Canada - Influenza A viruses of high pathogenicity (Inf. with) (non-poultry including wild birds) (2017-) - Follow-up report 10

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 10	FUR_161067	-	2023/06/29

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 additional H5N1 highly pathogenic avian influenza (HPAI) virus in feral cats, skunks and red foxes. 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	-	-	-	-	-	-

	TOTAL	-	1	1	-	-	-
domestic cat (wild)	NEW	-	2	2	-	-	-
	TOTAL	-	3	3	-	-	-
striped skunk (wild)	NEW	-	14	14	-	-	-
	TOTAL	-	54	31	7	-	-
american mink (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	2	1	1	-	-
harbor seal (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	17	17	-	-	-
racoon (northern raccoon) (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	3	2	-	-	-
american black bear (black bear) (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	2	1	1	-	-
red fox (wild)	NEW	-	4	4	-	-	-
	TOTAL	-	39	29	7	-	-
all species	NEW	-	20	20	-	-	-
	TOTAL	-	121	85	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
Gene sequencing	National Centre for Foreign Animal Disease (NCFAD), Winnipeg, Manitoba	American Mink, Racoon (Northern raccoon), American Black Bear (black bear), Striped Skunk, Dogs, Red Fox, Harbor Seal, Domestic cat	35	2022/05/01	2023/06/22	Positive
Real-time reverse transcription polymerase chain reaction (rRT-PCR)	National Centre for Foreign Animal Disease (NCFAD), Winnipeg, Manitoba	Dogs, Harbor Seal, American Black Bear (black bear), Striped Skunk, American Mink, Red Fox, Racoon (Northern raccoon)	35	2022/05/02	2023/06/22	Positive

CONTROL MEASURES

CONTROL MEASURES AT EVENT LEVEL	DOMESTIC ANIMALS	WILD ANIMALS

NEW OUTBREAKS

OB_121046 - NB-2023-HPAIM-001 - NEW BRUNSWICK - MAMMALS 2023

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
NB-2023-HPAIM-001	2023/04/14	-	-

FIRST ADMINISTRATIVE DIVISION	SECOND ADMINISTRATIVE DIVISION	THIRD ADMINISTRATIVE DIVISION	EPIDEMIOLOGICAL UNIT
New Brunswick	York	Fredericton	Not applicable

LOCATION	Latitude, Longitude	OUTBREAKS IN CLUSTER	Measuring unit
New Brunswick - mammals 2023	45.91 , -66.64 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

Reassortant H5N1 (Skunks) 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
red fox (wild) wild	NEW	-	1	1	-	-	-
	TOTAL	-	1	1	-	-	-

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
-	-

OB_120707 - NS-2023-HPAIM-003 - NOVA SCOTIA - MAMMALS 2023

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
NS-2023-HPAIM-003	2023/03/05	-	-

FIRST ADMINISTRATIVE DIVISION	SECOND ADMINISTRATIVE DIVISION	THIRD ADMINISTRATIVE DIVISION	EPIDEMIOLOGICAL UNIT
Nova Scotia	Halifax	Halifax	Not applicable

LOCATION	Latitude, Longitude	OUTBREAKS IN CLUSTER	Measuring unit
Nova Scotia - mammals 2023	44.66 , -63.55 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

Fully Eurasian H5N1

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

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES

-

-

UPDATED OUTBREAKS

OB_114386 - PEI-2023-HPAIM-001 - PRINCE EDWARD ISLAND - MAMMALS 2023

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
PEI-2023-HPAIM-001	2023/01/01	-	-
FIRST ADMINISTRATIVE DIVISION	**SECOND ADMINISTRATIVE DIVISION**	**THIRD ADMINISTRATIVE DIVISION**	**EPIDEMIOLOGICAL UNIT**
Prince Edward Island	Queens	Charlottetown	Not applicable
LOCATION	**Latitude, Longitude**	**OUTBREAKS IN CLUSTER**	**Measuring unit**
Prince Edward Island - mammals 2023	46.25 , -63.11 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

Fully Eurasian H5N1 (Red Fox) Reassortant H5N1 (Skunks) 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
striped skunk (wild) wild	NEW	-	5	5	-	-	-
	TOTAL	-	8	8	-	-	-
red fox (wild) wild	NEW	-	1	1	-	-	-
	TOTAL	-	1	1	-	-	-

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
-	-

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 (racoon, skunk) : Gene segments PB2, PB1, PA and NP belonging to North American lineage and gene segments HA, NA, M and NS belonging to Eurasian lineage Cluster (feral cats, red foxes) : 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	Susceptible	Cases	Deaths	Killed and	Slaughtered/ Killed for	Vaccinated

	type				Disposed of	commercial use	
domestic cat (wild) feral	NEW	-	2	2	-	-	-
	TOTAL	-	3	3	-	-	-
striped skunk (wild) wild	NEW	-	-	-	-	-	-
	TOTAL	-	1	1	-	-	-
racoon (northern raccoon) (wild) wild	NEW	-	-	-	-	-	-
	TOTAL	-	1	-	-	-	-
red fox (wild) wild	NEW	-	1	1	-	-	-
	TOTAL	-	3	3	-	-	-

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
-	-

OB_114384 - PEI-2022-HPAIM-003 - PRINCE EDWARD ISLAND - MAMMALS

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
PEI-2022-HPAIM-003	2022/11/15	2022/12/31	Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American

FIRST ADMINISTRATIVE DIVISION	SECOND ADMINISTRATIVE DIVISION	THIRD ADMINISTRATIVE DIVISION	EPIDEMIOLOGICAL UNIT
Prince Edward Island	Queens	Charlottetown	Not applicable

LOCATION	Latitude, Longitude	OUTBREAKS IN CLUSTER	Measuring unit
Prince Edward Island - mammals	46.25 , -63.11 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

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
striped skunk (wild) wild	NEW	-	-	-	-	-	-
	TOTAL	-	2	2	-	-	-

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
-	-

OB_116291 - BC-2023-HPAIM-001 - BRITISH COLUMBIA - MAMMALS 2023

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
BC-2023-HPAIM-001	2023/01/01	-	-

FIRST ADMINISTRATIVE DIVISION	SECOND ADMINISTRATIVE DIVISION	THIRD ADMINISTRATIVE DIVISION	EPIDEMIOLOGICAL UNIT
British Columbia	Capital	Victoria	Not applicable

LOCATION	Latitude, Longitude	OUTBREAKS IN CLUSTER	Measuring unit

British Columbia - mammals 2023	48.42 , -123.35 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

A total of 17 skunks were found with neurological clinical signs in the Vancouver and Richmond area. They subsequently died or were euthanised. Seuqencing results: Fully Eurasian lineage H5N1 (n=7) Reassortant H5N1 of the following 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 (n=4)

Species (latin name)	Wildlife type	Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
striped skunk (wild) wild	NEW	-	9	9	-	-	-
	TOTAL	-	11	9	2	-	-

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
-	-