Minnesota State Perspective on HPAI

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Senior Veterinarian
It Begins: March 5, 2015

- USDA confirms H5N2 HPAI in Pope County, MN
  - Commercial turkeys
  - No other commercial poultry in control area
  - 38 backyard flocks
  - State IMT (BAH and MDA) stood up
just 2 hours later
Younger flock, same premises
HPAI in Minnesota

- **9,024,632**: Total number of birds affected
- **23**: Minnesota counties impacted
- **110**: Affected farms
- **#1**: Minnesota’s rank as a turkey producer nationwide
HPAI in Minnesota

- 5,236 square miles in 10 km control areas
- 1,912 premises in control area

<table>
<thead>
<tr>
<th>Premises Type*</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backyard</td>
<td>1599</td>
</tr>
<tr>
<td>Commercial</td>
<td>264</td>
</tr>
<tr>
<td>Other/Unknown**</td>
<td>49</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1912</td>
</tr>
</tbody>
</table>

* Data from MPTL database
** company office; WEBY dealer; Feed Mill; Gov’t Agency; Laboratory; Commercial processing plant, Veterinary clinic
# HPAI in Minnesota

<table>
<thead>
<tr>
<th>Commercial Premises Type*</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broiler - Breeder</td>
<td>2</td>
</tr>
<tr>
<td>Broiler - Meat-Type</td>
<td>25</td>
</tr>
<tr>
<td>Egg Layer - Commercial</td>
<td>12</td>
</tr>
<tr>
<td>Hatchery - Turkey</td>
<td>2</td>
</tr>
<tr>
<td>Pullet Farm</td>
<td>2</td>
</tr>
<tr>
<td>Turkey - Commercial</td>
<td>174</td>
</tr>
<tr>
<td>Turkey - Multiplier Breeder</td>
<td>46</td>
</tr>
<tr>
<td>Turkey - Primary Breeder</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>264</strong></td>
</tr>
</tbody>
</table>

* Data from MPTL database; numbers include infected premises
Continuity of Business

• Permit required when Control Area established
• Initially just commercial premises
• Later permitted movement of backyard birds to slaughter and eggs for distribution
• Permits needed to move into/out of/within a Control Area
EMRS2 for permitting

• All premises need a PIN
• To generate permits from EMRS2 – need trained staff
• Permit requires approval at both ends of permit in EMRS
• Template used to merge data from EMRS2 into a permitted movement document
# Permit

## Movement of Day-Old Pouls Out of a Control Area

### Permit Information

<table>
<thead>
<tr>
<th>Permit number:</th>
<th>«Permit_Name»: «movementName»</th>
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<tbody>
<tr>
<td>Issued:</td>
<td>4/14/2015</td>
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<tr>
<td>Type:</td>
<td>«M_Items_Moved» «Item_Unit» «Items_Moved», «Item_Description»</td>
</tr>
<tr>
<td>To:</td>
<td>«Destination_Premises_Prem_ID» «Destination_Premises_Prem_Name» («Destination_Premises_Prem_Address_1» «Destination_Premises_City», «Destination_Premises_State» «Destination_Premises_Zip»)</td>
</tr>
<tr>
<td>Date of movement:</td>
<td>«Date_Moved»</td>
</tr>
<tr>
<td>Email permit to:</td>
<td>«Origin_Business_e_mail»</td>
</tr>
</tbody>
</table>

### Conditions

1. Pouls will be moved in clean reusable or new paper boxes with clean reusable or new pads.
2. Trucks and trailers will be cleaned and disinfected before pouls are loaded.
3. Prior to coming onto the hatchery premises and or backing into the loading dock, the wheels and undercarriage with be sprayed with disinfectant.
4. Truck drivers must use full coverage on each farm of delivery (haftet, mask, coveralls, gloves, and disposable boot covers) and follow protocols for movement between the farm and truck.
5. Floor mats, pedals, seat, and shoes must be sprayed with disinfectant and tires and undercarriage disinfected before leaving the farm.

Authorized by: Linda C Glaser, DVM  
Board of Animal Health  
Date: 4/14/2015
March 29, 2015 – July 28, 2015*

*All response zones released

Staff time – Permitted Movements

• 5,048 hours over 17.5 weeks
  – 288 hours/week ~ 7 FTEs
  – 931 permits & 3,074 movements (excluding feed, product)
  – Feed: 553 permits & 5,587 movements

• Product: 1,399 permits & 4,628 movements
  – Entered by USDA staff
Challenges – Poultry locations
Challenges

• Verification of permit conditions
• Pre-movement isolation of birds to slaughter
• Industry signature on permits

• Verification of testing requirements - Completed
  – Coordination of sample courier, VDL testing, and results
Solutions

• Dedicated email inbox, telephone lines
• Streamlined permit request process
• Common workspace
• Determine the time needed for test results
  – Set-up VDL cut-offs for movement sample testing
  – Set-up courier deadlines
2015 Solution – Interactive Map
HPAI Preparedness

• Biosecurity is critical

WARNING

This Facility is a Biosecure Area!

Do not enter without Permission
HPAI Preparedness

• What didn’t work in 2015
  – Epi questionnaire
  – Every day PCR testing for movement
  – Resources spent on low risk products
  – Late night testing and permitting
  – Limiting map access to responders
HPAI Preparedness
2016 Solution – Interactive Map

• Deliver near real-time interactive map with several HPAI-related data layers

• Include refined security
  – Ability to include external partners
  – Ability to limit access to layers based on user type
  – 4 groups: HPAI IMT; Industry Partners; Emergency response partners; public

• Develop with “responsive design”
  – Display better on different devices (e.g., tablet/phone)
HPAI Preparedness 2016 Solution – Interactive Map

• Map functionality
  – Navigation (zoom, pan, etc)
  – Toggle layers on/off
  – Click on map to get more info
  – Measure tool
  – Base maps and aerial photography
  – Include date of last update of data
  – Export spreadsheet of commercial premises insides 10 km zones
HPAI Preparedness

2016 Solution – Interactive Map
HPAI Preparedness
2016 Solution – Interactive Map
HPAI Preparedness
2016 Solution – Interactive Map
HPAI Preparedness

• What to consider next time?
  – Set lab test schedules to manage work load over extended period of time
  – Sample protocols to include 2 PCR tests on day before movement
  – Alternative procedures for low risk movements
  – Site management plan for procedures to follow to reduce risk in a Control Area
HPAI Preparedness

If HPAI rears it’s ugly head in the future we are ready:

- We have an ICP ready to go with supplies for about 2 months.
- ICS structure has been developed with dedicated personnel assigned.
- Case Managers, appraisers and depopulation contract teams have been designated.
- Laboratory support has been designated.
- Lines of communication have been established between industry, response personnel and laboratory support.
- The plan is to have a flock put down within 24 hours of a presumptive positive Dx and composting (disposal) started the next day.
1 year ago...

Kandiyohi County is hit.
Thank you!

- 13 permits
- 30 permitted movement docs
- 9 FTEs

5+ new sites some days

Simulated Disease

MINNESOTA BOARD OF ANIMAL HEALTH