



# Avian Influenza USDA APHIS Preparedness and Response



- Jon Zack, DVM
- PIC Director
- USDA APHIS VS
- EMD NCAHEM
- NIEHS-APHIS Conference
- September 17, 2007

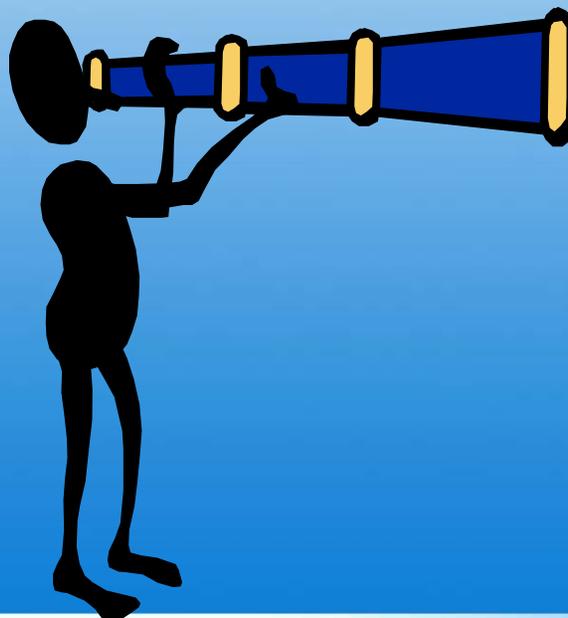


# Topics in this Presentation

- USDA APHIS Emergency Response
- USDA APHIS - Avian Influenza Background
- USDA APHIS - AI Safeguarding Efforts
- USDA APHIS – AI Surveillance



# USDA APHIS Emergency Response



SECRETARY

Deputy Secretary

Chief Information Officer

Chief Financial Officer

Inspector General

Executive Operations

Director of Communications

General Counsel

Under Secretary for Natural Resources and Environment

- Forest Service
- Natural Resources Conservation Service

Under Secretary for Farm and Foreign Agricultural Services

- Farm Service Agency
- Foreign Agricultural Service
- Risk Management Agency

Under Secretary for Rural Development

- Rural Utilities Service
- Rural Housing Service
- Rural Business Cooperative Service

Under Secretary for Food, Nutrition, and Consumer Services

- Food and Nutrition Service
- Center for Nutrition Policy and Promotion

Under Secretary for Food Safety

- Food Safety and Inspection Service

Under Secretary for Research, Education, and Economics

- Agricultural Research Service
- Cooperative State Research, Education, and Extension Service
- Economic Research Service
- National Agricultural Library
- National Agricultural Statistics Service

Under Secretary for Marketing and Regulatory Programs

- Agricultural Marketing Service
- Animal and Plant Health Inspection Service
- Grain Inspection, Packers and Stockyards Administration

Assistant Secretary for Congressional Relations

Assistant Secretary for Administration

Assistant Secretary for Civil Rights



# USDA

- USDA provides leadership on food, agriculture, natural resources, and related issues based on sound public policy, the best available science, and efficient management.
- USDA wants to be recognized as a dynamic organization that is able to efficiently provide the integrated program delivery needed to lead a rapidly evolving food and agriculture system.
- Nearly 30 agencies and offices.
- A USDA presence in each county nationwide.
- A network of Emergency Response Agencies and personnel with APHIS as a Primary Responder

# APHIS Administrator

Civil Rights Enforcement  
& Compliance Staff

Office of Emergency  
Management  
& Homeland Security

Animal Care

Biotechnology Regulatory Services

International Services

Plant Protection & Quarantine

Veterinary Services

Wildlife Services

Legislative and Public Affairs

MRP Business Services

Policy and Program Development

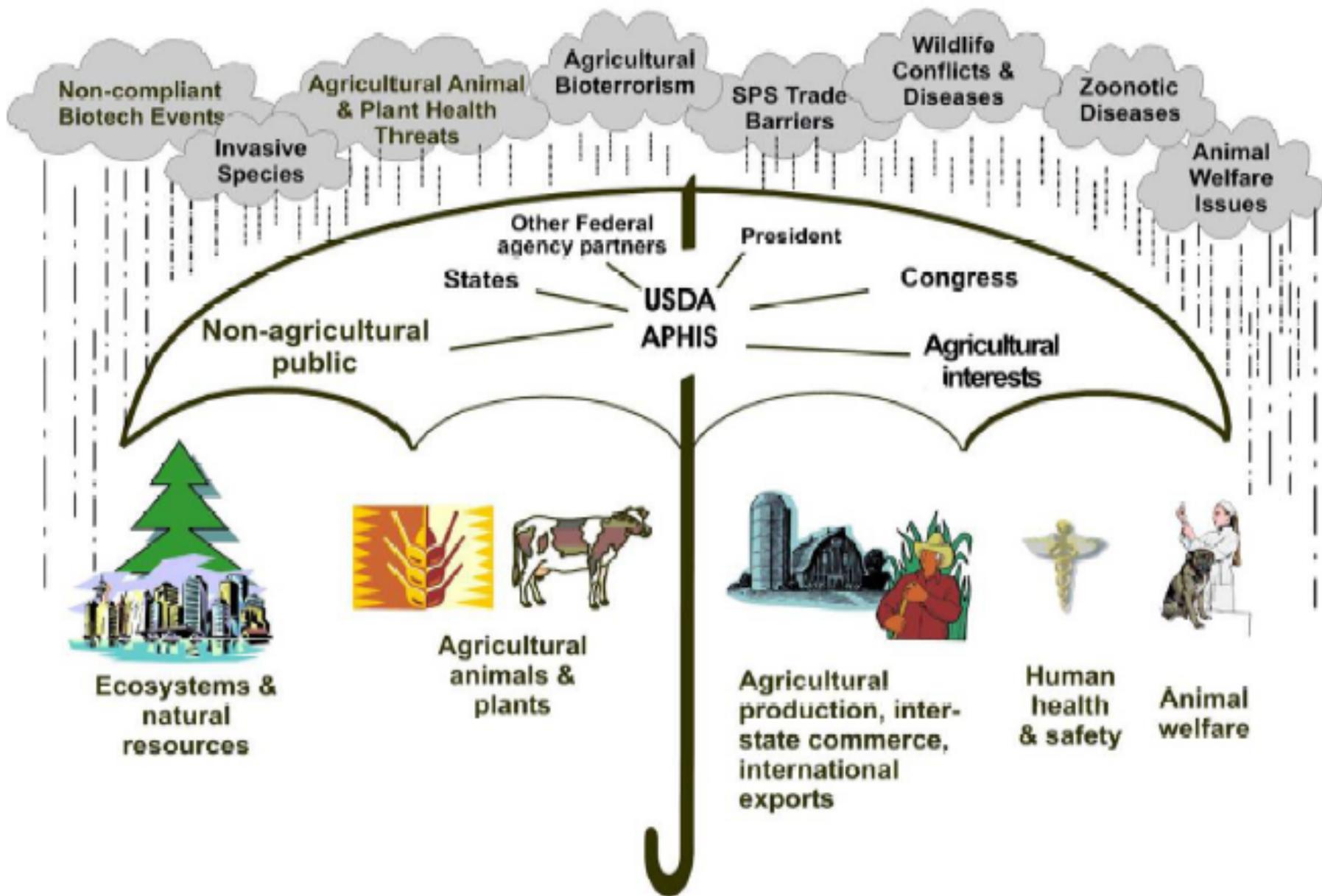


# APHIS

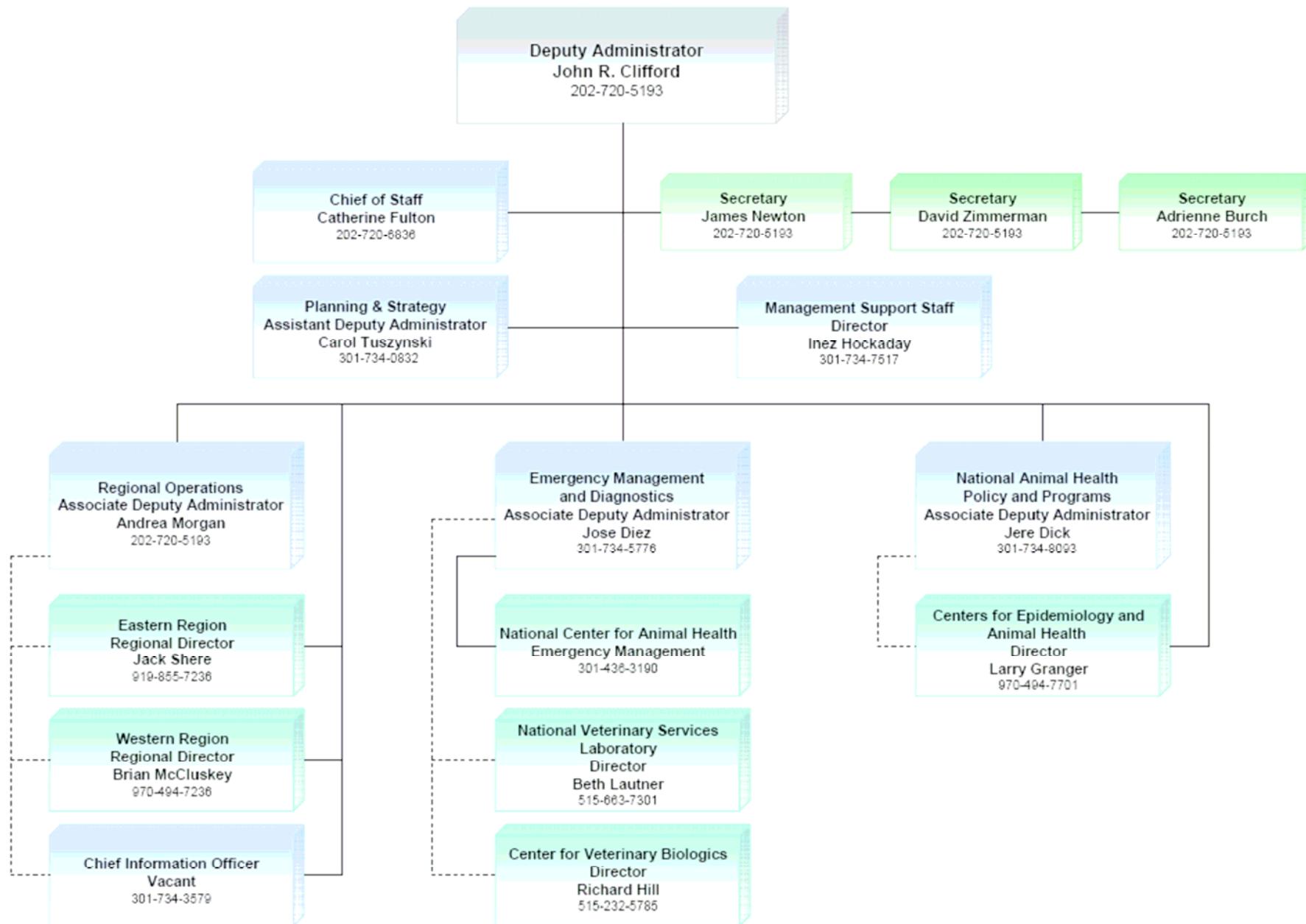
- APHIS Mission: To protect the health and value of American agriculture and natural resources.
- APHIS is on the job 24 hours a day, 7 days a week working to defend America's animal and plant resources from agricultural pests and diseases.
- In the event that a pest or disease of concern is detected, APHIS implements emergency protocols and partners with affected States to quickly manage or eradicate the outbreak. This aggressive approach has enabled APHIS to successfully prevent and respond to potential pest and disease threats to U.S. agriculture.

# APHIS' Mission:

To protect the health and value of American agriculture and natural resources



# Veterinary Services





# An Animal Health Emergency Can Come in Many Forms

Foreign Animal Disease

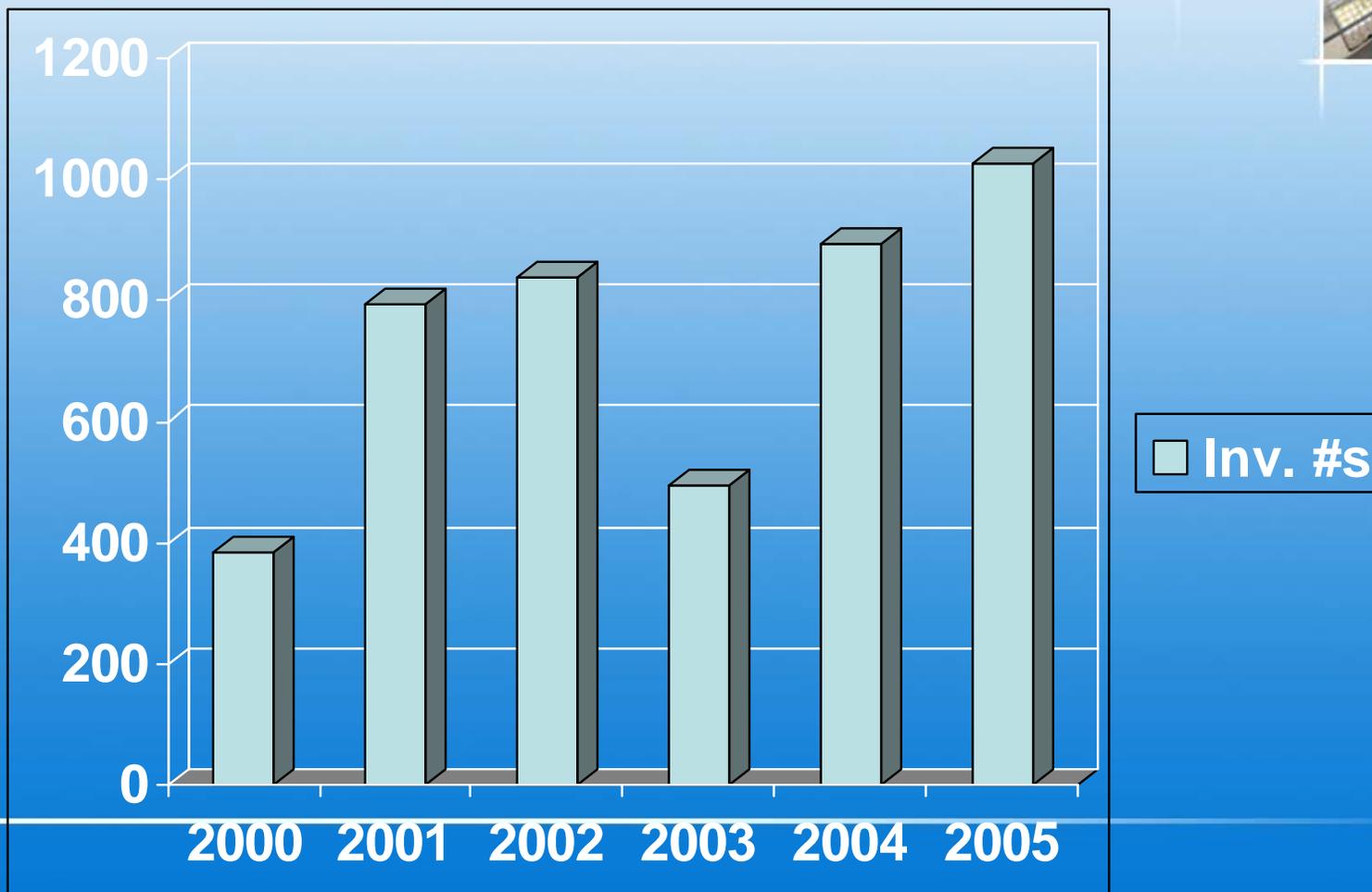
Terrorist Attack\*

Emerging Disease

Natural Disaster



# Foreign Animal Disease Investigations





# APHIS Has a History of Managing Animal Health Emergencies

- ◆ 1970s Classical Swine Fever
- ◆ 1984 Highly Pathogenic Avian Influenza
- ◆ 2002 Low Pathogenic Avian Influenza
- ◆ 2002-2003 Exotic Newcastle disease
- ◆ 2004 Highly Pathogenic Avian Influenza



# USDA Safeguarding Efforts

- APHIS' safeguarding system encompasses:
  - Targeted surveillance
  - Cooperative efforts with States and Industry
  - Outreach and education
  - Trade restrictions
  - Anti-smuggling programs
  - International efforts
  - Diagnostic capacity





## APHIS Role in an Animal Emergency

- Secretary of Agriculture has statutory authority and leadership role to protect American agriculture and animal health.
- Animal Health Protection Act (AHPA) (7 U.S.C. 8301 et seq.) gives the Secretary of Agriculture a broad range of authorities to use in the event of an outbreak of HPAI in the United States, as well as to prevent its introduction into the United States.



# APHIS Role in an Animal Emergency

- APHIS also has the responsibility under the NRF in a Stafford Act Declaration to assist in any animal emergency or natural disaster through leadership of USDA for ESF 11
- APHIS works and integrates with other State - Federal - Industry partners for non FAD diseases programs and responses
- APHIS and USDA lead a science based approach for State – Federal – Industry partners in animal emergency response



# APHIS Emergency Management

- Provide services, products and capabilities to keep emergencies 'local'
- Provide science based guidance and support
- Function as a 'one-stop resource' for information and knowledge
- Operate and communicate on a global scale
- Know where expertise exists and how to access it

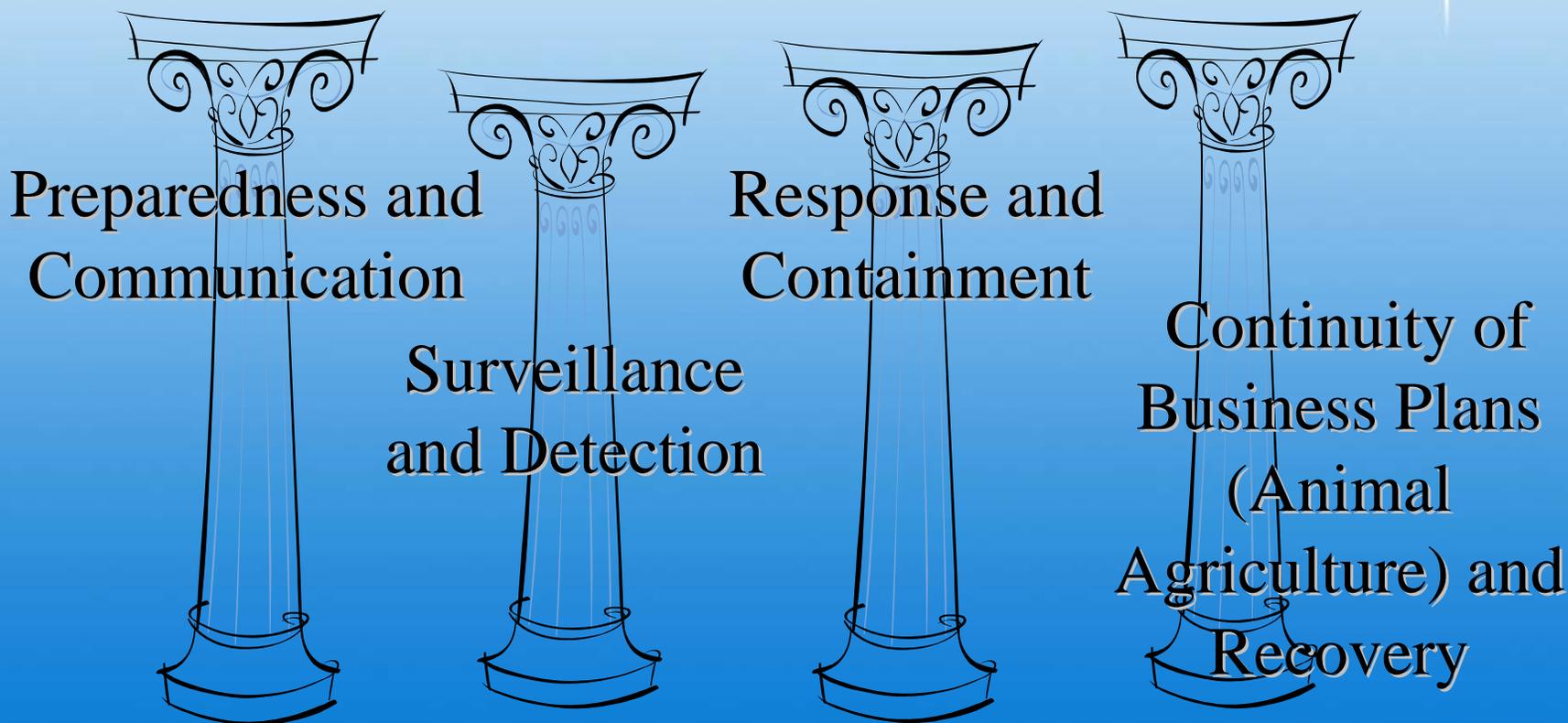


# APHIS Emergency Management

- Provide preparedness and response leadership to animal and plant health events
- Develop strategies and policies for effective incident management
- Act as a liaison with outside emergency management groups to ensure that APHIS emergency management policies, strategies, and responses are current with national and international standards.



# Emergency Management Policy: Four Pillars





Prevention

Preparedness

Response

Recovery

Mitigation



- National repository of critical veterinary supplies
- Homeland Security Presidential Directive 9
  - Directed the Secretary in 2004 to establish the National Veterinary Stockpile (NVS)
  - Required the NVS to
    - ❖ **Augment** local/state resources by deploying **within 24 hours** “sufficient amounts of animal vaccine, antiviral, or therapeutic products to appropriately respond to the most damaging animal diseases affecting human health and the economy”
    - ❖ Leverage the work done by the Strategic National Stockpile at CDC





# NVS Deployment Goals

**Arrive at the outbreak site within 24 hours**

**Pack products for rapid pick and load**

**Provide sufficient supplies to support response efforts for**

**10 responders changing 5 times/day for 10 days. Objective is 3,000 responders for 40 days.**

**Organize and label shipments for rapid identification by responders**

**Establish contracts with commercial sources to provide reliable, ready sources of material to support the NVS and responders beyond the initial response.**





## Current Inventory



- Personal Protective Equipment
- Antivirals
- AI vaccine
- AI field test kits
- Portable satellite equipment (voice and data)
- Portable vaccine shipment/storage containers
- Disinfectants



# NVS 3D Service Contracts

Multiple contractors – available for use concurrently

## Services

- Depopulation
- Disposal
- Decontamination

Response - 24 hours

## Scalable response

- Personnel
- Equipment
- Supplies
- Purchase



# State Planning / Execution Considerations

- State Distribution Plan
- Warehouse Facility Characteristics
  - Location: Central facility or multiple facilities
  - Size of Facility / Facilities
    - Pallet size, weight, stacking capability
    - Aisles widths ~ 72" - 96" wide
    - Overall warehouse space ~ 6000 sqft
  - Loading docks ~ 100ft deep (53ft trailers)
  - Material Handling Equipment (MHE)
    - Forklifts – one 3,000 & one 5,000lb capacity
    - Pallet Jacks: ~ 6 (3-picking, 2-staging/loading/unloading, 1-Quality Assurance)
    - Fuel
  - Refrigeration – Vaccines & Diagnostic Test Kits = 36 – 46 degrees F
  - Antivirals must be stored at room temperatures (58 – 86 degrees F)
  - Emergency Generators (uninterruptible electrical power)
  - Office Equipment (phones, computer, printer, fax, etc)
  - Warehouse Supplies (pallets, stretch wrap, tri-wall containers, gloves, ear plugs, first aid kit and office supplies)
  - Security

**Several  
Truck Loads  
of NVS  
Deployed**



## National Coordination

Homeland Security Act of 2002 and HSPD-5 required a comprehensive national approach to domestic incident management through the development of the National Incident Management System (NIMS) and National Response Framework (NRF)

- NIMS: Standardizes incident management processes, protocols, and procedures for use by all responders
- NRF: Establishes . . .
  - Federal coordination structures/mechanisms
  - Direction for incorporation of existing plans
  - Consistent approach to managing incidents



The NRF applies to all Federal departments and agencies that may be requested to provide federal to federal support



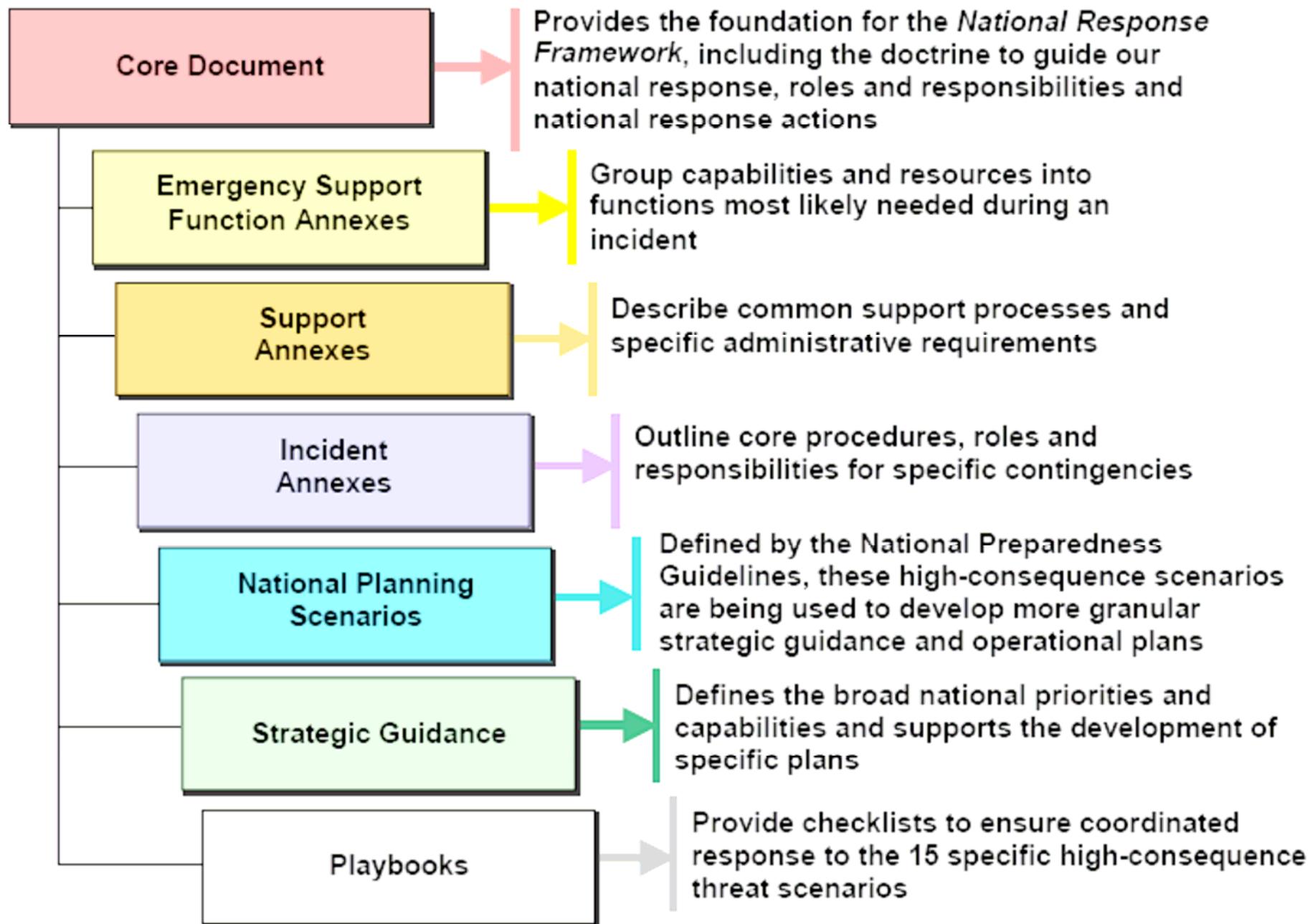
Major disasters, emergencies, and terrorist incidents including threats



Other events requiring Department of Homeland Security (DHS) assistance

The NRF provides one way of doing business for both Stafford Act and non-Stafford Act incidents

**Figure 1. Organization of the *Framework***



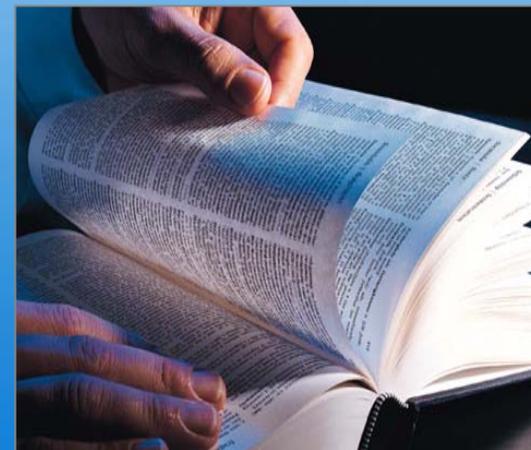


# NRF and Existing Authorities

The NRF:

- Uses the foundation provided by the Homeland Security Act, HSPD-5, and the Stafford Act to provide a comprehensive, all-hazards approach to domestic incident management

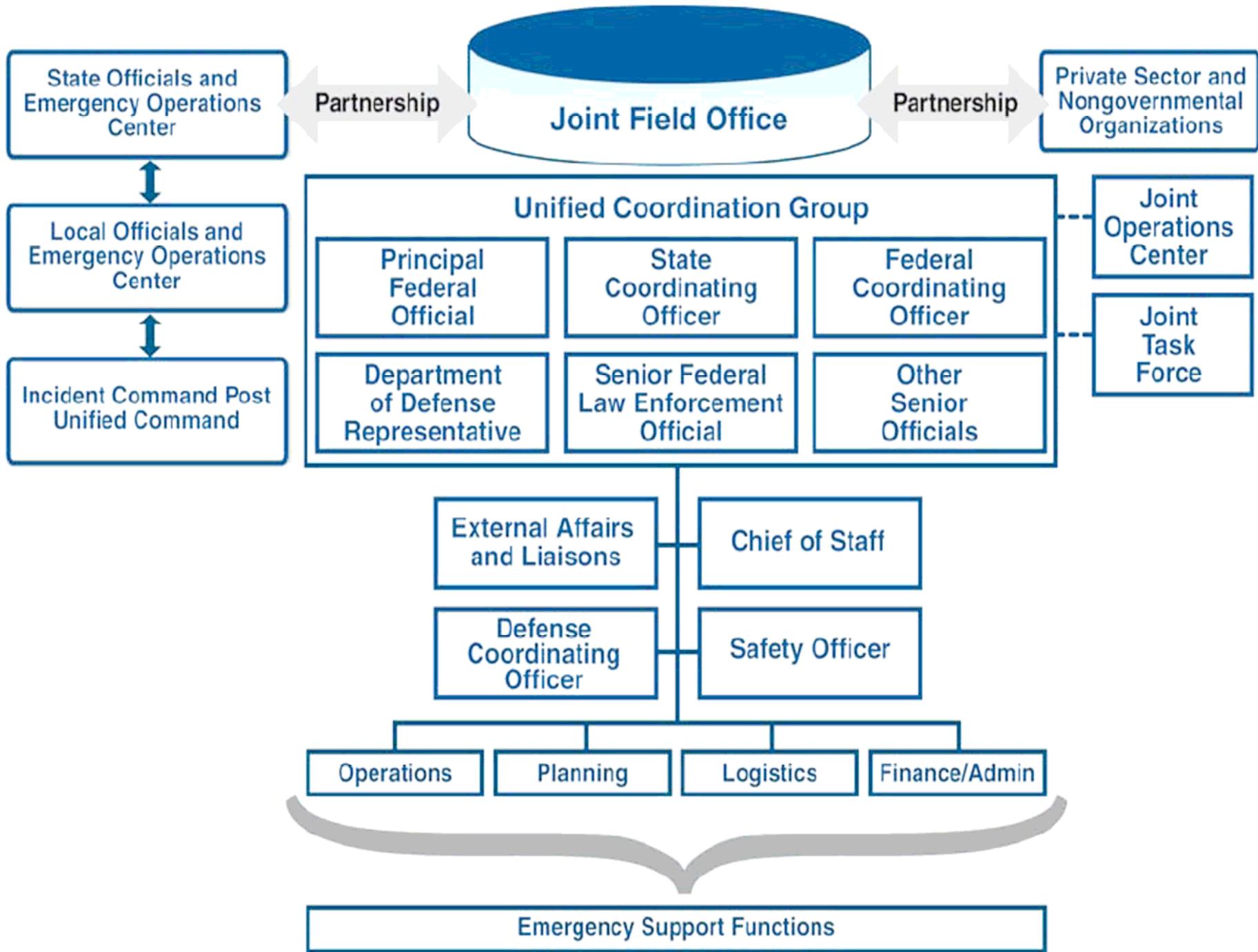
Does NOT alter or impede the ability of Federal agencies to carry out their specific authorities under applicable laws, Executive orders, and directives





# Federal-to-Federal Support

- A Federal entity with primary responsibility and statutory authority, such as APHIS, for an incident that needs support or assistance beyond its normal operations may request DHS coordination and facilitation through the NRF
- Generally, this support is funded by the Federal entity with primary responsibility and statutory authority for the incident, according to the Economy Act, unless other statutory authorities exist





# NRF Emergency Support Functions



**ESF #1: Transportation**

**ESF #2: Communications**

**ESF #3: Public Works/Engineering**

**ESF #4: Firefighting**

**ESF #5: Emergency Management**

**ESF #6: Mass Care/Housing/  
Human Services**

**ESF #7: Resource Support**

**ESF #8: Public Health/  
Medical Services**

**ESF #9: Urban Search/Rescue**

**ESF #10: Oil/Hazardous Materials  
Response**

**ESF #11: Agriculture/Natural Resources  
(USDA/DOI)**

**ESF #12 Energy**

**ESF #13: Public Safety/Security**

**ESF #14: Long-Term Community Recovery/  
Mitigation**

**ESF #15: External Affairs**



# National Response Framework Emergency Support Function #11



1. Provision of nutrition assistance
- 2. Animal and plant disease and pest response**
3. Assurance of the safety and security of the commercial food supply
4. Protection of natural, cultural, and historic properties



## ESF #11 - Agriculture and Natural Resources

- Revamps the previous Food ESF to address agriculture and natural resources issues related to Incidents of National Significance
- Supports State, local, and Tribal authorities and other Federal agency efforts to:
  - Provide nutrition assistance
  - Control and eradicate animal and plant disease outbreaks
  - Assure food safety and food security
  - Protect natural and cultural resources and historic properties





## STANDARD OPERATING PROCEDURES FOR NRP ESF #11 ACTIVATIONS

- Table of Contents
- Emergency Support Mission
- Notification
- National Responsibilities and Duties
- Regional Responsibilities and Duties
- Financial/Administrative Requirements
- Role and responsibilities of Emergency Operations Centers
- Roles and responsibilities of ESF #11 Support Agencies
- Appendices
- Mission Assignment (MA) and pre-scripted MA language
- Action Request Form (ARF)
- Briefing Paper (SitRep) template
- Administrative Direction for FEMA Incident template
- Notification/contact directory
  - ESF #11 Coordinators from FNS and APHIS
  - USDA Office of Homeland Security
  - Animal and Plant Health Inspection Service
  - Department of the Interior
  - Food and Nutrition Service
  - Food Safety and Inspection Service





## USDA Responds to Emergencies Using Incident Command System (ICS)

ICS a time-tested, emergency management structure. APHIS has used ICS since 2002.

ICS is used to respond to:

- ◆ A foreign animal disease
- ◆ An emerging disease
- ◆ A natural disaster
- ◆ An act of bioterrorism\*



\*Additional response parties: USDA's Office of the Inspector General and the Federal Bureau of Investigations

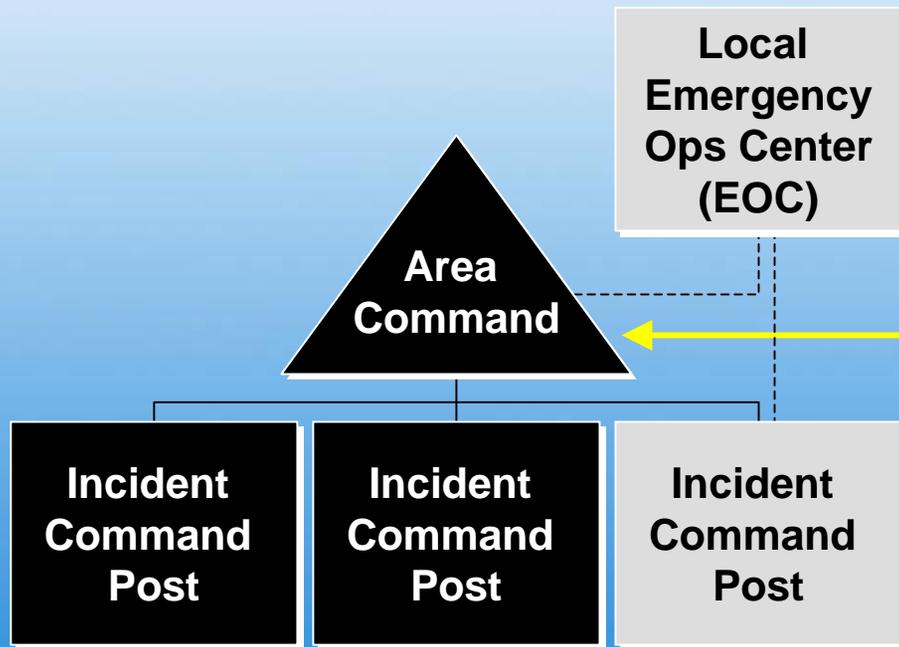


# ICS Organizes Animal Health Emergency Responses Through 5 Key Functions





# Incident Command System



**Local Emergency Operations Center** Coordinates information and resources to support local incident management activities

**Area Command** Oversees the management of multiple incidents that are each being handled by an ICS organization

**Incident Command Post** Performs primary tactical-level, on-scene incident command functions



# If Multiple Infected Premises, And Wide Spread Geographically...



FIGURE 3. Structure for NRP coordination

## NIMS Framework

The structure for NRP coordination is based on the NIMS construct. ICS/Unified Command on-scene supported by an Area Command (if needed), multiagency coordination centers, and multiagency coordination entities.

### Multiagency Coordination Entity

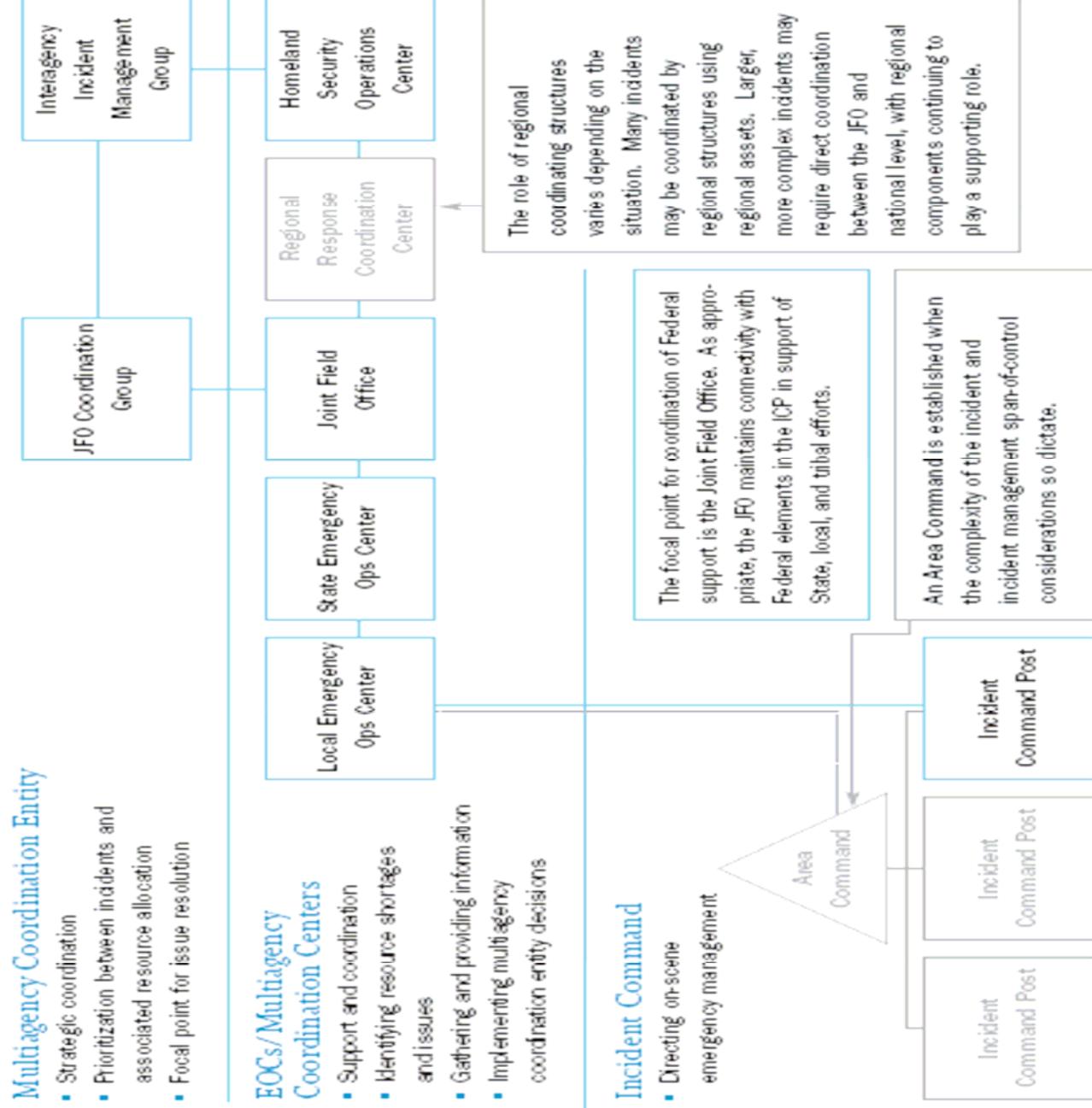
- Strategic coordination
- Prioritization between incidents and associated resource allocation
- Focal point for issue resolution

### EOCs/Multiagency Coordination Centers

- Support and coordination
- Identifying resource shortages and issues
- Gathering and providing information
- Implementing multi-agency coordination entity decisions

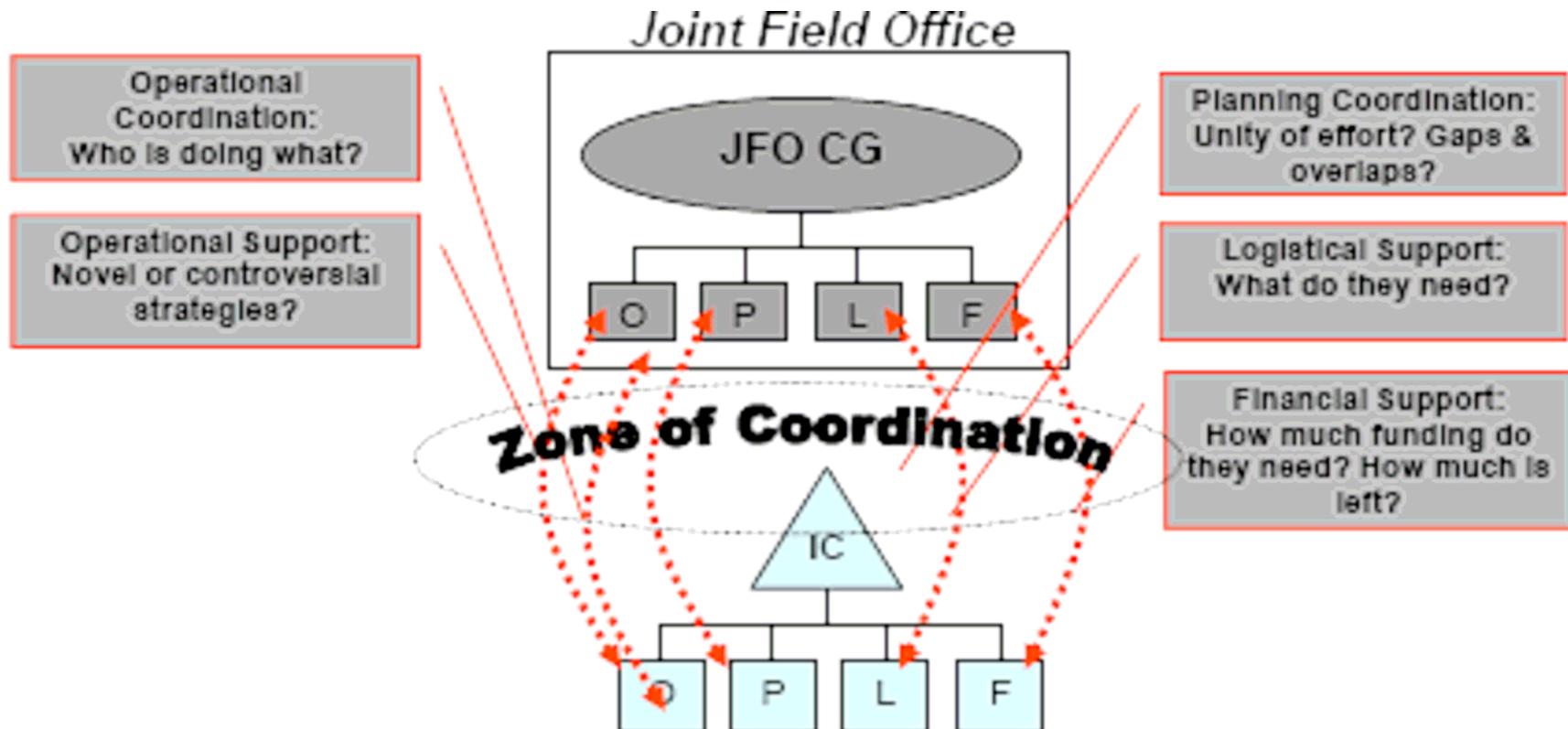
### Incident Command

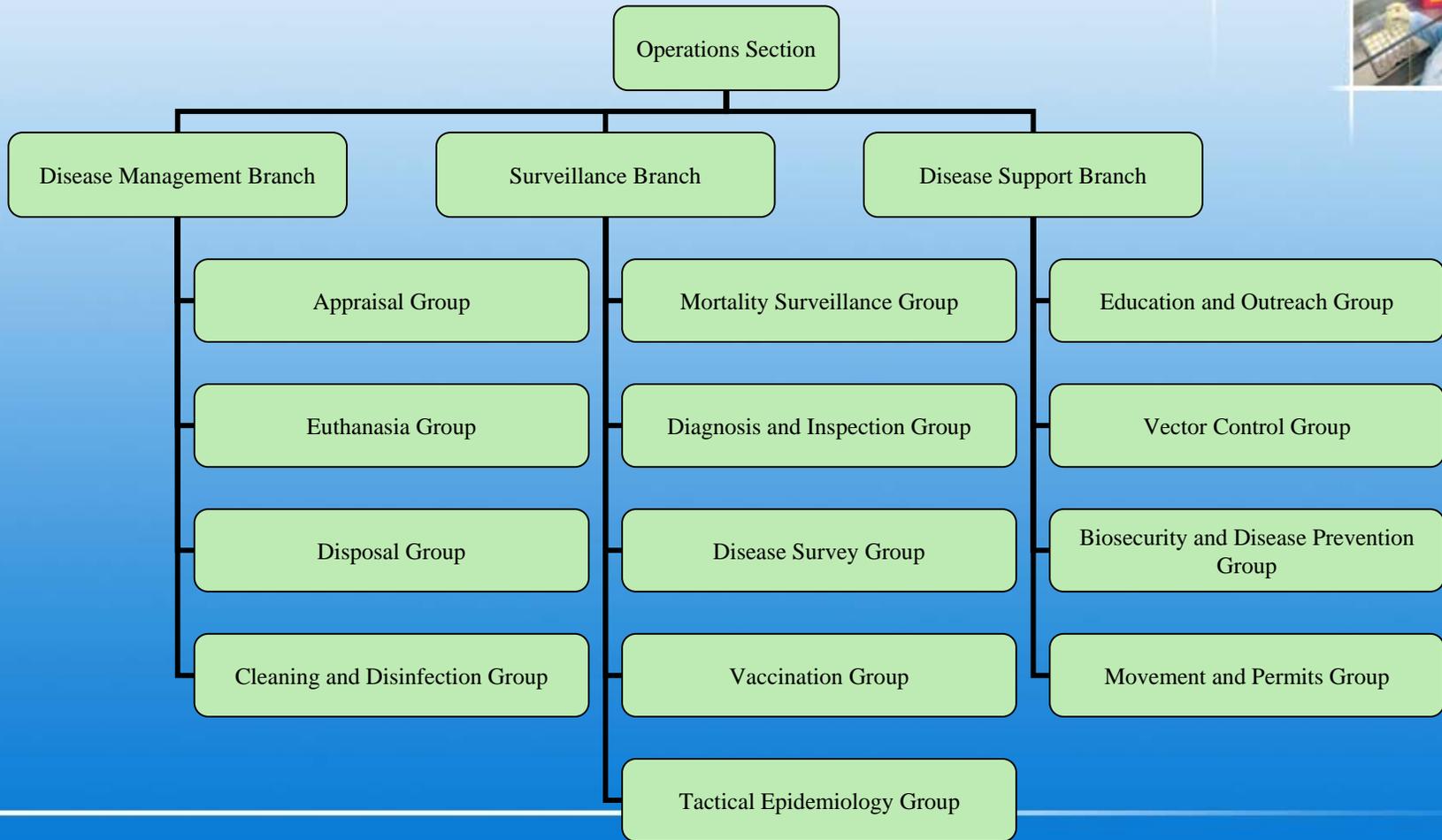
- Directing on-scene emergency management



## Joint Field Office

A temporary Federal facility established locally to provide a central point for Federal, State, local, and tribal executives with responsibility for incident oversight, direction, and/or assistance to effectively coordinate protection, prevention, preparedness, response, and recovery actions.







Catalog Category: AgHealth Positions

Catalog Item Name	Alias	Code	Created By
ADMIN SERVICES ADVISOR (AGHEALTH)		A105	APHIS National Dispatch Center (MD-APCC)
ADMINISTRATIVE ASSISTANT (AGHEALTH)		A094	APHIS National Dispatch Center (MD-APCC)
AGENCY LIAISON (AGHEALTH)		A001	APHIS National Dispatch Center (MD-APCC)
AGREEMENTS UNIT LEADER (AGHEALTH)		A002	APHIS National Dispatch Center (MD-APCC)
ANIMAL APPRAISAL GROUP SUPERVISOR		A007	APHIS National Dispatch Center (MD-APCC)
ANIMAL APPRAISAL SPECIALIST		A006	APHIS National Dispatch Center (MD-APCC)
ANIMAL APPRAISAL STRIKE TEAM LEADER		A112	APHIS National Dispatch Center (MD-APCC)
ANIMAL APPRAISAL TASKFORCE LEADER		A117	APHIS National Dispatch Center (MD-APCC)
ANIMAL BIOSECURITY & DISEASE PREV GRP SUPV		A075	APHIS National Dispatch Center (MD-APCC)
ANIMAL BIOSECURITY & DISEASE PREV S/T LDR		A118	APHIS National Dispatch Center (MD-APCC)
ANIMAL BIOSECURITY & DISEASE PREV TASKFORCE LDR		A009	APHIS National Dispatch Center (MD-APCC)
ANIMAL BIOSECURITY & DISEASE PREV TECH		A073	APHIS National Dispatch Center (MD-APCC)
ANIMAL DIAGNOSIS & INSPECTION GRP SUPV		A022	APHIS National Dispatch Center (MD-APCC)
ANIMAL DIAGNOSIS & INSPECTION S/T LEADER		A119	APHIS National Dispatch Center (MD-APCC)
ANIMAL DIAGNOSIS & INSPECTION TASKFORCE LDR		A023	APHIS National Dispatch Center (MD-APCC)
ANIMAL DIAGNOSIS & INSPECTION TECH		A097	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE MANAGEMENT BRANCH DIR		A024	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE REPORTING GROUP SUPV		A026	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE REPORTING OFFICER		A025	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE SUPPORT BRANCH DIRECTOR		A120	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE SURVEILLANCE BRANCH DIR		A027	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE SURVEY GROUP SUPV		A028	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE SURVEY STRIKE TEAM LDR		A121	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE SURVEY TASKFORCE LDR		A104	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISEASE SURVEY TECHNICIAN		A029	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISPOSAL GROUP SUPERVISOR		A122	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISPOSAL STRIKE TEAM LEADER		A123	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISPOSAL TASKFORCE LEADER		A124	APHIS National Dispatch Center (MD-APCC)
ANIMAL DISPOSAL TECHNICIAN		A125	APHIS National Dispatch Center (MD-APCC)

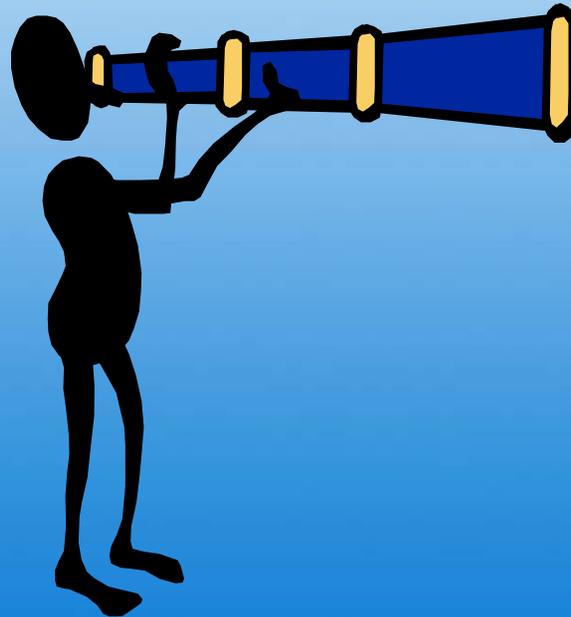


# APHIS Animal Health Emergency Response Key Points!

- State – Federal – Industry Partnership!
- State – Federal – Industry Integrated and Coordinated Response!
- Goals of this Conference: Coordinate and Communicate!
- Integrate, Synchronize and Deconflict!



# AI Background





# Avian Influenza Overview

- AI first identified in the early 1900s
- HPAI associated with H5 and H7 subtype
- HPAI strains evolve from LPAI lineages
- Vast majority of AI viruses found in birds do not represent a public health concern





## 2006 World Organization for Animal Health (OIE) Avian Influenza Chapter

- New definition of poultry
- Notifiable AI (NAI)
  - HPAI, and all H5 and H7 regardless of pathogenicity detected in *poultry*
  - All other subtypes are *not* reportable
- Report all HPAI immediately
- Report H5/ H7 LPAI
  - Immediately if found in commercial operations
  - 6 month report if found in LBM or other backyard environments (these are expected findings)



# Avian Influenza H5N1: Areas Under U.S. Import Ban



Areas Under U.S. Import Ban as of July 20, 2007

SOURCE: FAO/OIE/WHO/USDA

FOR APHIS INTERNAL USE ONLY

Veterinary Services  
 APHIS • USDA  
 CEAH GIS

# Avian Influenza: H5N1 Affected Countries with Positive Wild/Migratory Birds Only



 Wild/Migratory Bird Countries as of July 20, 2007

SOURCE: FAO/OIE/WHO/USDA

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# Avian Influenza: H5N1 Affected European Countries

## Legend:

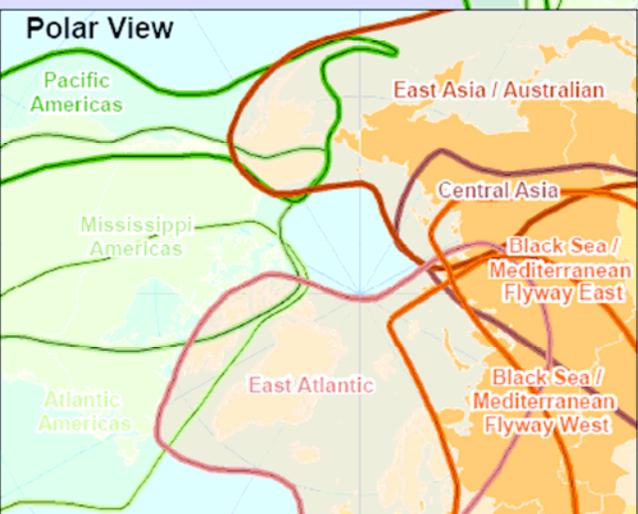
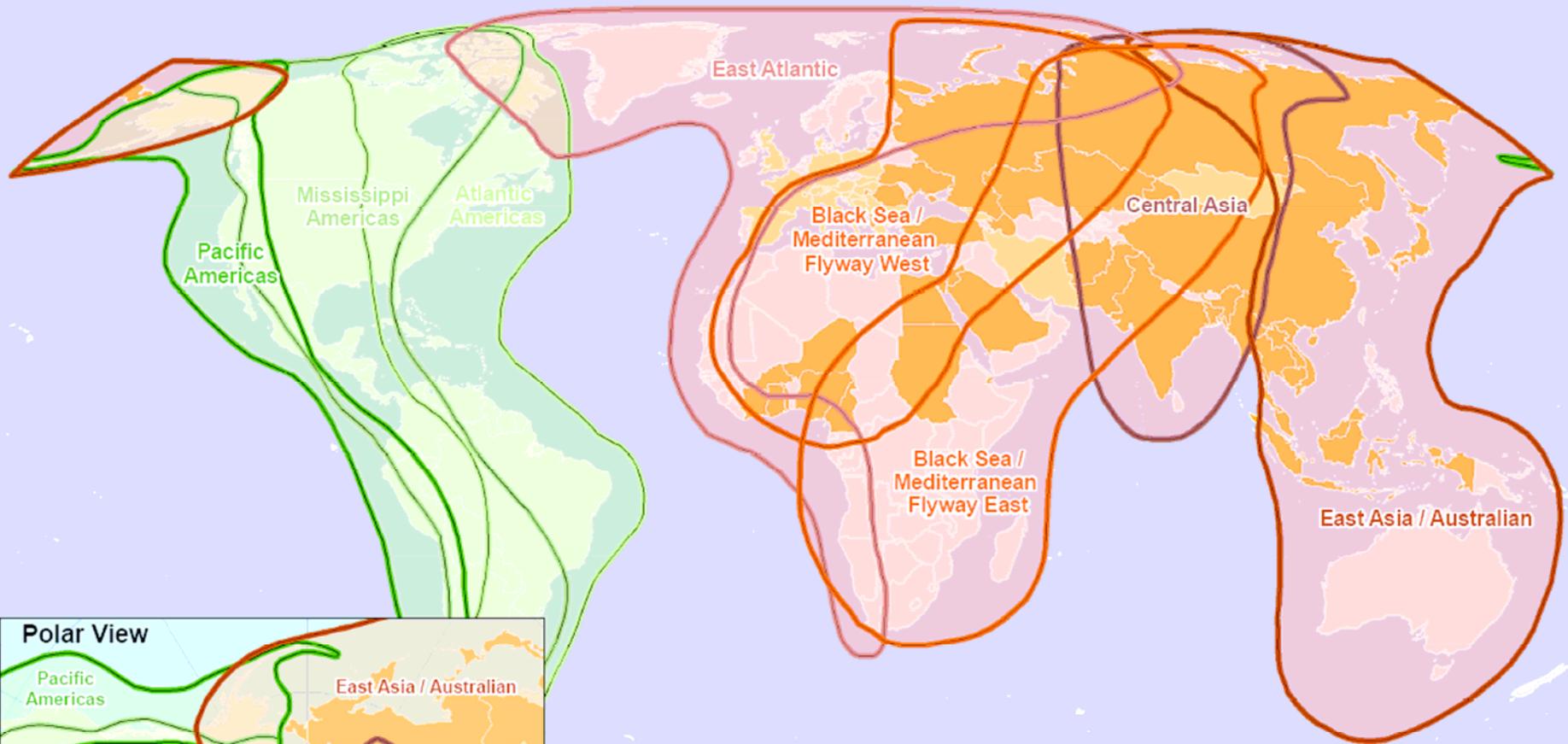
- Countries with No Positives
- Countries with Wild Positives
- Areas Under U.S. Import Ban

FOR APHIS INTERNAL USE ONLY  
SOURCE: FAO/OIE/USDA July 20, 2007

0 125 250 500 Miles



# Avian Influenza: H5N1 Affected Countries and Major World Flyways



**Legend:**

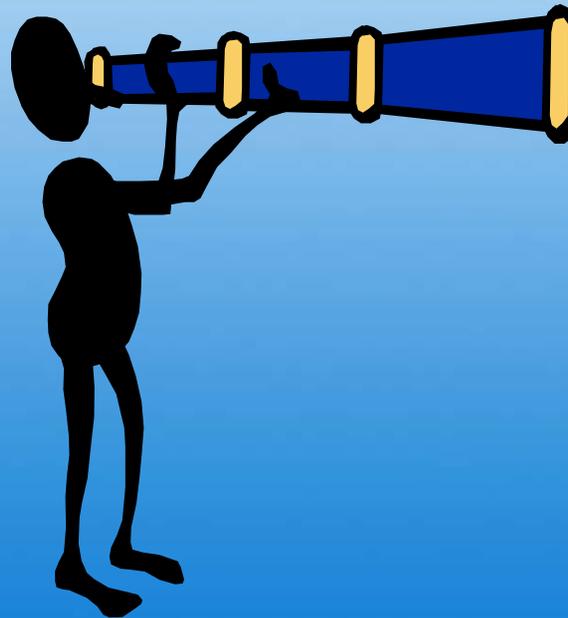
<b>Affected Countries:</b>	<b>Americas Flyways:</b>	<b>Asia / Europe Flyways:</b>
No Positives Reported	Atlantic Americas	Black Sea / Mediterranean Flyways
Under U.S. Import Ban	Mississippi Americas	Central Asia
Wild Positives	Pacific Americas	East Asia / Australian
		East Atlantic

**Veterinary Services**  
**APHIS • USDA**  
**CEAH GIS**

Flyway Data Source: Wetlands International and U.S. Fish and Wildlife Service  
 For Internal APHIS Use Only  
 Created: July 20, 2007



# AI Funding





# AI Background

- USDA's HPAI prevention and response efforts are part of the National Strategy for Pandemic Influenza outlined by President Bush in November 2005
- To support these efforts, at the end of 2005 USDA received \$91.4 million in supplemental funding (of which \$80.2 million went to APHIS)



## Background (cont.)

- In fiscal year (FY) 2006, APHIS also received \$13.6 million for LPAI surveillance efforts
- The President's budget request for FY 2007 includes \$82.1 million (\$73.6 million would go to APHIS) for USDA's continued efforts with domestic AI preparation and international AI assistance



# Fiscal Year **2006** AI Supplemental Funding Allocations

<b>Category</b>	<b>Millions of \$</b>
Domestic Surveillance and Diagnostics	\$23.9
Wildlife Surveillance	\$16.8
Preparedness and Communication	\$21.4
<u>International Capacity Building</u>	<u>\$18.1</u>
<b>Total</b>	<b>\$80.28</b>



# Fiscal Year **2007** AI Supplemental Funding Allocations

<b>Category</b>	<b>Millions of \$</b>
Domestic Surveillance and Diagnostics	\$15.4
Wildlife Surveillance	\$15.2
Preparedness and Communication	\$7.4
<u>International Capacity Building</u>	<u>\$9.2</u>
<b>Total</b>	<b>\$47.2</b>



# The Agriculture & Food Sector is Essential To National Security





# Agriculture - a National Resource

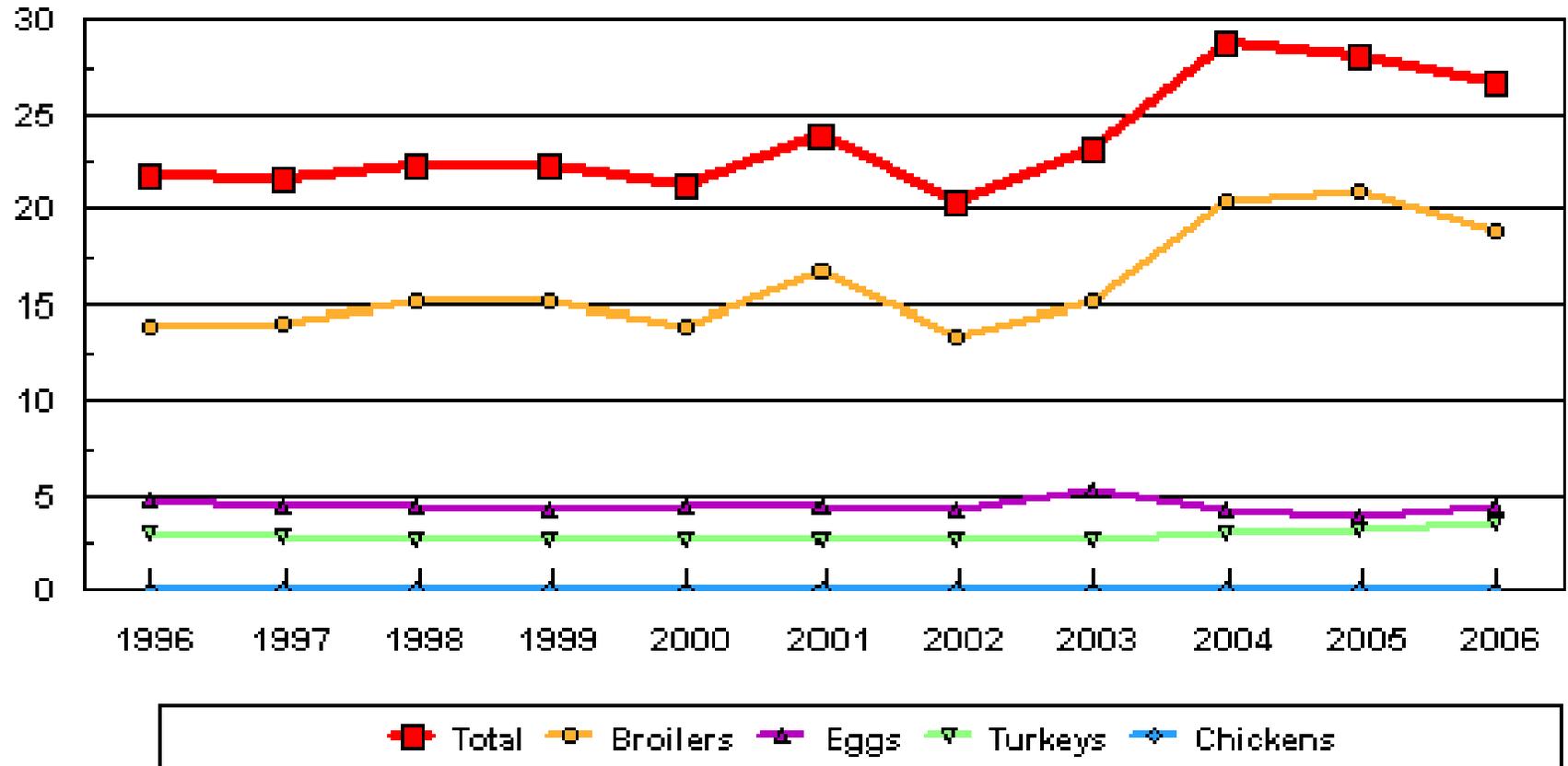
Value Toward GDP	\$1.24 Trillion or 12.3% of GDP
Direct and Related Employment	16.7% or 1 in 6 Jobs

“Most reliable, secure and safe supply of food at a reasonable cost that the world has ever known”



# Value of Production: Broilers, Eggs, Turkeys, Chickens, and Total, United States, 1996-2006

Billion Dollars



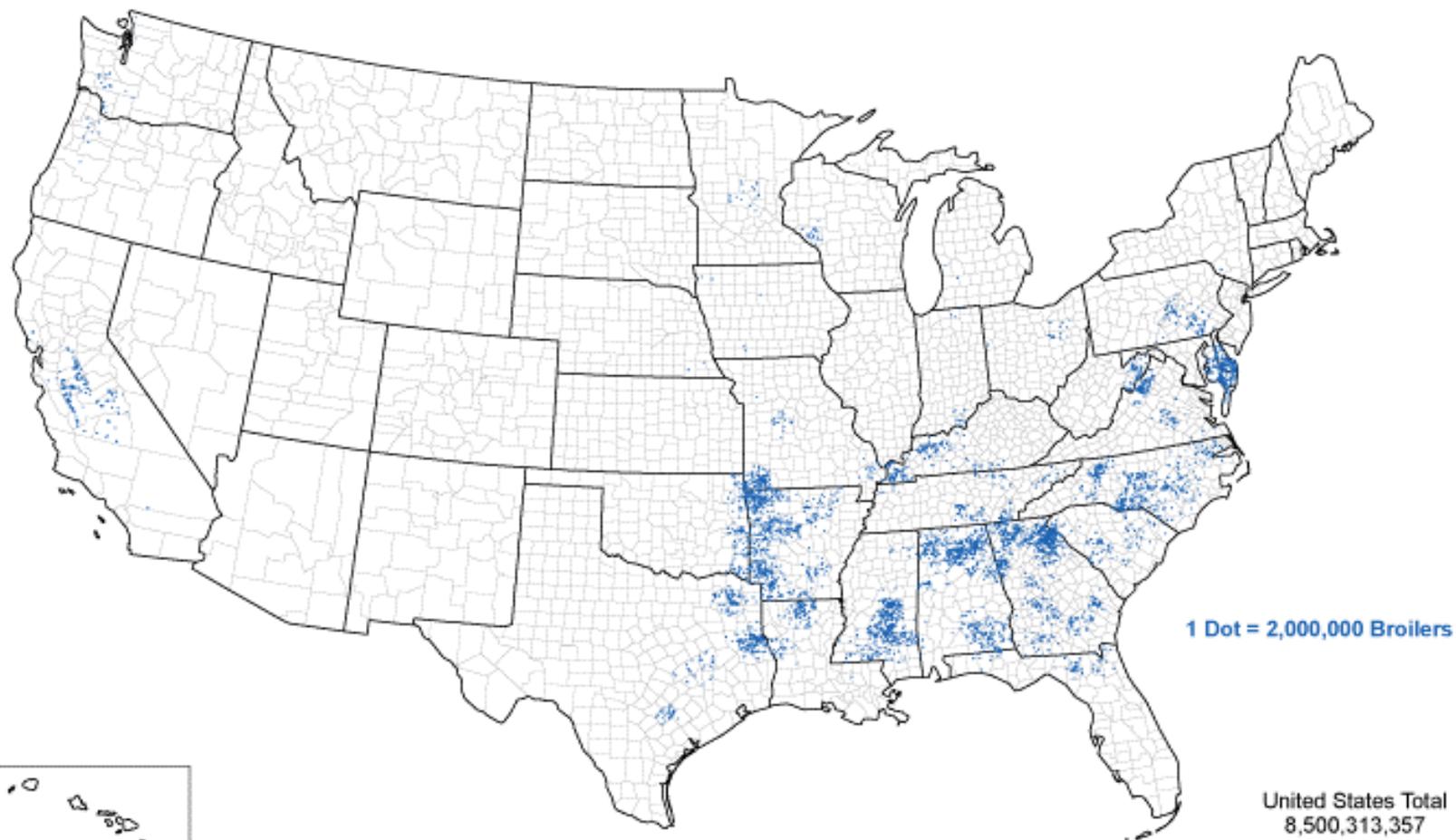
USDA-NASS  
April 2007



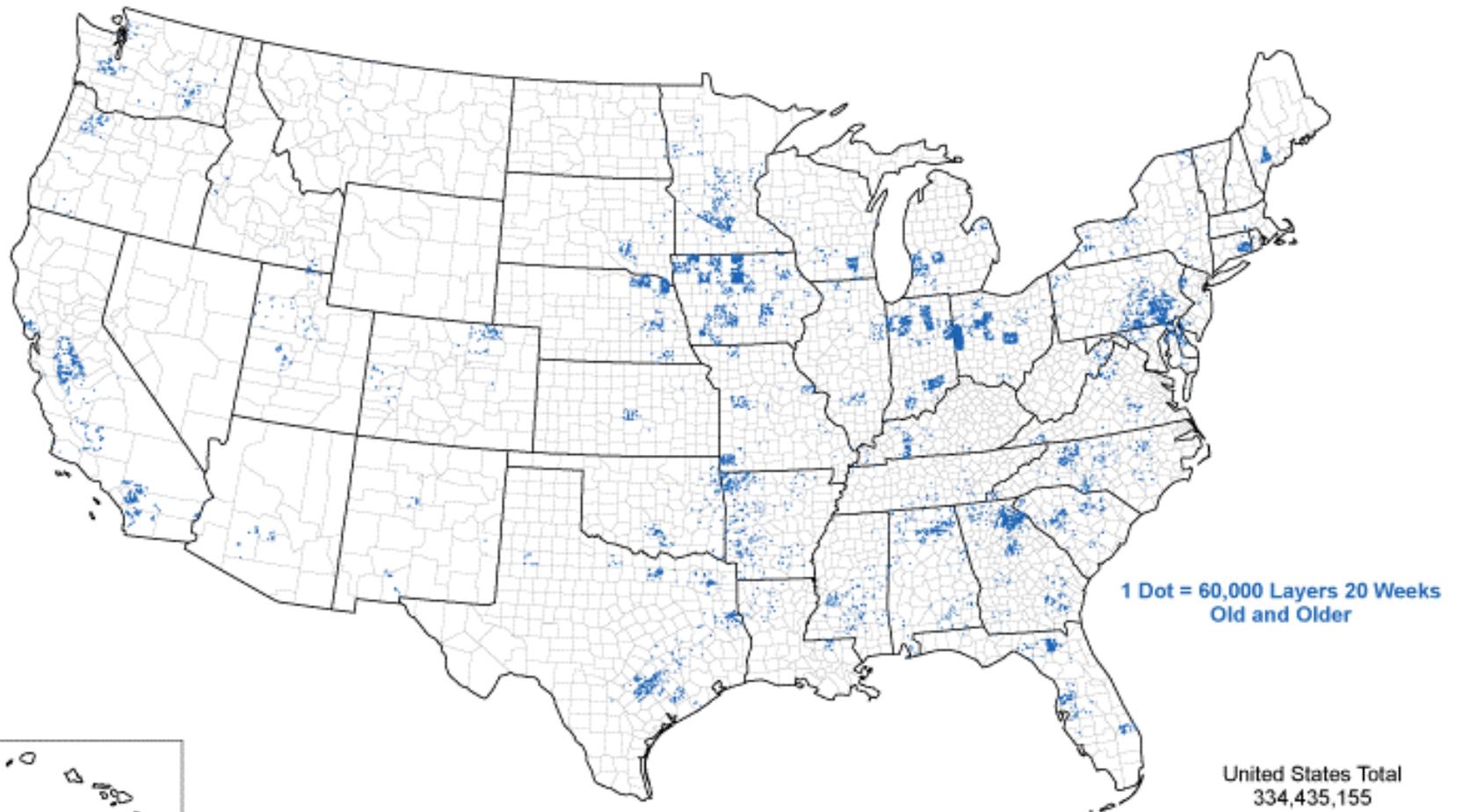
# National Avian Influenza Surveillance Plan - Population Groups

- Group I – Large Volume Commercial Poultry (NPIP Broilers, Layers, Turkeys)
- Group II – Small Commercial and Other Industries
- Group III – Live Bird Marketing System
- Group IV – Backyard Birds
- Group V – Wild Birds
- Group VI – Zoological and Exhibition Birds

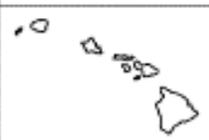
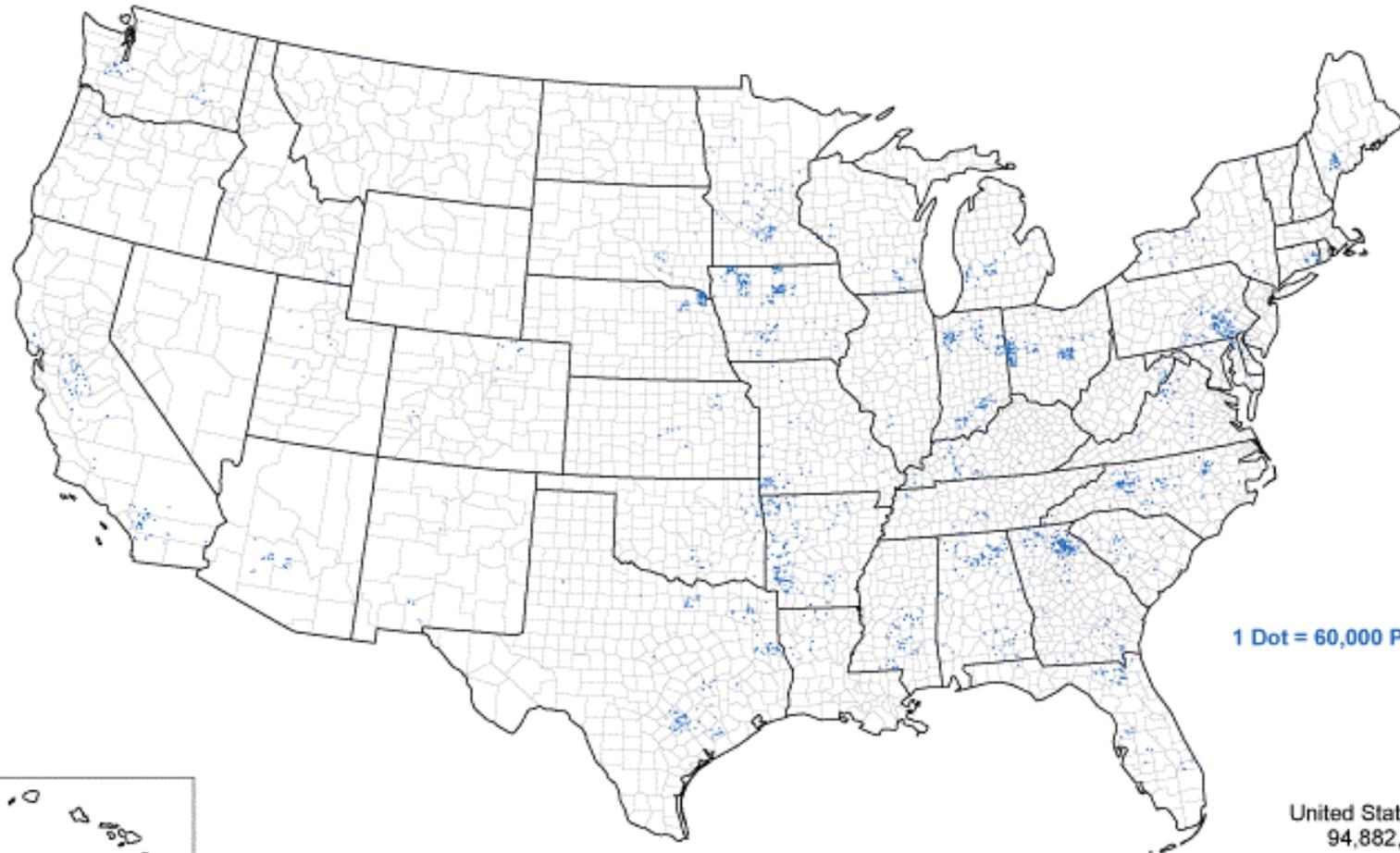
## Number of Broilers and Other Meat-Type Chickens Sold: 2002



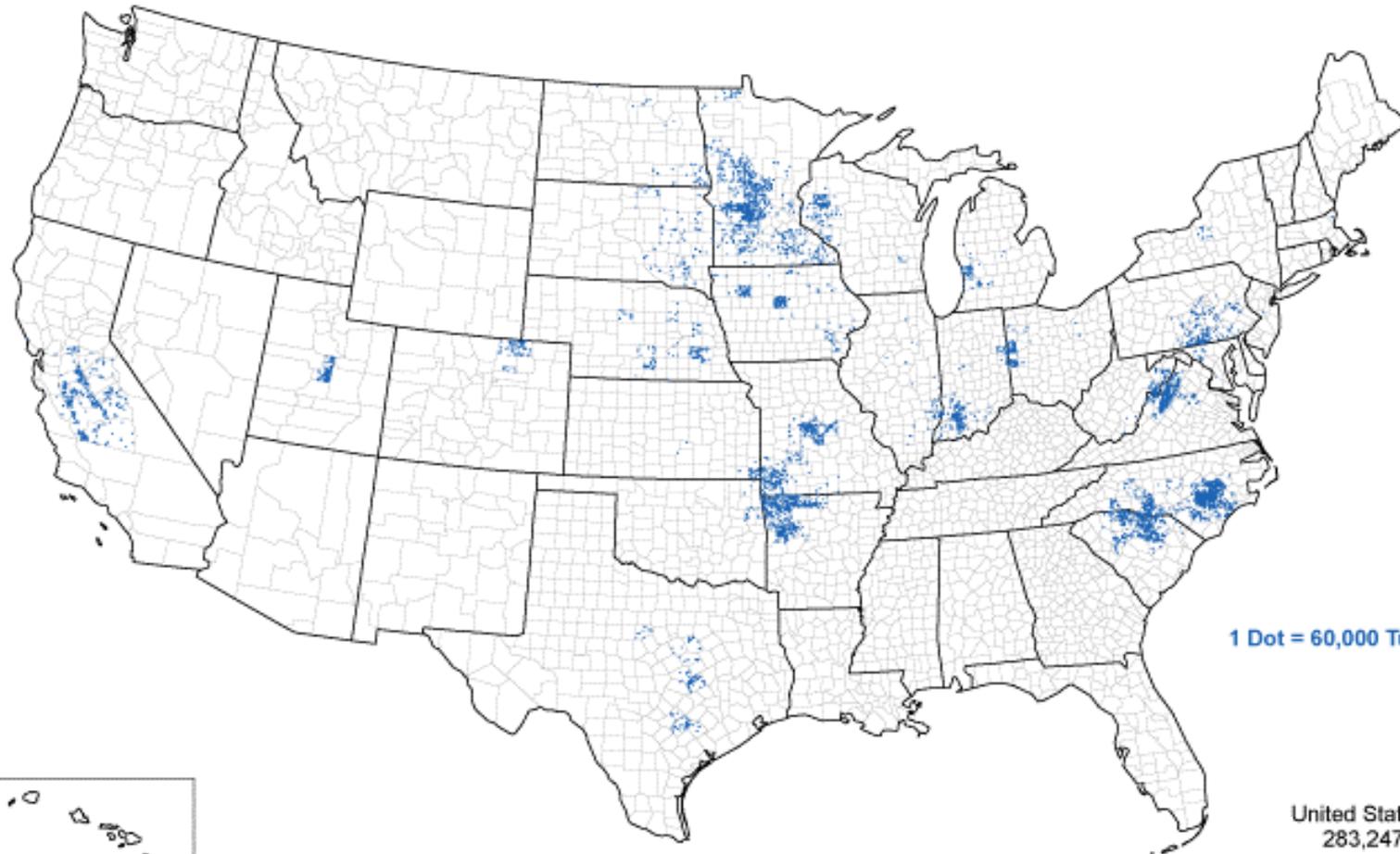
## Layers 20 Weeks Old and Older - Inventory: 2002



## Pullets for Laying Flock Replacement - Inventory: 2002



## Number of Turkeys Sold: 2002

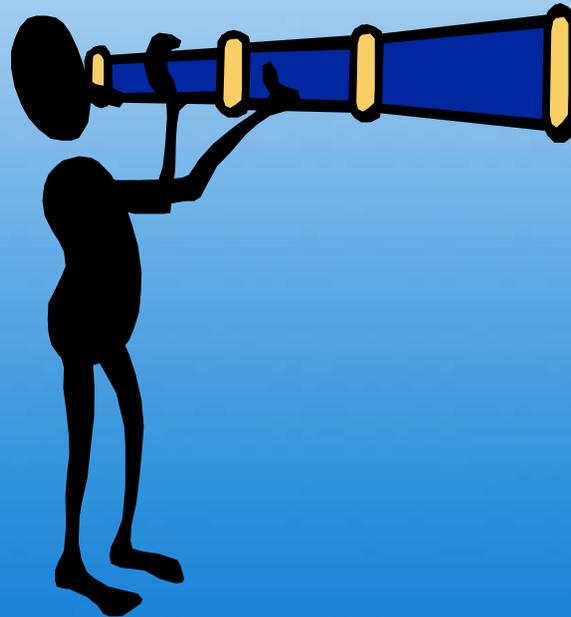


# (HAI) Response Plan





# USDA – Overview of Efforts





# U.S. Positioned to Contain Virus

- United States is very active in international efforts to detect and control AI
- U.S. industry is likely to report suspicious birds to help protect the overall health of the poultry industry
- Compensation is an additional incentive
- USDA National Avian HPAI Response Plan Summary in place
- USDA has some of the world's top AI researchers



# USDA AI Safeguarding Efforts

- International Capacity Building
  - Study Threat Abroad at Source
  - Reduce Threat Abroad at Source
- Targeted Surveillance
  - Early Detection
- Cooperative Efforts with States and Industry
  - Early Detection
  - Rapid Response and Containment
- Outreach and Education
  - Threat Awareness
- Trade Restrictions
  - Exclusion
  - Science Based Trade Policy
- Anti-Smuggling Programs
  - Exclusion





## USDA National HPAI Response Plan

- Intended to complement State and Industry plans that are more specific to local issues and needs
- States should continue to develop plans that are specific to their poultry industry and requirements
- The plan is a “living document” that will continue to evolve with new or additional information and with further stakeholder and partner communication



# HPAI Response Plan Updates

- APHIS may authorize pre-emptive culling for presumptive positive cases that meet case definition
- Indemnification for owners and growers consistent with H5/H7 LPAI interim final rule formula
- Water-based foam has been approved as a method of mass depopulation under certain conditions



## AI Preparedness

- Key is early detection and rapid response
- USDA maintains a comprehensive emergency response structure:
  - Partnerships with local, State, and Federal organizations
  - Integration with the National Response Plan
  - Continual collaboration with HHS, DOI, DHS and other Federal entities
  - Diagnostic capabilities



# Response Strategy

- National Animal Health Emergency Management (NAHEMS) Guidelines
- Stamping out
- Cleaning and disinfection
- Availability of first responders
- Vaccines (to be used only upon approval by the USDA and the applicable State Veterinarian)



## Border Protection and Trade Restrictions

- USDA maintains trade restrictions on the importation of poultry and poultry products from countries and/or regions where the HPAI H5N1 strain has been detected in commercial or traditionally raised poultry
- USDA regulations require that import permits accompany properly sanitized poultry products, such as raw feathers



# HPAI and Trade

- Trade restrictions apply to countries or zones affected with HPAI H5N1
- 40 countries currently on list
- Triggers for action:
  - Official report to OIE
  - Report to VS Chief Veterinary Officer
- Restrictions described in 9 Code of Federal Regulations Parts 93 to 95



# Trade Restrictions and Prohibitions

- Unprocessed avian products are prohibited
- Live birds and hatching eggs are prohibited
- Returning U.S.-origin birds and theatrical birds must be quarantined in a USDA facility for 30 days
- Processed avian products require a Veterinary Services import permit and government certification of treatment



# Trade Restrictions and Guidelines

- USDA is prepared to encourage trading partners NOT to disrupt trade
- The USDA encourages trading partners to align import standards with science-based OIE guidelines to avoid import restrictions that are not scientifically based



# HPAI and Trade: Exports

- U.S. exported \$3 billion in live poultry and poultry products worldwide in 2006
- APHIS negotiates trade resumption based on OIE standards
- However, importing countries ultimately determine when trade will resume
- A previously free country or zone (region) may be reconsidered to be free of HPAI or notifiable LPAI 3 months after stamping-out (including disinfection), provided that surveillance has been carried out in that 3-month period



## AI Restrictions and Prohibitions: Exports

- If U.S. experienced notifiable LPAI, countries could suspend trade with that State or region until the importing country determined the area to be disease free
- If U.S. experienced HPAI, countries might impose a country-wide ban initially, followed by a reduction in the size of the ban to the affected State or region
- Disease freedom must be endorsed on export certificates whether the importing country implements a ban or not



# Outreach & Education

USDA's "Biosecurity for the Birds" Campaign is an extensive and far-reaching outreach initiative designed to:

Educate non-commercial poultry owners about the signs of AI & other poultry diseases

Promote the importance of practicing biosecurity

Encourage rapid reporting of clinical signs of disease and/or unexpected deaths through a sick/dead bird call line

Information is disseminated through brochures, DVDs, public service announcements, printing on feed sacks, and other materials.

Information is printed in multiple languages



# AI Surveillance



## Surveillance: National Animal Health Laboratory Network (NAHLN)

NAHLN currently consists of 58 State and university labs in 46 States. NAHLN labs:

- Provide laboratory services nationwide

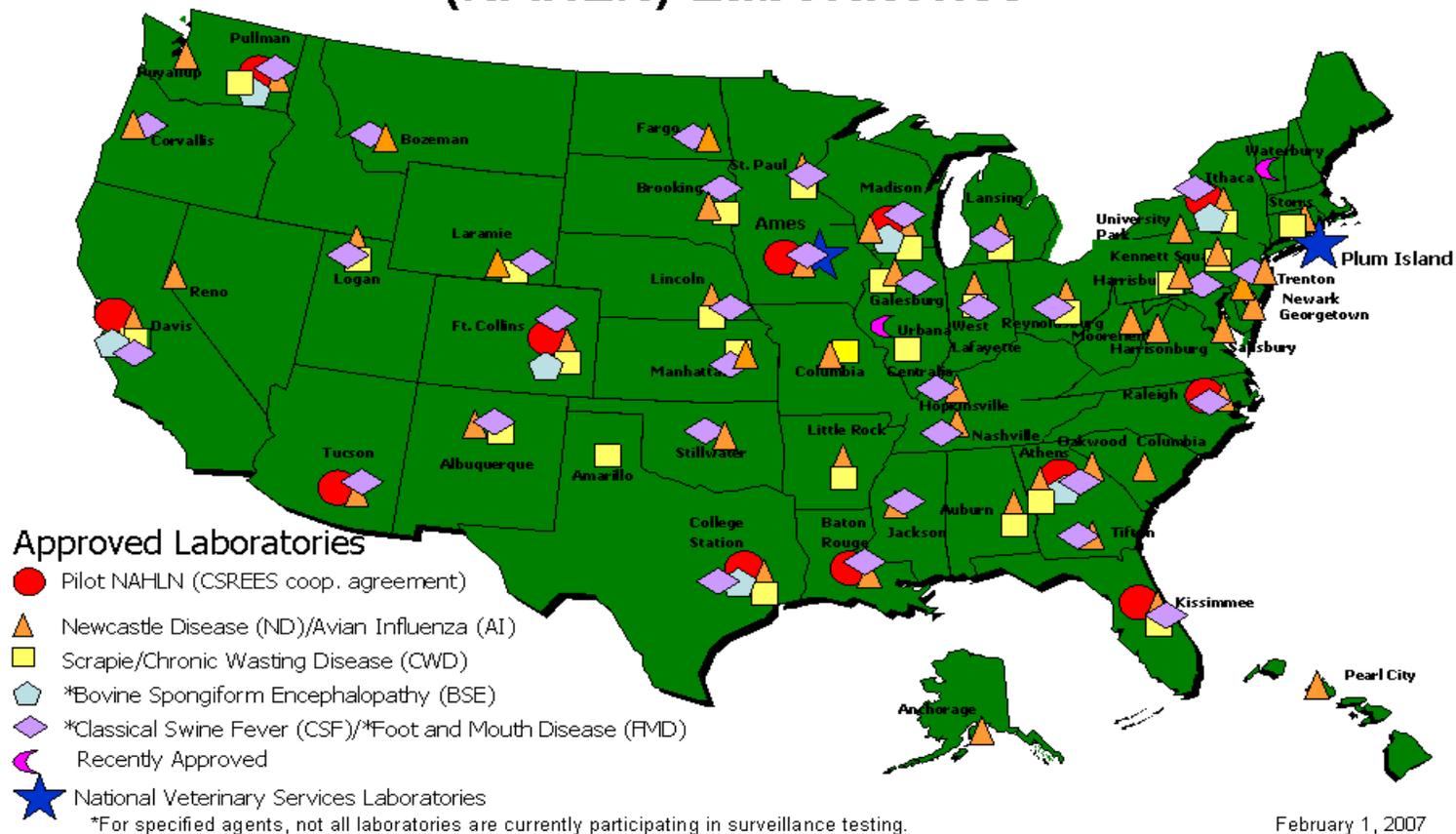
- Provide laboratory data for reporting

- Respond to foreign animal disease (FAD) outbreaks

- Focus on surge capacity during disease outbreak situations



## National Animal Health Laboratory Network (NAHLN) Laboratories





# AI Surveillance – Big Picture

- NPIP poultry breeding flocks
  - Meat-type chickens & turkeys
  - Egg-type chickens
  - Waterfowl, exhibition and backyard flocks
- NPIP commercial poultry production flocks
  - Meat-type chickens & turkeys
  - Table egg layers
- Live Bird Marketing System
  - Producers, distributors, retail markets
  - Backyard flocks, auctions, swap meets, etc.
- Waterfowl and game birds raised for release
- Wild birds
- Diagnostic laboratories (passive surveillance including FAD investigations)



# Summary of National AI Surveillance

- Multiple data streams for AI surveillance
- National Surveillance Unit and Aquaculture, Swine, Equine, and Poultry staff collaboration on development of the National AI Surveillance Plan
- Capitalizing on existing surveillance systems
  - NPIP Breeder flocks
  - Diagnostic labs (passive surveillance)
- Developing new surveillance systems
  - NPIP production flocks, LBMS, and wild birds
- Expanding laboratory capacity - NAHLN & NPIP labs



# Wildlife Surveillance





# Response Plans for AI in Wild Birds

- Continue to monitor potential wild bird threats to domestic poultry
- Assessment of the risk wild birds pose to the transmission of a HPAI virus to susceptible livestock and poultry will be conducted after confirmation of the index case





## Improved Wildlife Surveillance/Sampling

- AI surveillance in wild, migratory birds for the early detection of HPAI H5N1 virus is on pace to detect a possible disease incursion
- Currently, the surveillance effort is being fully supported by all 50 State Wildlife Agencies in a cooperative effort to produce robust sample sizes from across the United States



## Improved Wildlife Surveillance/Sampling (cont.)

As of March 30, 2007, the total number of wild bird cloacal samples collected by APHIS Wildlife Services and State Wildlife Agency employees are:

Pacific flyway (including Alaska)	17,869
Central flyway	17,719
Mississippi flyway	23,605
Atlantic flyway	24,696
Hawaii, Guam & Pacific Islands:	525
<u>Cloacal samples collected by DOI</u>	<u>+ 25,000</u>
<b>USDA TOTAL:</b>	<b>109,414</b>



## Improved Wildlife Surveillance/Sampling (cont.)

APHIS/WS & State Wildlife Agency fecal samples as of March 30, 2007:

Pacific flyway (including Alaska):	9,361
Central flyway:	8,899
Mississippi flyway	14,306
Atlantic flyway:	16,929
<u>Hawaii, Guam &amp; Pacific Islands:</u>	<u>+ 689</u>
<b>TOTAL:</b>	<b>50,184</b>



# USDA's Commitment to International AI Efforts



# USDA International Efforts

- Eliminating the virulent strain of HPAI H5N1 at its source—in poultry abroad—is an effective way to reduce the chances of a domestic outbreak
- To help slow the spread of HPAI H5N1, USDA has provided training and equipment, dispatched response teams, and expanded lab capacity in the United States to assist with international detection and diagnosis



## USDA International Efforts (cont.)

- Committing \$1.2 million to the OIE for standardized assessments of foreign veterinary infrastructure
- Supporting the United Nation's FAO and the OIE in their launch of a Crisis Management Center to coordinate global HPAI response and deploy rapid response teams to HPAI hotspots



## USDA International Efforts (cont.)

- Establishing AI-dedicated offices and personnel in Cambodia, China, Indonesia, Laos, and Thailand that (where possible) are co-located with offices of the U.S. Centers for Disease Control and Prevention
- Hiring a local national veterinarian in Burma (Myanmar) to carry out USDA AI activities; and,
- Offering (as capacity-building for AI diagnostic testing) three training courses at the NVSL. These courses have provided training to some 99 foreign officials from 62 countries.



# *Questions?*