United Kingdom - Highly pathogenic influenza A viruses (Inf. with)(non-poultry including wild birds)(2017-) - Immediate notification [FINAL]

GENERAL INFORMATION

COUNTRY/TERRITORY OR ZONE	ANIMAL TYPE	DISEASE CATEGORY	EVENT ID
ZONE	TERRESTRIAL	Listed disease	3598

DISEASE	CAUSAL AGENT	GENOTYPE / SEROTYPE / SUBTYPE	START DATE
Highly pathogenic influenza A viruses (Inf. with)(non-poultry including wild birds)(2017-)	Highly pathogenic avian influenza virus	H5N8	2020/11/21

REASON FOR NOTIFICATION	DATE OF LAST OCCURRENCE	CONFIRMATION DATE	EVENT STATUS
Unusual host species	-	2021/01/26	Resolved

END DATE	SELF-DECLARATION
2021/02/12	NO

REPORT INFORMATION

REPORT NUMBER	REPORT ID	REPORT REFERENCE	REPORT DATE
Immediate notification	IN_149091	-	2021/03/15

REPORT STATUS	NO EVOLUTION REPORT
Validated	-

EPIDEMIOLOGY

SOURCE OF EVENT OR ORIGIN OF INFECTION

- Contact with wild species

EPIDEMIOLOGICAL COMMENTS

Carcasses of four common seals, one grey seal and one red fox submitted to APHA laboratory during December 2020 for diagnostic PME as part of routine wildlife disease surveillance activities. Two of the Common Seal carcasses were autolysed so were safely disposed of without PME. Following histopathological examination of tissues from the fox and seals identified lesions indicative of acute systemic viral infection further laboratory testing was performed at APHA. This testing resulted in the detection of H5N8 influenza virus infection. Gene Sequencing identified this H5N8 influenza virus to be [99.9%] identical to avian-origin H5N8 viruses detected from the Mute swans that had died and been tested from this wildlife rescue centre. In November 2020, five wild Mute swans (Cygnus olor) that had been rescued and taken to a wildlife rescue centre died, were tested and found to be infected with H5N8 HPAI. Retrospective investigation of the deaths of five seals - four Common seals (Phoca vitulina) and one grey seal (Halichoerus grypus) - and one red fox (Vulpes vulpes) approximately one week later at the same wildlife rescue centre resulted in the finding of H5N8 influenza virus infection. These were all wild animals temporarily located at the wildlife rescue and rehabilitation centre. Comorbidities were not investigated, and it is possible that other factors may have influenced disease severity. Infection of mammalian species is a rare event, with no prior authenticated cases of H5N8 infection in foxes. All laboratory investigations and testing were performed at APHA. Test results confirm both the H5N8 influenza virus being of avian origin, and the source hypothesis as the Mute

swans at the rescue centre that were also H5N8 positive. There was no evidence of spread of infection from the wildlife rescue centre.

QUANTITATIVE DATA SUMMARY

MEASURING UNIT
Animal

Species		Susceptible	Cases	Deaths	Killed and Disposed of	Slaughtered/ Killed for commercial use	Vaccinated
gray seal (wild)	NEW	-	1	0	1	0	0
	TOTAL	-	1	0	1	0	0
harbor seal (wild)	NEW	-	4	1	3	0	0
	TOTAL	-	4	1	3	0	0
red fox (wild)	NEW	-	1	1	0	0	0
	TOTAL	-	1	1	0	0	0
all species	NEW	-	6	2	4	0	0
	TOTAL	-	6	2	4	0	0

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
Virus isolation	Animal and Plant Health Agency (APHA)	Red Fox	1	2021/01/25	-	Positive
Gene sequencing	Animal and Plant Health Agency (APHA)	Harbor Seal, Gray Seal, Red Fox	1	2021/01/26	-	Positive
Reverse transcription-polymerase chain reaction (RT-PCR)	Animal and Plant Health Agency (APHA)	Harbor Seal, Gray Seal, Red Fox	1	2021/01/22	-	Positive

CONTROL MEASURES

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

NEW OUTBREAKS

OB_82786 - AIV 6431 - ENGLAND

OUTBREAK REFERENCE	START DATE	END DATE	DETAILED CHARACTERISATION
AIV 6431	2020/11/21	2021/02/12	-

FIRST ADMINISTRATIVE DIVISION	SECOND ADMINISTRATIVE DIVISION	THIRD ADMINISTRATIVE DIVISION	EPIDEMIOLOGICAL UNIT
England	Surrey	Runnymede	Other

LOCATION	Latitude, Longitude	OUTBREAKS IN CLUSTER	Measuring unit
england	51.353 , -0.493 (Approximate location)	-	Animal

AFFECTED POPULATION DESCRIPTION

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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	0	0	0
	TOTAL	-	1	1	0	0	0
harbor seal (wild) wild	NEW	-	4	1	3	0	0
	TOTAL	-	4	1	3	0	0
gray seal (wild) wild	NEW	-	1	0	1	0	0
	TOTAL	-	1	0	1	0	0

METHOD OF DIAGNOSTIC

Diagnostic test

CONTROL MEASURES DIFFERENT FROM EVENT LEVEL

MEASURES NOT IMPLEMENTED	ADDITIONAL MEASURES
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