HPAI Permitted Movement: Lessons Learned and Changes Implemented

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Senior Veterinarian
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><strong>1912</strong></td>
</tr>
</tbody>
</table>

* Data from MPTL database

** company office; WEBY dealer; Feed Mill; Gov’t Agency; Laboratory; Commercial processing plant, Veterinary clinic
<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

• Permits needed to move into/out of/within a Control Area
  – Permits needed for all birds and poultry-related products (feed, manure, finished products, etc)
• Initially just commercial premises
• Later permitted movement of backyard birds to slaughter and eggs for distribution
EMRS2 for permitting

• All premises need a PIN
• Need trained staff
• Permit requires approval at both ends of permit in EMRS2
• Template used to merge data from EMRS2 into a permitted movement document
**PERMIT**

**MOVEMENT OF DAY-OLD POULTS OUT OF A CONTROL AREA**

<table>
<thead>
<tr>
<th>Permit Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit number:</td>
</tr>
<tr>
<td>Issued:</td>
</tr>
<tr>
<td>Type:</td>
</tr>
</tbody>
</table>
| From:              | «Origin_Premises_Prem_ID» «Origin_Premises_Prem_Name»  
|                    | «Origin_Premises_Prem_Address_1» «Origin_Premises_City», «Origin_Premises_State»  
|                    | «Origin_Premises_Zips» |
| To:                | «Destination_Premises_Prem_ID» «Destination_Premises_Prem_Name»  
|                    | «Destination_Premises_Prem_Address_1» «Destination_Premises_City»,  
|                    | «Destination_Premises_State» «Destination_Premises_Zips» |
| Date of movement:  | «Date_Moved» |
| Email permit to:   | «Origin_Business_e_mail» |

**Conditions**

1. Poults 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 poults are loaded.
3. Prior to coming onto the hatchery premises or backing into the loading dock, the wheels and undercarriage will be sprayed with disinfectant.
4. Truck drivers must use full coverage on each farm of delivery (hainet, 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 control areas released

Challenge
State 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
2015 Challenges

• Verification of permit conditions
• Industry signature on permits

Lessons Learned

• Future COB permitting will require a prior monitored premises status
Lessons Learned

• Monitored Premises
• All premises in a control area needing COB permits must complete a Minnesota Monitored Premises Status Questionnaire
  – Questionnaire reviewed by Disease Reporting Officer (DRO)
  – Status applied to premises in EMRS2 by DRO
MINNESOTA BOARD OF ANIMAL HEALTH

MINNESOTA MONITORED PREMISES STATUS QUESTIONNAIRE

PERSON FILLING OUT FORM:
Name: __________________________ Phone Number: __________ Email: __________________________
Street Address: __________________________ City: __________________________ State: MN Zip Code: __________

TRACEABILITY
1. What is the national Premises Identification Number (PIN) for the premises? __________________________

HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI)
2. Does this premises have a diagnosis of HPAI? Please Select _________
   If YES, please explain:
   __________________________

3. Does this premises have any unexplained clinical signs or clinical signs indicating HPAI? Please Select _________
   If YES, please explain:
   __________________________

4. Does this premises have any unexplained mortality or mortality indicating HPAI? Please Select _________
   If YES, please explain:
   __________________________

5. Does this premises have any unexplained changes in production parameters or production parameters indicating HPAI? Please Select _________
   If YES, please explain:
   __________________________

NOTE: YES answers will be referred to Incident Command for follow-up.

EPIDEMIOLOGICAL LINKS/EXPOSURES TO INFECTED PREMISES
"Contact" premises are premises with poultry that have been exposed directly or indirectly to poultry and other animals, animal products, fomites, or people from an "infected" premises.

Please view the HPAI interactive Map or contact Incident Command at ____________ to obtain the most current information about "infected" premises in order to answer the following questions. Also, please record the date and time when the status of "infected" premises was checked in order to complete this questionnaire.

Date and Time when status of "Infected" premises was checked:
Date: __________ Select Month: ________ Select Day: ________ Select Year: ________
Time: ________ Hour: ________ Min: ________ AM or PM: ________

After reviewing the HPAI interactive Map or a list for "Infected" premises, please complete the following questions to assess potential ________

09/23/2017
Lessons Learned

- Biosecurity is critical

This Facility is a Biosecure Area!

Do not enter without Permission
Lessons Learned

• Encourage producer preparedness – UMN tool
Lessons Learned

- Poultry Disease Planning - UMN tool
- Developed by Clara Brandt
- MN poultry producers

https://poultrydiseaseplanning.com/
2015 Challenges

• Pre-movement isolation of birds to slaughter

Lessons Learned

• Terminal movements of entire premises w/in 48hrs
  – Turkeys to market = 8 days
  – Broilers to market = 5 days
  – Spent hens = 5 days
  – Spent breeders = 5 days
2015 Challenges

- Verification of testing requirements

Lessons Learned

- Risk Management
  - Negligible to Low Risk
    - E.g. Washed & sanitized eggs; Liquid egg; Day-old poultry
  - Moderate to High Risk
    - E.g. Live birds to market; Transfer flocks; Fresh manure
Lessons Learned

• Risk Management
  – Negligible to Low Risk
    • Original permit – BAH approved
    • Subsequent movements under permit – Industry oversight
  – Moderate to High Risk
    • Original permit – BAH approved
    • Subsequent movements under permit – BAH approved
  – Unknown/Undetermined Risk
    • Permitting Advisory Group: Scientists, risk accessors, industry, ad hoc participants
2015 Challenges

• Coordination of sample courier to St. Paul, VDL testing, and results

Lessons Learned
Lessons Learned

• Total Project Costs
  – $8,529,000 of MN Legislative Funds

• Size:
  – 3,665 sq. feet (before)
  – 11,900 sq. feet (after)
Lessons Learned

• MPTL is a NAHLN certified branch laboratory of the MVDL
• 2 PCR technicians trained and proficiency tested
• Additional technicians are being prepared for surge capacity
• Poultry diagnostician position to be filled
Lessons Learned

- 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
- Call in USDA sooner
2015 – Interactive Map
Lessons Learned: Current 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)
Lessons Learned:
Current Interactive Map
Lessons Learned: Current 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 inside 10 km zones
  – Directions tool
Lessons Learned:
Current Interactive Map

Operational Layers
- HPAI Related Data
- Infected Premises
- Commercial Premises (EMRS) inside Current 10km Zone
- All Surveillance Zones
- All Surveillance Zones (undissolved)
- Cities and Townships intersecting with current 10 km zones
- Minnesota Counties with HPAI Infected Premises

<table>
<thead>
<tr>
<th>Infected Premises</th>
<th>Commercial Premises (EMRS) inside Current 10km Zone</th>
<th>Commercial Premises (MPFS) inside Current 10km Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Last Updated</td>
<td>EMRS PREM ID</td>
<td>MN ID</td>
</tr>
<tr>
<td>3/8/2016, 9:07 AM</td>
<td>MN 124 / 123</td>
<td>Other</td>
</tr>
<tr>
<td>3/8/2016, 5:52 AM</td>
<td>MN 124 / 123</td>
<td>Commercial Turkey Poultry Mort</td>
</tr>
<tr>
<td>3/8/2016, 5:52 AM</td>
<td>MN 124 / 123</td>
<td>Commercial Turkey Poultry Mort</td>
</tr>
<tr>
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Export to CSV
Export data to CSV file?
OK  Cancel
2015 Challenges

• Incident Command System
  – Where does permitting belong?
  – 2017: Permitting FADPreP document – unit under the Planning Section Chief

• Case Managers – manage infected premises
  – Regular turnover as new federal teams rotated
  – Difficult for producers to understand who to contact
HPAI Preparedness

• What didn’t work in 2015
  – Epi questionnaire
  – Resources spent on low risk products
  – Late night testing and permitting
  – Limiting map access to responders
HPAI Preparedness

• Plans for next time
  – Set lab test schedules to manage work load over extended period of time
  – Sample protocols to include 2 PCR tests w/in 48 hours with 1 test on day before movement (11 bird samples to replace 5 bird samples)
  – 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.