



United States Department of Agriculture

# Foreign Animal Disease Preparedness and Response Plan

## FAD PReP

National Preparedness and Incident Coordination

Veterinary Services

Animal and Plant Health Inspection Service

U.S. Department of Agriculture



# Why Foreign Animal Diseases Matter

Preparedness and response planning for foreign animal disease (FAD) incidents is crucial to protect public health, animal health, animal agriculture, the environment, the food supply, and the economy.



# Examples of FADs (Transboundary Diseases)

- highly pathogenic avian influenza
- foot-and-mouth disease
- Newcastle disease
- classical swine fever
- African swine fever



# Challenges of an FAD Response

- Significant disruptions to interstate commerce and international trade can occur.
- Response activities are complex and require significant planning and preparation before an event.
- Outbreaks are rapidly changing and can become large or widespread.



# Lessons Learned

In order to effectively control, contain, and eradicate an FAD, we must:

- Provide processes for emergency planning that respect local knowledge.
- Integrate State-Federal-Tribal-industry planning processes.
- Ensure that there are clearly defined, obtainable, and unified goals for response.
- Have a Unified Command with a proper delegation of authority that is able to act with speed and certainty.

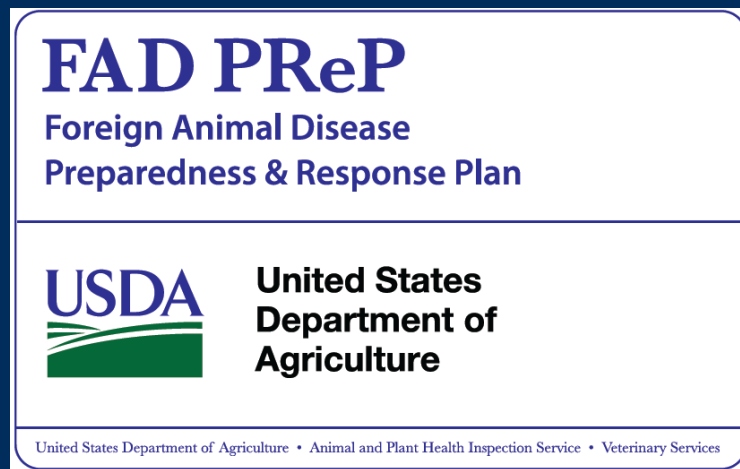
# Lessons Learned

(continued)

- Employ science- and risk-based management approaches to an FAD response.
- Ensure that all guidelines, strategies, and procedures are communicated effectively to responders and stakeholders.
- Identify resources and trained personnel required for an effective incident response.
- Try to resolve competing interests prior to an outbreak and addressing them quickly during an outbreak.
- Achieve rapid FAD detection and tracing.

# What is FAD PReP?

- A public-private-academic partnership.
- Provides collaborations, products, and services for preparing for and responding to animal health emergencies.
- The FAD PReP mission is...
  - to raise awareness, define expectations, and
  - improve capabilities for FAD preparedness and response.



# Preparedness Goals



- Define stakeholder expectations for successful and timely outcomes.
- Identify resources and personnel for potential large-scale outbreaks.
- Identify and resolve issues that may become competing interests during an outbreak.
- Provide a systems approach to preparedness issues that need additional time, attention, and collaboration.



# Response Goals

Detect, control, and contain FAD outbreaks as quickly as possible.



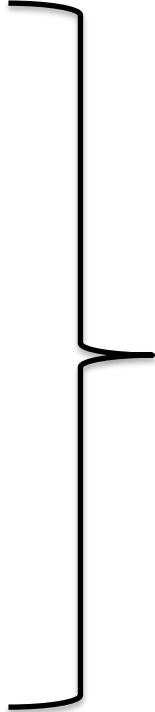
Eradicate the FAD using strategies that stabilize animal agriculture, the food supply, the economy, and protect public health and the environment.



Provide science- and risk-based approaches and systems to facilitate continuity of business for non-infected animals and non-contaminated animal products.



# Achieving Response Goals

- 
- Achieving these goals will allow individual livestock and poultry facilities, States, Tribes, regions, and industries to resume normal production as quickly as possible.
  - They will also allow the United States to regain FAD-free status without the response effort causing more disruption and damage than the disease outbreak itself.

# Examples of FAD PReP

## Collaborations, Products, and Services

- FAD PReP materials
- Secure Food Supply Plans
  - Secure Poultry    — Secure Milk Supply
  - Secure Pork        — Secure Beef Supply
  - Secure Sheep  
and Wool
- California Department of Food and Agriculture (CDFA) California Animal Health Emergency Management System (CAHEMS) Tool Kit
- Incident Coordination and Exercise Support



# FAD PReP Materials

- Provides a source for critical FAD planning, response, and analytical documents.
- Provides emergency management information and animal disease information for planners and responders.
- All documents available on the APHIS public website:  
[www.aphis.usda.gov/fadprep](http://www.aphis.usda.gov/fadprep)

**Strategic Plans—  
Concept of Operations**

**NAHEMS  
Guidelines**

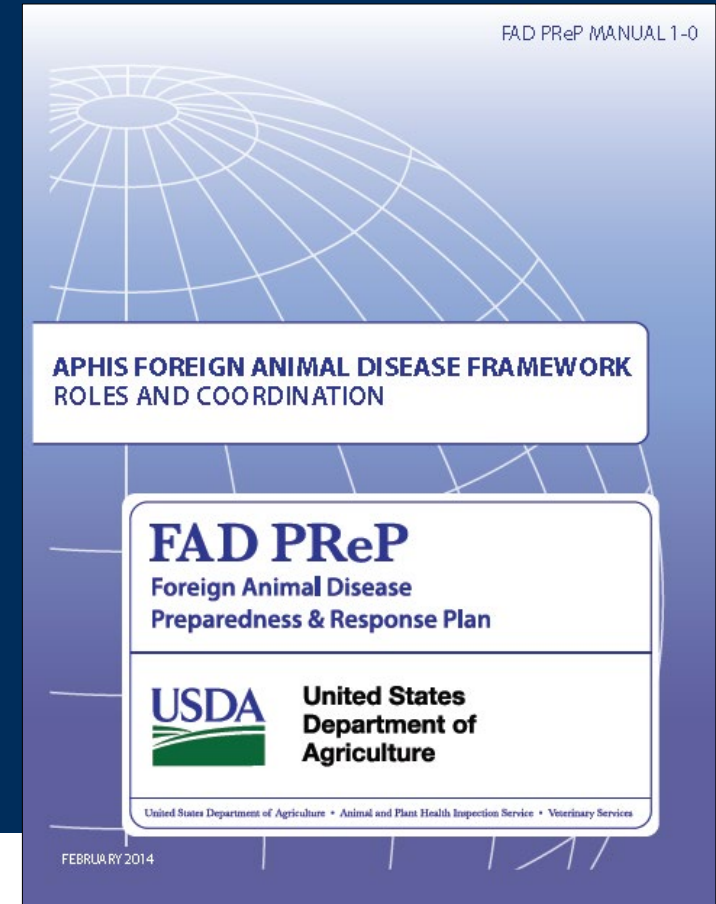
**Industry  
Manuals**

**Disease  
Response Plans**

**Critical  
Activity SOPs**

# Strategic Plans—Concept of Operations

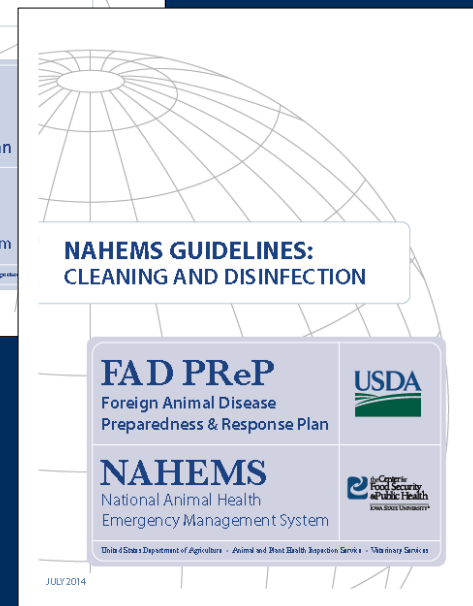
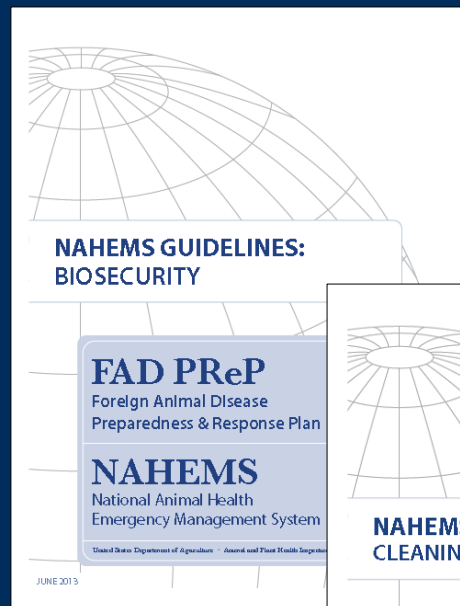
The strategic plans provide an overall concept of operations for FAD preparedness and response. They explain the framework of approaches and systems, identify key stakeholders, and explain how APHIS will prepare and respond to an animal health emergency.



**Strategic Plans—  
Concept of Operations**

# NAHEMS Guidelines

NAHEMS Guidelines cover important preparedness and response activities. They provide critical information for stakeholders to prepare for an animal health emergency.



Strategic Plans—  
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NAHEMS  
Guidelines

# Industry Manuals

Industry manuals describe the complexity of animal industry for responders and provide industry information about emergency animal health emergency preparedness and response to producers.



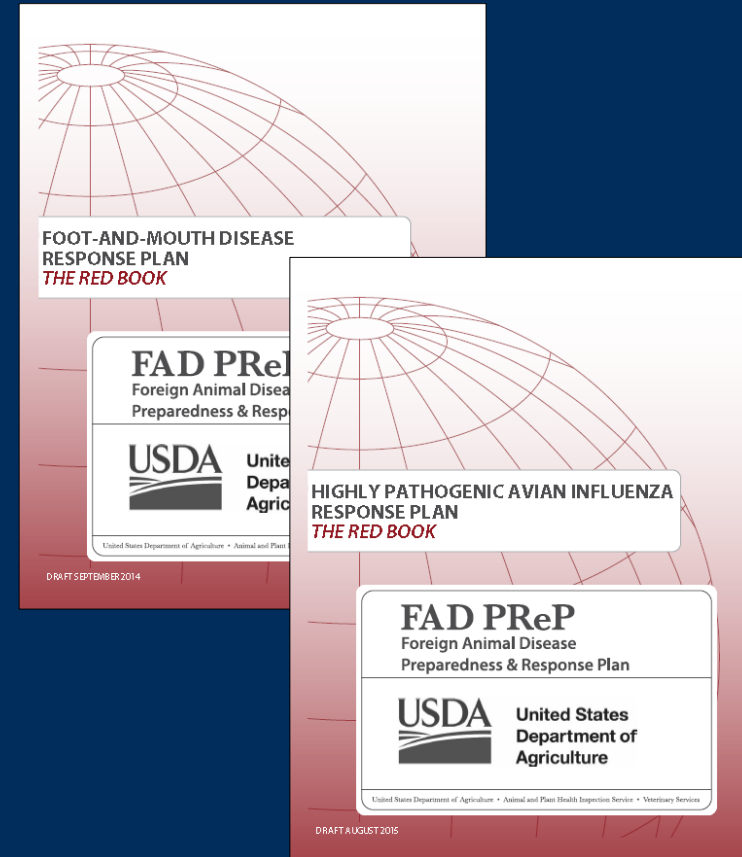
Strategic Plans—  
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# Response Plans

Response plans provide disease-specific information and response strategies. They offer guidance to all stakeholders on capabilities and critical activities that are required to respond to an FAD outbreak.



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# Standard Operating Procedures Critical Activities

SOPs provide details for conducting critical activities, such as communication and biosecurity, that are essential to effective preparedness and response to an FAD outbreak. SOPs provide operational details that are not discussed in depth in strategy documents or disease-specific response plans.



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# Critical Activities for FAD Preparedness and Response

- Etiology and Ecology of Specific FAD Agents
- Case Definition Development Process
- Surveillance
- Diagnostics (Sample Collection, Surge Capacity, and Reporting)
- Epidemiological Investigation and Tracing
- Information Management
- Communications
- Health and Safety and PPE
- Biosecurity
- Quarantine and Movement Control
- Continuity of Business
- Overview of Regionalization for International Trade
- Mass Depopulation and Euthanasia
- Disposal
- Cleaning and Disinfection
- Vaccination
- Logistics
- Wildlife Management and Vector Control
- Animal Welfare
- Modeling and Assessment Tools
- Appraisal and Compensation
- Finance
- Incident Management



<http://www.securepork.org>



<http://www.securepoultry.org>



<http://www.securebeef.org>



<http://securemilksupply.org>

# Additional Resources

- Ready Reference Guides
- Training materials
- Manual 5-0 – List of Stakeholders

To better understand the scope of the 2014–2015 HPAI outbreak, the next section of maps and data provide information on poultry populations and egg production in the United States. These numbers help to provide perspective on the potential consequences of an HPAI outbreak.

## Turkey Production

Turkeys: Number Raised by State  
Million Head, 2014

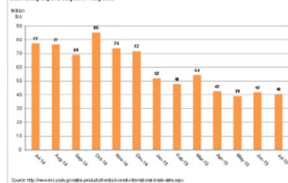


U.S. Total: 237.3 Million Head  
207 Million Head, 87.2% of U.S. Total  
All Other Production States

USDA/ARS  
KCS0115



U.S. Turkey Exports July 2014 – July 2015



Source: U.S. Department of Agriculture, National Animal Health Laboratory

## Impact of HPAI in 2014–2015

Turkey production was heavily impacted by HPAI. The HPAI outbreak impacted the domestic turkey industry, primarily in Minnesota, the largest producing State. In June 2015, turkey exports were down 40 percent when compared to June of the previous year. This number is due to both trade restrictions (e.g., those put in place by Mexico, the United States' largest market) and decreased production. Lower production raised prices, but this was partially offset by declines in exports. For exporters expect to see a decrease of six percent by the time 2015 is over when compared to the same period of time in 2014.

Text: USDA ERS—Livestock, Dairy, and Poultry Outlook, August 18, 2015

Graph: USDA ERS—Livestock, Dairy, and Poultry Outlook, September 17, 2015

Incubation Period (Days)	Frequency of Sampling (Days between samplings)	
	Minimum (Days)	Maximum (Days)
1 to 2 Days	1	1
3 to 4 Days	2	2
5 to 7 Days	4	4
8 to 14 Days	7	7
> 14 Days	10	10

## Surveillance Objectives by Time Period

There are three key segments of surveillance activity: local, national, and international.

1. The initial 72 hours post-outbreak (PO) surveillance. The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

2. The surveillance period (from 72 hours to 14 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

3. The surveillance period (from 14 days to 28 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

4. The surveillance period (from 28 days to 42 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

5. The surveillance period (from 42 days to 56 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

6. The surveillance period (from 56 days to 70 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

7. The surveillance period (from 70 days to 84 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

8. The surveillance period (from 84 days to 98 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

9. The surveillance period (from 98 days to 112 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

10. The surveillance period (from 112 days to 126 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

11. The surveillance period (from 126 days to 140 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

12. The surveillance period (from 140 days to 154 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

13. The surveillance period (from 154 days to 168 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

14. The surveillance period (from 168 days to 182 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

15. The surveillance period (from 182 days to 196 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

16. The surveillance period (from 196 days to 210 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

17. The surveillance period (from 210 days to 224 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

18. The surveillance period (from 224 days to 238 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

19. The surveillance period (from 238 days to 252 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

20. The surveillance period (from 252 days to 266 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

21. The surveillance period (from 266 days to 280 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

22. The surveillance period (from 280 days to 294 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

23. The surveillance period (from 294 days to 308 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

24. The surveillance period (from 308 days to 322 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.

25. The surveillance period (from 322 days to 336 days post-outbreak). The objective is to detect and contain the outbreak as quickly as possible. Incubation period is the key factor in this period.



## A PARTIAL LISTING OF FAD STAKEHOLDERS

## FAD PrEP Foreign Animal Disease Preparedness & Response Plan





United States Department of Agriculture



**Want more Information on FAD PReP?  
Start by visiting:**

**[www.aphis.usda.gov/fadprep](http://www.aphis.usda.gov/fadprep)**

