Iowa Department of Agriculture and Land Stewardship: 2015 HPAI Response

David Schmitt, DVM
State Veterinarian
Iowa Agricultural Statistics

Iowa's 2013 production value from crops and livestock totals > $31 billion

Iowa is 2nd to CA in agriculture

Iowa imported > 29 million animals in 2015

Iowa leads the nation in corn and soybean production

Iowa ranks 1st in Swine

1st in Egg Production

~ 60 million layers – pre-2015 HPAI

~ 16.5 billion eggs - pre-2015 HPAI

2nd in Red meat
Emergency Preparedness and Response
Iowa Veterinarian and Veterinary Technician Licensing Summary

- Licensed veterinarians with an expiration date of 6/30/2017: 2782
- Licensed Iowa veterinarians with an expiration date of 6/30/2017 residing in Iowa: 1722
- Registered veterinary technicians with an expiration date of 12/31/2017: 454
- Registered Iowa veterinary technicians with an expiration date of 12/31/2017 residing in Iowa: 416
IDALS Legal Authority

- Control and eradicate highly contagious animal disease
- Quarantine diseased animals
- Regulate or prohibit animal movement
- Enter premises
- Euthanize animals if necessary
- Disinfect farm operations
Highly Pathogenic Avian Influenza and Exotic Newcastle Disease – Iowa Emergency Poultry Disease Response Plan
Highly Pathogenic Avian Influenza – Iowa 2015

- First reported illness in a commercial turkey flock on Sunday, April 12, 2015
  - HPAI lab positive avian influenza Monday, April 13, 2015
- No human cases of influenza associated with H5N2
- All poultry in control zones tested negative for AI before being permitted to go to processing
- Last HPAI H5N2 case in Iowa on June 16, 2015
Flyway.us
Ducks, Geese and Swans of North America by Frank C. Bellrose - 1980
MALLARD

MIGRATION CORRIDOR POPULATION

1,501,000-3,000,000
751,000-1,500,000
376,000-750,000
201,000-375,000
20,000-200,000

BREEDING POPULATION

65,000 per Space
Less than 65,000
Winter Area
Buena Vista County Turkey Farm
– April 13, 2015

25,749 turkeys
Control Zone Map - Layer Farm
April 20, 2015 - 4,184,076 layers
Buena Vista 5 – April 29, 2015 - 4,910,601 layers
Secure Premises Entrances – C&D Line
Personal Protection On Premises

All responders fit tested for N95 masks, required to don outer protection upon entering premises and doffing at C&D line to exit. Designated staff for infected premises.
Area Surveillance

- Operations conducted under ICS structure
- Work with County Emergency Manager
- Establish a center of operations
- Surveillance of 10 km radius of infected premises for poultry
- Collection of samples from poultry for AI testing
- Quarantine of all poultry premises in buffer zone
- Samples submitted to ISU VDL for testing
Premises Registration

Premises identification required for all premises identified in Control Zones. A premises ID number is a unique number related to a geographic physical premises with contact information.

Iowa Department of Agriculture and Land Stewardship
Wallace State Office Building
502 E 9th St.
Des Moines, Iowa 50319

Premises Identification Number Application (Print Legibly)

Business/Farm Account Information

Business/Farm Name: ____________________________
Primary Contact: ____________________________ Date: ___________
Secondary Contact: ____________________________
Business/Farm Address: ____________________________
City: __________________ State: __________________ Zip Code: ____________
Business Phone: (________) Fax Number: (________)
Cell Phone: (________) E-mail Address: ____________________________

Signature (required):

Business Type (Check one):
- Individual
- Partnership
- Incorporate
- Non-Profit Organization
- LLC
- LLP

Operation Type (Check all that apply):
- Producer Unit/Farm
- Exhibition
- Market/Collection Point
- Port of Entry
- Tagging Site
- Veterinary Clinic
- Laboratory
- Quarantine Facility
- Slaughter Plant
- Rendering
- Non-producer Participant

Premises Information

Primary location where livestock resides, if more than one location and animals are managed separately, apply for multiple premises IDs on additional forms.
Premises Name/Description: (ex. “home place”, “feed yard”)

Species at Premises (Check all that apply):
- Beef and Bovine: Cattle, Bison
- Poultry: Chickens, Turkeys
- Sheep: Sheep, Goats
- Camels: Camels
- Horses

Additional Land Descriptions

Legal Land Description*: ____________________________
GPS Coordination*: ____________________________

Please mail to above address or fax to (515) 281-4282.
Ph: (888) 778-7675 • Email: idals_id@idals.state.ia.us • Web: http://www.agriculture.state.ia.us/premiseID.htm
SEOC Representation

- IDALS
- IDPH
- HSEMD
- NG
- DOT
- DPS
- DNR
- DIA
- DHS
- DOC
- Iowa Turkey Federation
- Iowa Poultry Association
- Rural Concern Hotline
Disposal
Carcass Disposal Options

- Composting
- Rendering – **Not Used**
- Burial
- Incineration
Composting

- A recommended method of disposal for turkey farms

- Carcasses placed in with layers of a carbon source and a nitrogen source to allow the natural heating process to break them down
In House Composting

Temperature probe monitoring of compost. Compost reach temperature of at least 131° F. (55° C.) for at least 3 days, turn pile at 14 days, let reheat, and completed at 30 days.
Burial Requirements On Site

- 7' wide at the bottom of the pit
- 3' wide at ground level
- 6' deep
- 2' at each side of the pit

(Images of people or animals may be present in the diagram for illustration purposes.)
http://programs.iowadnr.gov/maps/afo/burial.html
Staged leak proof roll offs for mortalities in sealed biobags to be transported to approved landfill by permit and IDOT designated route.
Incineration

- Advantages
  - Year round use
  - Bio-security
  - Kills pathogens

- Disadvantages
  - Cost of Incinerator
  - Cost of fuel
  - Odor
IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

Regarding the display, sale or exhibition of poultry in the State of Iowa

Order No. AI-15-0456

The Governor of the State of Iowa declared a state of emergency concerning highly pathogenic avian influenza which authorized various stop movement and control zone measures as necessary. More than 60 infected premises have been identified in northwest Iowa during the last six weeks. Producers and owners are being asked to take every biosecurity measure available. Additional actions are necessary to minimize the risk of spreading of the virus.

THEREFORE, IT IS HEREBY ORDERED, under the authority of Iowa Code section 163.1 which provides the authority of the Department to limit animal movement for disease control and Iowa Code Chapter 165B, “Control of Pathogenic Viruses in Poultry,” that:

1. Live bird exhibitions at county fairs, the State Fair, fair events and other gatherings are cancelled for the remainder of the calendar year.
2. Sales of birds at livestock auction markets, swap meets or other events are cancelled for the remainder of the calendar year.
3. The prohibitions in this order do not apply to movements permitted by the Iowa Department of Agriculture and to sales or events held electronically or over the internet from non-avian influenza affected areas.
4. Violations of this order are subject to a civil penalty or criminal prosecution or both.

David Schmitt
State Veterinarian
HPAI-Infected Premises by Date of Onset of Clinical Illness
Iowa - 2015
(Number of cases = 77)
HPAI Counties Affected - 2015
Summary HPAI Premises

- 35 Commercial Turkey Farms (1,146,586)
- 22 Commercial Table Egg Layer Farms – one certified organic (25,128,824)
- 13 Commercial Table Egg Pullet Farms (5,519,464)
- 1 Commercial Breeder Flock (45,455)
- 5 Backyard Producers (1,200)
- 1 Commercial Mail Order Breeder Operation (7,886)

Total = 77 HPAI Infected Premises (31,849,415)
USDA Indemnification Requirements

- For payment from USDA producers needed SAMS and DUNS registration numbers
- SAMS – System for Award Management
  - Official US Government registration
  - [https://www.sam.gov/portal/SAM/#1](https://www.sam.gov/portal/SAM/#1)
  - No cost to register
- D-U-N-S – Data Universal Numbering System
  - For US Government Contractors and Grantees
  - No cost to register
2015 Iowa Affected Poultry

- Total **Indemnity** Paid in Iowa = over $91 million dollars
- 1,361,543 dozen eggs in Iowa appraised for disposal
- ~$859 million – total cost for US Avian Influenza response
## 2015 HPAI Response

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<tr>
<th>Personnel</th>
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<tr>
<td>Federal Agency</td>
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<tr>
<td>Federal Contractor</td>
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<td>State Ag Dept.</td>
<td>67</td>
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<td>USDA:APHIS:VS</td>
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<tr>
<td>Other Contracted Personnel</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>2,205</strong></td>
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Continuity of Business

- Surveillance testing within AI control zones
  - Backyard flocks
  - Routine surveillance testing in non-infected commercial poultry
  - Testing for movement of eggs and turkeys
- Permitted movements – over 3,700 permits
  - All products into a control zone, including infected premises
  - All products out of a control zone
  - All products within a control zone
USDA Emergency Management Response System (EMRS2)

- USDA database for tracking all HPAI response work
Data Entry
Continuity of Business

- Enhanced biosecurity
- Global trade markets closed
- Several states closed borders to receipt of egg products and live poultry, including day old chicks
- Demand of existing US markets for food production and consumers
Biosecurity! Is Important!
Thank You

- IDALS Staff
- USDA Veterinary Services
- USDA Animal Care
- USDA Investigative and Enforcement Services
- USDA Wildlife Services
- Iowa Department of Natural Resources
- Iowa Department of Public Health
- Iowa State University, College of Veterinary Medicine
- Iowa State University Extension Services
- Iowa Livestock Industry Organizations and Businesses
- Iowa Homeland Security and all Departments staffing at State Emergency Operations Center