Immediate notification report						
	Report reference: CAN-2015-NAI-001 REF OIE	17152, Report Date: 06/02/2015, Country : Canada				
Report Summary						
Name of sender of the report	+1 613 773 5722					
Position	OIE Delegate for Canada, Chief Food Safety Officer Vice-President,	Fax	+1 613 773 5797			
	Science Branch					
Address	Floor 3, Room 349	Email	martine.dubuc@inspection.gc.ca			
	1400 Merivale Road, Tower 2					
	Ottawa, Ontario K1A 0Y9 Ottawa	Date submitted to OIE	07/02/2015			
Animal type	Terrestrial	Date of report	06/02/2015			
Disease	Highly pathogenic avian influenza	Date of start of the event	02/02/2015			
Causal Agent	Highly pathogenic avian influenza virus	Date of pre-confirmation of the	02/02/2015			

event

Laboratory (advanced)

Yes

Serotype(s)	H5N1	Diagnosis
Reason	New strain of a listed disease	Clinical signs
Country or zone	a zone or compartment	
Number of reported outbreaks	submitted= 1, Draft= 0	

Outbreak details

Province	Number of outbreaks	District	Sub-district	Unit Type	Location	Latitude	Longitude	Start Date	End Date:
BRITISH COLUMBIA-	-			Backyard	Chilliwack	49.171042	-121.95099	02/02/2015	
(this report - submitted)									
Species	Measuring units	Susceptible	Cases	Deaths	Destroyed	Slaughtered			
Birds	Animals	94	94	81	13	0			
Affected Population	BC-2015-NAI-NC2								
	Non-commercial semi-confinement chicken laying hens.								

Outbreak summary: Total outbreaks = 1 (Submitted)

Species	Susceptible	Cases	Deaths	Destroyed	Slaughtered
Birds	94	94	81	13	0

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

Applied

To be applied

Applied	To be applied			
stamping out	no planned control measures			
• quarantine				
movement control inside the country				
• screening				
• zoning				
disinfection of infected premises/establishment(s)				
Animals treated	Vaccination Prohibited			
No	Yes			
Diagnostic test results				

Laboratory Type	Name of Laboratory	Species	Test Type	Date Results Provided	Result	
National laboratory	National Centre for Foreign	Birds	virus sequencing	05/02/2015	Positive	
	Animal Disease, Canadian Food					
	Inspection Agency					
National laboratory	National Centre for Foreign	Birds	real-time reverse	04/02/2015	Positive	
	Animal Disease, Canadian Food		transcriptase/polymerase chain			
	Inspection Agency		reaction (RRT-PCR)			
Local laboratory	Animal Health Centre, British	Birds	real-time reverse	02/02/2015	Positive	
	Columbia Ministry of		transcriptase/polymerase chain			
	Agriculture		reaction (RRT-PCR)			
Future Reporting						

Future Reporting

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



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