United States of America - Influenza A viruses of high pathogenicity (Inf. with) (non-poultry including wild birds) (2017-) - Follow-up report 44

GENERAL INFORMATION

COUNTRY/TERRITORY OR ZONE	ANIMAL TYPE	DISEASE CATEGORY	EVENT ID
ZONE	TERRESTRIAL	Listed disease	4451

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	2022/03/30

REASON FOR NOTIFICATION	DATE OF LAST OCCURRENCE	CONFIRMATION DATE	EVENT STATUS
Unusual host species	-	2022/05/05	On-going

END DATE	SELF-DECLARATION
-	NO

REPORT INFORMATION

REPORT NUMBER	REPORT ID	REPORT REFERENCE	REPORT DATE
Follow-up report 44	FUR_166639	-	2024/03/26

REPORT STATUS	NO EVOLUTION REPORT
Validated	-

EPIDEMIOLOGY

SOURCE OF EVENT OR ORIGIN OF INFECTION

- Contact with wild species
- Unknown or inconclusive

EPIDEMIOLOGICAL COMMENTS

Highly pathogenic avian influenza (HPAI) H5N1 Eurasian lineage goose/Guangdong clade 2.3.4.4b was confirmed in samples from sick cattle collected from at least one dairy farm in Kansas and at least one dairy farm in Texas. The initial sequences represent a sporadically detected 4 gene reassortant (B3.13 per GenoFlu) descended from the previously predominant genotype B3.2 first observed in wild birds in November 2023. No markers for mammalian adaptation nor antiviral resistance were observed. This is an evolving situation - additional work and studies are in process. Federal and state agencies are moving quickly to conduct additional testing for HPAI, as well as viral genome sequencing, so that we can better understand the situation, including characterization of the HPAI strain or strains associated with these detections.

QUANTITATIVE DATA SUMMARY

MEASURING UNIT

Animal

Species		Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
coyote (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	1	-	1	-	-
cats (domestic)	NEW	-	-	-	-	-	-
	TOTAL	-	7	1	4	-	-
virginia opossum (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	4	3	1	-	-
domestic cat (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	6	1	1	-	-
goats (domestic)	NEW	-	-	-	-	-	-
	TOTAL	165	5	5	-	-	-
gray seal (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	1	1	-	-	-
bobcat (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	6	4	2	-	-
striped skunk (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	42	27	14	-	-
tiger (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	1	1	-	-	-
harbor seal (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	21	19	2	-	-
racoon (northern raccoon) (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	15	5	4	-	-
puma (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	22	22	-	-	-
bottlenose dolphin (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	1	1	-	-	-
american black bear (black bear) (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	4	1	3	-	-
brown bear (grizzly bear) (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	4	3	1	-	-
polar bear (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	-	1	-	-	-
red fox (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	85	48	19	-	-
amur leopard (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	1	1	-	-	-
fisher (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	3	2	1	-	-
north american river otter (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	1	1	-	-	-
american marten (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	1	1	-	-	-
abert's squirrel (wild)	NEW	-	-	-	-	-	-
	TOTAL	-	1	-	-	-	-
bovine (domestic)	NEW	-	9	0	0	0	0
	TOTAL	-	9	0	0	0	0

all species	NEW	-	9	0	0	0	0
	TOTAL	165	241	148	53	0	0

DIAGNOSTIC DETAILS

CLINICAL SIGNS

YES

METHOD OF DIAGNOSTIC

Clinical,
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 Veterinary Services Laboratories (NVSL), Ames, Iowa	Cats, Red Fox, Fisher, Brown bear (Grizzly Bear), Gray Seal, Domestic cat, Puma, American Black Bear (black bear), Racoon (Northern raccoon), Tiger, North American river otter, Bobcat, Harbor Seal, Bottlenose dolphin, Virginia Opossum, American marten, Amur Leopard, Striped Skunk, Polar Bear, Abert's squirrel, Coyote, Bovine, Goats	175	2022/05/05	2024/03/25	Positive

CONTROL MEASURES

CONTROL MEASURES AT EVENT LEVEL	DOMESTIC ANIMALS	WILD ANIMALS
Disinfection		Applied
Official disposal of carcasses, by-products and waste		Applied
Surveillance within the restricted zone		Applied

NEW OUTBREAKS

OB_133485 - HARTLEY NON-AVIAN 01 - HARTLEY COUNTY

OUTBREAK REFERENCE

Hartley non-avian 01

START DATE

2024/03/20

END DATE

-

DETAILED CHARACTERISATION

-

FIRST ADMINISTRATIVE DIVISION

Texas

SECOND ADMINISTRATIVE DIVISION

Hartley

THIRD ADMINISTRATIVE DIVISION

-

EPIDEMIOLOGICAL UNIT

Farm

LOCATION

Hartley County

Latitude, Longitude

36.051 , -102.515
(Approximate location)

OUTBREAKS IN CLUSTER

-

Measuring unit

Animal

AFFECTED POPULATION DESCRIPTION

Commercial dairy milking cows experiencing an unexplained morbidity event with some later-lactation cows exhibiting decreased lactation, low appetite and other clinical signs. HPAI H5N1 clade 2.3.4.4b from bovine origin samples was confirmed at the National Veterinary Services Laboratory (NVSL). Epidemiologic investigations are ongoing.

Species	Wildlife type	Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
bovine (domestic)	NEW	-	8	0	0	0	0
	TOTAL	-	8	0	0	0	0

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
-	-

OB_133490 - SEWARD NON-AVIAN 01 - SEWARD COUNTY

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
Seward non-avian 01	2024/03/21	-	-
FIRST ADMINISTRATIVE DIVISION	**SECOND ADMINISTRATIVE DIVISION**	**THIRD ADMINISTRATIVE DIVISION**	**EPIDEMIOLOGICAL UNIT**
Kansas	Seward	-	Farm
LOCATION	**Latitude, Longitude**	**OUTBREAKS IN CLUSTER**	**Measuring unit**
Seward County	37.043 , -100.921 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

Commercial dairy milking cows experiencing an unexplained morbidity event with some later-lactation cows exhibiting decreased lactation, low appetite and other clinical signs. HPAI H5N1 clade 2.3.4.4b from bovine origin samples was confirmed at the National Veterinary Services Laboratory (NVSL). Epidemiologic investigations are ongoing.

Species	Wildlife type	Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
bovine (domestic)	NEW	-	1	0	0	0	0
	TOTAL	-	1	0	0	0	0

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
-	-