Immediate notification report

Report Summary

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Date submitted to OIE: 08/04/2015

Animal type: Terrestrial
Date of report: 08/04/2015
Disease: Highly pathogenic avian influenza
Date of start of the event: 03/04/2015
Causal Agent: Highly Pathogenic Avian Influenza
Date of confirmation of the event: 05/04/2015
Serotype(s): H5N2
Date of last occurrence: 02/2015
Reason: Reoccurrence of a listed disease
Diagnosis: Clinical, Laboratory (advanced)

Country or zone: a zone or compartment
Clinical signs: Yes

Number of reported outbreaks: submitted=1, Draft=0

Outbreak details

Province: ONTARIO - (this report - submitted)
Number of outbreaks: -
District: -
Sub-district: -
Unit Type: Farm
Location: Beachville
Latitude: 43.0907
Longitude: -80.8293
Start Date: 03/04/2015
End Date: -

Species: Birds
Measuring units: Animals
Susceptible: 45000
Cases: 9000
Deaths: 9000
Destroyed: ...
Slaughtered: ...

Affected Population: ONT-2015-NAI-001
Meat turkey commercial farm with 4 barns. One barn is affected, with approximately 75% mortality. Age of the birds in the affected barn: 16 weeks.

Outbreak summary: Total outbreaks = 1 (Submitted)
Species: Birds
Susceptible: 45000
Cases: 9000
Deaths: 9000

Epidemiology

Epidemiological comments:
Sudden high mortality (approximately 25% within 48 hours). The National Centre for Foreign Animal Disease - Canadian Food Inspection Agency (CFIA) has confirmed that the virus was a H5N2. Preliminary testing indicates that the virus is similar to other Eurasian origin H5 outbreaks currently circulating in North America and the HA0 cleavage site sequence is typical of HPAI viruses. Additional testing is underway.

This outbreak of H5N2 is not linked with the H5N2 outbreaks that affected the commercial poultry in the province of British Columbia late in 2014. One possibility is that the current H5N2 outbreak in Ontario is related to wild birds migration (Mississippi flyway). Wild waterfowls (ducks, geese, swans) were observed around the barns within the last 30 days.

The CFIA has immediately quarantined the infected farm and is implementing strict movement controls and a stamping out policy. The Canadian Notifiable Avian Influenza Surveillance System (CanNAISS) has been ongoing in Canada since 2008 and surveillance activities will be enhanced in Ontario.

Source of the outbreak(s) or origin of infection:
• Contact with wild species
• Unknown or inconclusive

Measures applied:

<table>
<thead>
<tr>
<th>Applied</th>
<th>To be applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>• stamping out</td>
<td>• disinfection of infected premises/establishment(s)</td>
</tr>
<tr>
<td>• quarantine</td>
<td></td>
</tr>
<tr>
<td>• movement control inside the country</td>
<td></td>
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<tr>
<td>• screening</td>
<td></td>
</tr>
<tr>
<td>• zoning</td>
<td></td>
</tr>
</tbody>
</table>

Animals treated:

<table>
<thead>
<tr>
<th>No</th>
<th>Vaccination Prohibited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

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### Diagnostic test results

<table>
<thead>
<tr>
<th>Laboratory Type</th>
<th>Name of Laboratory</th>
<th>Species</th>
<th>Test Type</th>
<th>Date Results Provided</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>National laboratory</td>
<td>National Centre for Foreign Animal Disease - CFIA</td>
<td>Birds</td>
<td>virus sequencing</td>
<td>07/04/2015</td>
<td>Positive</td>
</tr>
<tr>
<td>National laboratory</td>
<td>National Centre for Foreign Animal Disease - CFIA</td>
<td>Birds</td>
<td>real-time reverse transcriptase/polymerase chain reaction (RRT-PCR)</td>
<td>07/04/2015</td>
<td>Positive</td>
</tr>
<tr>
<td>Local laboratory</td>
<td>University of Guelph - Animal Health Laboratory</td>
<td>Birds</td>
<td>real-time PCR</td>
<td>05/04/2015</td>
<td>Positive</td>
</tr>
</tbody>
</table>

### Future Reporting

The event is continuing. Weekly follow-up reports will be submitted.