### Immediate notification report

Report reference: CAN-2015-NAI-001 REF OIE 17152, Report Date: 06/02/2015, Country: Canada

#### Report Summary

<table>
<thead>
<tr>
<th>Name of sender of the report</th>
<th>Telephone</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Martine Dubuc</td>
<td>+1 613 773 5722</td>
<td>Floor 3, Room 349 1400 Merivale Road, Tower 2, Ottawa, Ontario K1A 0Y9 Ottawa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position</th>
<th>Fax</th>
<th>Email</th>
<th>Date submitted to OIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIE Delegate for Canada, Chief Food Safety Officer Vice-President, Science Branch</td>
<td>+1 613 773 5797</td>
<td><a href="mailto:martine.dubuc@inspection.gc.ca">martine.dubuc@inspection.gc.ca</a></td>
<td>07/02/2015</td>
</tr>
</tbody>
</table>

#### Animal type
- Terrestrial

#### Disease
- Highly pathogenic avian influenza

#### Causal Agent
- Highly pathogenic avian influenza virus

#### Serotype(s)
- H5N1

#### Reason
- New strain of a listed disease

#### Country or zone
- a zone or compartment

#### Number of reported outbreaks
- submitted=1, Draft=0

### Outbreak details

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of outbreaks</th>
<th>District</th>
<th>Sub-district</th>
<th>Unit Type</th>
<th>Location</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRITISH COLUMBIA- (this report - submitted)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
</tbody>
</table>

#### Species
- Measuring units: Backyard
- Susceptible: Birds
- Case: 94
- Deaths: 94
- Destroyed: 81
- Slaughtered: 13

#### Affected Population
- BC-2015-NAI-NC2 Non-commercial semi-confinement chicken laying hens

#### Outbreak summary: Total outbreaks = 1 (Submitted)

<table>
<thead>
<tr>
<th>Species</th>
<th>Susceptible</th>
<th>Cases</th>
<th>Deaths</th>
<th>Destroyed</th>
<th>Slaughtered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds</td>
<td>94</td>
<td>94</td>
<td>81</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

### Epidemiology

#### Epidemiological comments
This new outbreak was detected in a backyard poultry flock in the Avian Influenza Primary Control Zone (PCZ) in the province of British Columbia (BC), in the same area as the previous outbreaks of HPAI H5N2 reported in December 2014. All susceptible animals on site were humanely destroyed.

The National Centre for Foreign Animal Disease (CFIA - Winnipeg) reported NAI H5 RRT-PCR positive results on 4 February 2015 and partial sequencing of H5 and N1 segments on 5 February.

The virus involved is a HPAI H5N1 virus with the H5 gene segment derived from the Eurasian lineage, and N1 derived from North American lineage based on partial sequence. The H5 gene segment is very similar to the reassortant H5N2 in BC and the H5 in the H5N1 reassortant virus detected in a wild green-winged teal just south of the border in Washington State, USA. In addition, the N1 gene segment is very similar to North American wild bird viruses and nearly identical, over the very small fragment sequenced this far, to the N1 in the H5N1 virus detected in a green-winged teal mentioned above.

Based on the limited partial sequence of the H5 and N1 gene segments obtained this far, it appears very likely that this is the same or a very similar virus to the recent reassortant H5N1 virus in Washington State but more sequencing will be needed to make a final conclusion. This virus has NOT been reported in any commercial poultry flock in Canada.

It is important to note this HPAI H5N1 virus is different from the strain circulating in Asia. It is a reassortant virus with the N1 from a North American wild bird virus.

The Canadian Food Inspection Agency (CFIA) continues to monitor the situation and implement strict movement restrictions in the PCZ. Ongoing surveillance is in place in all of Canada. All provinces, with the exception of the PCZ in British Columbia, remain free of Notifiable Avian Influenza in poultry.

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

Animals treated Vaccination Prohibited
No Yes

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, Canadian Food Inspection Agency</td>
<td>Birds</td>
<td>virus sequencing</td>
<td>05/02/2015</td>
<td>Positive</td>
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<tr>
<td>National laboratory</td>
<td>National Centre for Foreign Animal Disease, Canadian Food Inspection Agency</td>
<td>Birds</td>
<td>real-time reverse transcriptase/polymerase chain reaction (RRT-PCR)</td>
<td>04/02/2015</td>
<td>Positive</td>
</tr>
<tr>
<td>Local laboratory</td>
<td>Animal Health Centre, British Columbia Ministry of Agriculture</td>
<td>Birds</td>
<td>real-time reverse transcriptase/polymerase chain reaction (RRT-PCR)</td>
<td>02/02/2015</td>
<td>Positive</td>
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</tbody>
</table>

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