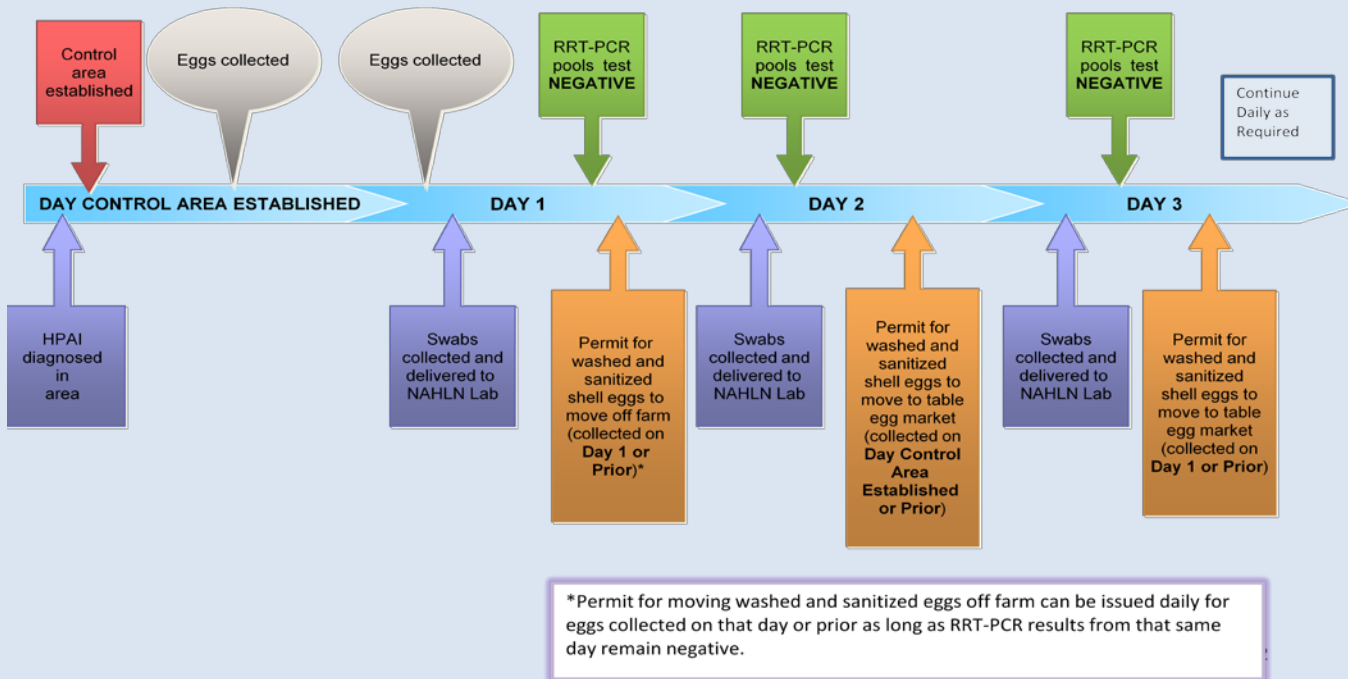
A landmark document for continuity of market planning, the SES Plan was a collaborative effort between academic centers, industry, and APHIS.

Egg production facilities frequently do not have the capacity to store eggs or egg products for any substantial period of time, so even a very brief interruption in movement can result in serious egg shortages.

The SES Plan, consisting of the 1) Egg Movement Control Plan (EMC), and 2) the voluntary Federal and State Transport (FAST) Eggs Plan, provides guidelines and requirements for egg movement in an outbreak of HPAI. Agreed on by egg producers, processors, poultry disease experts, public health experts, as well as federal and state officials, the SES plan confronts the challenge of continuing egg movement during an outbreak.

Using proactive risk assessments, biosecurity requirements, diagnostic testing, cleaning and disinfection procedures, and other requirements, the SES Plan provides a transparent process for the movement of eggs and egg products, benefiting consumers, producers, and regulators. The science- and risk-based recommendations provide a high degree of certainty that the health of uninfected flocks will not be endangered, and that HPAI virus will not exist in eggs or egg products destined for human consumption.

For example, the following figure depicts the movement of washed and sanitized shell eggs to market.



Note: NAHLN = National Animal Health Laboratory Network, RRT-PCR = real-time reverse transcriptase polymerase chain reaction.

For more information on this document, please go to [www.secureeggssupply.com](http://www.secureeggssupply.com), or <https://fadprep.lmi.org> (a username and password can be requested).

# KEY CONTRIBUTORS TO FAD PREP

- ◆ APHIS, Veterinary Services
- ◆ Center for Food Security and Public Health (CFSPH), Iowa State University
- ◆ Center for Animal Health and Food Safety (CAHFS), University of Minnesota
- ◆ Cornell University, College for Veterinary Medicine
- ◆ National Center for Foreign Animal and Zoonotic Disease Defense (FAZD), Texas A&M University
- ◆ University of California, Davis, Department of Veterinary Medicine and Epidemiology
- ◆ LMI Government Consulting
- ◆ Egg Sector Working Group (Secure Egg Supply)
- ◆ Secure Milk Supply Working Group

*FAD PReP Stakeholders*

