

Canada - Influenza A viruses of high pathogenicity (Inf. with) (non-poultry including wild birds) (2017-) - Follow-up report 8

GENERAL INFORMATION

COUNTRY/TERRITORY OR ZONE	ANIMAL TYPE	DISEASE CATEGORY	EVENT ID
COUNTRY/TERRITORY	TERRESTRIAL	Listed disease	4438
DISEASE	CAUSAL AGENT	GENOTYPE / SEROTYPE / SUBTYPE	START DATE
Influenza A viruses of high pathogenicity (Inf. with) (non-poultry including wild birds) (2017-)	Highly pathogenic avian influenza virus	H5N1	2022/04/03
REASON FOR NOTIFICATION	DATE OF LAST OCCURRENCE	CONFIRMATION DATE	EVENT STATUS
Unusual host species	-	2022/05/02	On-going
END DATE	SELF-DECLARATION		
-	NO		

REPORT INFORMATION

REPORT NUMBER	REPORT ID	REPORT REFERENCE	REPORT DATE
Follow-up report 8	FUR_160276	-	2023/04/05
REPORT STATUS	NO EVOLUTION REPORT		
Validated	-		

EPIDEMIOLOGY

SOURCE OF EVENT OR ORIGIN OF INFECTION

- Contact with wild species
- Unknown or inconclusive

EPIDEMIOLOGICAL COMMENTS

We report the first case of a H5N1 highly pathogenic avian influenza (HPAI) virus in a domestic dog . Additional unusual species are reported grouped by province. The geographical marker is on the capital. For detailed and current information on high pathogenicity avian influenza cases in wildlife, please consult : http://www.cwhc-rcsf.ca/avian_influenza.php

QUANTITATIVE DATA SUMMARY

MEASURING UNIT

Animal

Species		Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
dogs (domestic)	NEW	-	1	1	-	-	-

	TOTAL -	1	1	-	-	-
striped skunk (wild)	NEW -	-	-	-	-	-
	TOTAL -	38	15	7	-	-
american mink (wild)	NEW -	-	-	-	-	-
	TOTAL -	2	1	1	-	-
harbor seal (wild)	NEW -	-	-	-	-	-
	TOTAL -	17	17	-	-	-
raccoon (northern raccoon) (wild)	NEW -	-	-	-	-	-
	TOTAL -	2	1	-	-	-
american black bear (black bear) (wild)	NEW -	-	-	-	-	-
	TOTAL -	2	1	1	-	-
red fox (wild)	NEW -	-	-	-	-	-
	TOTAL -	33	23	7	-	-
all species	NEW -	1	1	-	-	-
	TOTAL -	95	59	16	-	-

DIAGNOSTIC DETAILS

CLINICAL SIGNS

YES

METHOD OF DIAGNOSTIC

Diagnostic test

Test name	Laboratory	Species sampled	Number of outbreaks sampled	First result date	Latest result date	Result
Real-time reverse transcription polymerase chain reaction (rRT-PCR)	National Centre for Foreign Animal Disease (NCFAD), Winnipeg, Manitoba	Harbor Seal, Dogs, Striped Skunk, American Black Bear (black bear), Red Fox, American Mink, Raccoon (Northern raccoon)	32	2022/05/02	2023/04/01	Positive
Gene sequencing	National Centre for Foreign Animal Disease (NCFAD), Winnipeg, Manitoba	American Mink, Raccoon (Northern raccoon), Red Fox, American Black Bear (black bear), Striped Skunk, Harbor Seal, Dogs	32	2022/05/01	2023/04/01	Positive

CONTROL MEASURES

CONTROL MEASURES AT EVENT LEVEL

DOMESTIC ANIMALS

WILD ANIMALS

NEW OUTBREAKS

OB_117084 - ON-2023-HPAIM-002 - ONTARIO - DOG

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
ON-2023-HPAIM-002	2023/03/20	-	Clade: 2.3.4.4b - Lineage:

		Reassortment Eurasian and North American	
FIRST ADMINISTRATIVE DIVISION	SECOND ADMINISTRATIVE DIVISION	THIRD ADMINISTRATIVE DIVISION	EPIDEMIOLOGICAL UNIT
Ontario	Toronto	Toronto	Not applicable
LOCATION	Latitude, Longitude	OUTBREAKS IN CLUSTER	Measuring unit
Ontario - dog	43.65 , -79.39 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

The geographic coordinates represent the capital of the province and not the actual location of animals. The domestic dog was found eating a dead goose on March 20, 2023 . On March 22, the dog was lethargic, and on March 23 developed diarrhea and died. Highly pathogenic avian influenza was confirmed on April 1, 2023. Necropsy was completed on April 3, 2023, and showed respiratory system involvement. The virus sequenced from both the dog and the wild goose were 100% identical. Cluster: Gene segments PB2, PB1, NP and NS belonging to North American lineage and gene segments PA, HA, NA and M belonging to Eurasian lineage.

Species (latin name)	Wildlife type	Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
dogs (domestic)	NEW	-	1	1	-	-	-
	TOTAL	-	1	1	-	-	-

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
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UPDATED OUTBREAKS

OB_114383 - ON-2023-HPAIM-001 - ONTARIO - MAMMALS 2023

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
ON-2023-HPAIM-001	2023/01/01	-	Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American
FIRST ADMINISTRATIVE DIVISION	SECOND ADMINISTRATIVE DIVISION	THIRD ADMINISTRATIVE DIVISION	EPIDEMIOLOGICAL UNIT
Ontario	Toronto	Toronto	Not applicable
LOCATION	Latitude, Longitude	OUTBREAKS IN CLUSTER	Measuring unit
Ontario - mammals 2023	43.6497 , -79.3751 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

Cluster (raccoon) : Gene segments PB2, PB1, PA and NP belonging to North American lineage and gene segments HA, NA, M and NS belonging to Eurasian lineage

Species (latin name)	Wildlife type	Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
raccoon (northern	NEW	-	-	-	-	-	-
raccoon) (wild) wild	TOTAL	-	1	-	-	-	-

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED

ADDITIONAL MEASURES

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OB_106292 - QC-2022-HPAIM - QUÉBEC - MAMMALS

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
QC-2022-HPAIM	2022/05/30	2022/12/31	-
FIRST ADMINISTRATIVE DIVISION	SECOND ADMINISTRATIVE DIVISION	THIRD ADMINISTRATIVE DIVISION	EPIDEMIOLOGICAL UNIT
Québec	Communauté-Urbaine-de-Québec	Québec	Not applicable
LOCATION	Latitude, Longitude	OUTBREAKS IN CLUSTER	Measuring unit
Québec - mammals	46.8138 , -71.2183 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

Multiple regions from Québec : Côte Nord, Bas-Saint-Laurent, Gaspésie and Montérégie. We also report HPAI in a Atlantic White-Sided Dolphin from Bas St-Laurent (data not captured in WAHIS) Fully Eurasian lineage (Bears and one seal) Reassortment EU&NA (5 seals, dolphin and skunk) Cluster: Gene segments PB2, PB1, PA and NP belonging to North American lineage and gene segments HA, NA, M and NS belonging to Eurasian lineage.

Species (latin name)	Wildlife type	Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
harbor seal (wild) wild	NEW	-	-	-	-	-	-
	TOTAL	-	6	6	-	-	-
american black bear	NEW	-	-	-	-	-	-
(black bear) (wild) wild	TOTAL	-	2	1	1	-	-
striped skunk (wild) wild	NEW	-	-	-	-	-	-
	TOTAL	-	1	1	-	-	-

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED

ADDITIONAL MEASURES

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