

Avian Influenza Report

Avian Influenza Report is a weekly report produced by the Surveillance Division of the Communicable Disease Branch of the Centre for Health Protection. This report highlights global avian influenza activity in humans and birds.

VOLUME 18, NUMBER 46

Reporting period: Nov 6, 2022 – Nov 12, 2022 (Week 46) (Published on November 15, 2022)

Summary

- 1. Since the previous issue of Avian Influenza Report (AIR), there were no new human cases of avian influenza A(H7N9). Since March 2013 (as of November 12, 2022), there were a total of 1568 human cases of avian influenza A(H7N9) reported globally (all were reported in the seven waves between 2013 and September 2019). The latest case was reported on April 5, 2019.
- 2. Since the previous issue of AIR, there were no new human cases of avian influenza A(H5N6). Since 2014 (as of November 12, 2022), there were 82 human cases of avian influenza A(H5N6) reported globally and 81 of them occurred in Mainland China. The latest case was reported on October 21, 2022.
- 3. Since the previous issue of AIR, there were no new human cases of avian influenza A(H5N1). From 2012 to 2022, 0 to 145 confirmed human cases of avian influenza A(H5N1) were reported to WHO annually (according to onset date).* The latest case was reported on November 3, 2022.

^{*} Since November 21, 2012, WHO only publishes information on human cases with avian influenza A(H5N1) infection in "<u>Influenza at human – animal interface: Monthly Risk Assessment Summary</u>". Only cases of human infection with H5N1 involved in events that are unusual or associated with potential increased risks will be reported in Disease Outbreak News. The latest report was published in October, 2022.

This week's highlights

(Sources: WHO, NHC, Mainland health authorities, Ministry of Agriculture of the People's Republic of China, Centre for Health Protection (CHP) and World Organisation for Animal Health (OIE))

Table 1. Hong Kong: Confirmed human cases of avian influenza A(H5N1 / H5N6 / H7N9) since previous issue of AIR

	No. of H5 cases (No. of deaths)	No. of H7N9 cases (No. of deaths)	Details
In this reporting period	0(0)	0(0)	-

Table 2. Outside Hong Kong: Confirmed human cases of avian influenza A(H5N1 / H5N6 / H7N9) since previous issue of AIR

Date of report	Country	Province / Region	District / City	Sex	Age	Condition at time of reporting	Subtype of virus
1	-	-	-	-	-	-	-

Table 3. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHC since 2003 (by onset date) §

Year	Cases	Deaths	Case fatality rate
2003	4	4	100%
2004	46	32	69.6%
2005	98	43	43.9%
2006	115	79	68.7%
2007	88	59	67.0%
2008	44	33	75.0%
2009	73	32	43.8%
2010	48	24	50.0%
2011	62	34	54.8%
2012	32	20	62.5%
2013	39	25	64.1%
2014	52	22	42.3%
2015	145	42	29.0%
2016	10	3	30.0%
2017	4	2	50.0%
2018	0	0	0%
2019	1	1	100%
2020	1	0	0%
2021	2	1	50%
2022	3	0	0%
Overall	867	456	52.7%

[§] Further breakdown by countries is available at WHO website

Table 4. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHC since 2003 (by date of reporting)

Countries /Areas	Cumulative no. of cases (December 2003 to November 2022)	No. of recent cases (July to November 2022)
Azerbaijan	8	0
Bangladesh	8	0
Cambodia	56	0
Canada	1	0
Mainland China	53#	0
Djibouti	1	0
Egypt	359	0
India	1	0
Indonesia	200	0
Iraq	3	0
Lao People's Democratic Republic	3	0
Myanmar	1	0
Nepal	1	0
Nigeria	1	0
Pakistan	3	0
Spain	2	2
Thailand	25	0
Turkey	12	0
United Kingdom	1	0
United States of America	1	0
Vietnam	127	0
Overall	867	2

^{*} Including two cases from Mainland China detected in Hong Kong

Table 5. Cumulative numbers of confirmed cases of human infection with avian influenza A(H5N6) since 2014 and since January 2022 respectively

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (82 cases in total) (as of November 12, 2022)	Cumulative no. of cases since January 2022 (24 cases in total) (as of November 12, 2022)
	Guangxi Zhuang Autonomous Region	20	9
	Guangdong Province	13	1
	Hunan Province	13	0
	Sichuan Province	12	5
Mainland	Jiangsu Province	5	3
China	Chongqing Municipality	3	0
	Anhui Province	2	0
	Fujian Province	2	1
	Jiangxi Province	3*	2
	Yunnan Province	2	0
	Zhejiang Province	2	2

been rep	H5N6 human cases have orted in the following ountries / areas	Cumulative no. of cases since 2014 (82 cases in total) (as of November 12, 2022)	Cumulative no. of cases since January 2022 (24 cases in total) (as of November 12, 2022)
	Beijing Municipality	1	0
	Guizhou Province	1	0
	Henan Province	1	1
	Hubei Province	1	0
Lao People's Democratic Republic		1	0

^{*} one case was imported from Guangdong Province

 $\it Table~6.$ Cumulative numbers of confirmed cases of human infection with avian influenza A(H7N9) since 2013 and since October 2022 respectively

Confirmed H7N9 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2013 (1568 cases in total) (as of November 12, 2022)	Cumulative no. of cases since October 2022 (0 case in total) (as of November 12, 2022)
	Zhejiang Province	310	0
	Guangdong Province	259	0
	Jiangsu Province	252	0
	Fujian Province	108	0
	Anhui Province	99	0
	Hunan Province	95	0
	Shanghai Municipality	57	0
	Jiangxi Province	52	0
	Sichuan Province	38	0
	Beijing Municipality	35	0
	Guangxi Zhuang Autonomous Region	31	0
	Hubei Province	31	0
	Hebei Province	29	0
Mainland	Henan Province	28	0
China	Shandong Province	28	0
	Guizhou Province	20	0
	Xinjiang Uygur Autonomous Region	14	0
	Chongqing Municipality	9	0
	Yunnan Province	8	0
	Shaanxi Province	7	0
	Gansu Province	6	0
	Liaoning Province	5	0
	Tianjin Municipality	5	0
	Jilin Province	3	0
	Shanxi Province	3	0
	Tibet Autonomous Region	3	0
	Inner Mongolia Autonomous Region	2	0
	Hong Kong	21*	0
	Taiwan	5*	0
	Canada	2*	0
	Macao	2#	0

Confirmed H7N9 human cases have been reported in the following countries / areas	Cumulative no. of cases since 2013 (1568 cases in total) (as of November 12, 2022)	Cumulative no. of cases since October 2022 (0 case in total) (as of November 12, 2022)
Malaysia	1*	0

^{*} All cases imported from Mainland China

Table 7. Confirmed human cases of avian influenza A infections other than avian influenza A(H5N1 / H5N6 / H7N9) reported in the past 6 months (as of November 14, 2022)

	Place of occurrence	No. of cases (No. of deaths)	Details
In this reporting period	-	0(0)	-
Previously reported cases (onset/ reported in the past 6 months)	Mainland China	4(0)	Avian influenza A(H3N8): Hunan Province: A 5-year-old boy with onset on May 9, 2022. Avian influenza A(H9N2): Guizhou Province: A 2-year-old boy with onset on May 8, 2022. Guangdong Province: A 1-year-old boy with onset on August 1, 2022. Avian influenza A(H10N3): Zhejiang Province: A 33-year-old man with onset on June 11, 2022.

Table 8. Hong Kong: Confirmed reports of avian influenza A(H5) or avian influenza A(H7N9) in poultry / wild birds / environmental samples since 2015

	No. of reports of H5 in poultry / wild birds / environmental samples	No. of reports of H7N9 in poultry / wild birds / environmental samples	Details
In this reporting period	0	0	-
Previously reported cases since 2015	20*	1#	-

^{*}The latest case imported from Mainland China

	No. of reports of H5 in poultry / wild birds / environmental samples	No. of reports of H7N9 in poultry / wild birds / environmental samples	Details
(before this reporting period)			

^{*} Carcass of a peregrine falcon found in Yuen Long on April 9, 2015 (H5N6)

Carcass of an oriental magpie robin found in Sai Kung on April 29, 2015 (H5N6)

Carcass of an oriental magpie robin found in Kwai Chung on November 17, 2015 (H5N6)

Carcass of a great egret found in Wong Tai Sin on December 31, 2015 (H5N6).

Chicken carcass found in Tuen Mun on February 14, 2016 (H5N6)

Chicken carcass found in Tai O on February 18, 2016 (H5N6)

Samples of faecal droppings collected at Mai Po Nature Reserve on November 25, 2016 (H5N6)

A sample of faecal droppings collected at Mai Po Nature Reserve on November 30, 2016 (H5N6)

A dead red-whiskered bulbul collected at Kowloon City on April 7, 2017 (H5N6)

A dead oriental magpie robin found in Tseung Kwan O on December 21, 2017 (H5N6)

A dead black-faced spoonbill found in the Hong Kong Wetland Park in Tin Shui Wai on December 21, 2017 (H5N6)

An environmental swab of a chopping board and skin swabs of a chilled duck sample taken from a fresh provision shop in Wan Chai on 2 January & 9 January, 2018 (H5N6)

An oropharyngeal swab from a batch of chilled chicken taken at a fresh provision shop in Mong Kok, reported on 23 January, 2018 (H5N6)

A black-headed gull carcass found in Ngau Hom Tsuen, Lau Fau Shan on February 8, 2018 (H5N6)

A dead crested myna found at Kun Lung Wai, Fanling reported on April 9, 2018 (H5N6)

A swab sample taken from a bird cage housing a hill myna at a pet bird shop in Yuen Po Street Bird Garden in Mong Kok on 7 April, 2018 (H5N6)

Samples of faecal droppings collected at Mai Po Nature Reserve reported on January 14, 2021 (H5N8)

Carcass of a peregrine falcon found in Wu Kai Sha reported on February 1, 2021 (H5N8)

Carcass of a black-faced spoonbill found in the Hong Kong Wetland Park in Tin Shui Wai reported on December 20, 2021 (H5N1)

Carcass of a Eurasian Curlew found in the Mai Po Nature Reserve reported on January 26, 2022 (H5N1)

Table 9. Outside Hong Kong: Confirmed avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds / environmental samples reported in this week – number of reports for various subtypes of virus

Subtype of virus	No. of reports
H5N1	41
H5N2	2

Table 10. Outside Hong Kong: Confirmed avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds / environmental samples reported in this week – details of reports

Places of Occurrence	Details	OIE Report Date
United Kingdom	Samples from poultry and birds in Wales, England and Scotland were tested positive for highly pathogenic avian influenza A(H5N1).	November 5, 2022 November 12, 2022
	Samples from poultry in Northern Ireland were tested	November 5, 2022 November 12, 2022

[#] A sample of faecal droppings of live poultry taken from a poultry stall in Yan Oi Market in Tuen Mun reported on June 5, 2016 (H7N9)

Places of Occurrence	Details	OIE Report Date			
	positive for highly pathogenic avian influenza A(H5N1).				
	Samples from birds in United Kingdom Exclusive Economic Zone were tested positive for highly pathogenic avian influenza A(H5N1).				
Colombia	Samples from birds in Bolívar, Sucre and Chocó were tested positive for highly pathogenic avian influenza A(H5N1).	November 7, 2022 November 13, 2022			
India	Samples from poultry in Kerala were tested positive for highly pathogenic avian influenza A(H5N1).	November 7, 2022			
	Samples from poultry and birds in Bács-Kiskun were tested positive for highly pathogenic avian influenza A(H5N1).	November 8, 2022 November 11, 2022			
Hungary	Samples from poultry in Csongrád-Csanád were tested positive for highly pathogenic avian influenza A(H5N1).	November 8, 2022			
	Samples from birds in Somogy, Tolna, Csongrád, Komárom-Esztergom, Fejér, Gyor-Moson-Sopron, Pest, Szabolcs-Szatmár-Bereg, Borsod-Abaúj-Zemplén, Budapest, Hajdú-Bihar, Vas and Baranya were tested positive for highly pathogenic avian influenza A(H5N1).	November 8, 2022			
Ireland	Samples from birds in Meath, Cavan, Wicklow, Dublin, Cork, Waterford, Kerry, Louth, Donegal and Mayo were tested positive for highly pathogenic avian influenza A(H5N1).	November 8, 2022			
	Samples from birds in Hokkaido were tested positive for highly pathogenic avian influenza A(H5N2).	November 8, 2022			
Japan	Samples from birds in Niigata, Miyagi, Fukui and Kanagawa were tested positive for highly pathogenic avian influenza A(H5N1).	November 9, 2022			
	Samples from poultry in Ibaraki, Okayama, Hokkaido and Kagawa were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022			
Latvia	Samples from birds in Rīgas were tested positive for highly pathogenic avian influenza A(H5N1).	November 8, 2022			
Finland	Samples from birds in Etelä-Suomen aluehallintovirasto, Lounais-Suomen aluehallintovirasto, Ahvenanmaan valtionvirasto, Länsi- ja Sisä-Suomen aluehallintovirasto	November 9, 2022			

Places of Occurrence	Details	OIE Report Date		
	and Pohjois-Suomen aluehallintovirasto were tested positive for highly pathogenic avian influenza A(H5N1).			
North Macedonia	Samples from birds in Vinitsa were tested positive for highly pathogenic avian influenza A(H5N1).	November 9, 2022		
Sweden	Samples from birds in Tomelilla, Lomma and Varberg were tested positive for highly pathogenic avian influenza A(H5N1).	November 9, 2022 November 14, 2022		
Austria	Samples from birds in Steiermark were tested positive for highly pathogenic avian influenza A(H5N1).	November 10, 2022		
Denmark	Samples from poultry in Veterinary Inspection Unit East were tested positive for highly pathogenic avian influenza A(H5N1).	November 10, 2022		
Germany	Samples from poultry in Nordrhein-Westfalen and Hessen were tested positive for highly pathogenic avian influenza A(H5N1).	November 10, 2022		
Germany	Samples from birds in Bremen, Hamburg and Bayern were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022		
Dalaium	Samples from poultry and birds in Vlaanderen were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022 November 14, 2022		
Belgium	Samples from birds in Wallonie were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022		
	Samples from poultry and birds in Québec, Alberta, Saskatchewan, Ontario and Manitoba were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022		
Canada	Samples from birds in British Columbia, Newfoundland and Labrador, Prince Edward Island, Nunavut, Yukon, Northwest Territories, New Brunswick and Nova Scotia were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022		
France	Samples from poultry and birds in Bretagne, Normandie, Occitanie, Grand Est, Île-de-France, Centre-Val de Loire, Nouvelle-Aquitaine, Hauts-de-France, Pays de la Loire and Auvergne-Rhône-Alpes were tested positive for highly pathogenic avian influenza A(H5N1).			

Places of Occurrence	Details	OIE Report Date
Italy	Samples from birds in Sardegna were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022
Norway	Samples from birds in Troms Og Finnmark, Rogaland, Trøndelag, Nordland, Vestland, Viken, Svalbard and Jan Mayen, Oslo, Norwegian Exclusive Economic Zone, Møre Og Romsdal and Agder were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022
Spain	Samples from birds in Galicia, País Vasco, Cantabria, Andalucía, Principado de Asturias, Cataluña and Castilla - La Mancha were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022
	Samples from poultry and birds in California, Oregon, Pennsylvania, Wisconsin, South Dakota, North Dakota, Minnesota, Montana, Indiana, Colorado, Utah, Arkansas, Florida, Delaware, New York, Washington, Idaho, Alaska and Michigan were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022
United States of America	Samples from poultry in Ohio, Mississippi, Iowa, Kansas, Nebraska and Nevada were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022
	Samples from birds in Wyoming, Virginia, Oklahoma, Texas, South Carolina, New Jersey, Massachusetts, Arizona, Illinois, Tennessee, Louisiana, North Carolina, Iowa, Missouri, Rhode Island, Connecticut, New Mexico and Maryland were tested positive for highly pathogenic avian influenza A(H5N1).	November 11, 2022
Moldova	Samples from poultry in Teleneşti were tested positive for highly pathogenic avian influenza A(H5N1).	November 14, 2022
Russia	Samples from poultry in Sakhalin were tested positive for highly pathogenic avian influenza A(H5N1).	November 14, 2022
Serbia	Samples from birds in Južno-Banatski and Južno-Bački were tested positive for highly pathogenic avian influenza A(H5N1).	November 14, 2022
South Africa	Samples from poultry in KwaZulu-Natal were tested positive for highly pathogenic avian influenza A(H5N2).	November 14, 2022

For cumulative reports of avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds, please refer to the <u>OIE</u> website.

Table 11. Countries / areas with documented human infection with avian influenza A(H7N9) or highly pathogenic avian influenza (including infections in humans/birds and relevant environmental samples) in the past 6 months (as of November 14, 2022)

	Human cases		Poultry cases / other related samples		Wild bird cases / other related samples	
Countries / Areas	Subtype of virus	Date of last report / onset of last reported case (Subtype in this report)	Subtype of virus	Date of last report (Subtype in this report)	Subtype of virus	Date of last report (Subtype in this report)
Albania	-	-	H5	16/08/2022 (H5N8)	-	-
Algeria	-	-	H5	07/10/2022 (H5N1)	-	-
Austria	-	-	-	-	H5	10/11/2022 (H5N1)
Belgium	-	-	Н5	14/11/2022 (H5N1)	Н5	20/07/2022* 11/11/2022 (H5N1)
Bulgaria	-	-	H5	13/06/2022*	-	-
Canada	-	-	H5	11/11/2022 (H5N1)	Н5	11/11/2022 (H5N1)
Colombia	-	-	-	-	Н5	13/11/2022 (H5N1)
Croatia	-	-	H5	10/06/2022 (H5N1)	-	-
Czech Republic	-	-	H5	16/05/2022 (H5N1)	Н5	17/05/2022 (H5N1)
Denmark	-	-	H5	10/11/2022 (H5N1)	Н5	28/10/2022 (H5N1)
Egypt	-	-	Endemic (H5)	Endemic (H5N1)	-	-
Faroe Islands	-	-	-	-	Н5	26/10/2022 (H5N1)
Finland	-	-	-	-	Н5	12/10/2022 (H5N5) 09/11/2022 (H5N1)
France	-	-	Н5	11/11/2022 (H5N1)	H5	11/11/2022 (H5N1)
Gabon	-	-	H5	19/05/2022 (H5N1)	=	-
Germany	-	-	H5	10/11/2022 (H5N1)	H5	11/11/2022 (H5N1)
Greece	-	-	-	-	Н5	06/05/2022 (H5N1)
Guinea	-	-	Н5	03/06/2022 (H5N1)	-	-
Hungary	-	-	Н5	11/11/2022 (H5N1)	Н5	08/11/2022 (H5N1)
Iceland	-	-	Н5	05/05/2022 (H5N1)	Н5	20/10/2022 (H5N1)
India	-	-	Н5	07/11/2022 (H5N1)	-	-
Indonesia	-	-	Endemic (H5)	Endemic (H5N1)	-	-
Iraq	-	-	Н5	23/06/2022 (H5N8)	-	-
Ireland	-	-	-	-	H5	08/11/2022 (H5N1)
Israel	-	-	-	-	Н5	03/05/2022 (H5N1) 29/06/2022 (H5N8)
Italy	-	-	Н5	02/11/2022 (H5N1)	Н5	11/11/2022 (H5N1)

	Human cases		Poultry cases / other related samples		Wild bird cases / other related samples	
Countries / Areas	Subtype of virus	Date of last report / onset of last reported case (Subtype in this report)	Subtype of virus	Date of last report (Subtype in this report)	Subtype of virus	Date of last report (Subtype in this report)
						21/06/2022*
Japan	-	-	H5	11/11/2022 (H5N1)	H5	08/11/2022 (H5N2)
						09/11/2022 (H5N1)
Kazakhstan	-	-	-	-	H5	04/08/2022*
Korea	-	-	H5	28/10/2022 (H5N1)	-	-
Latvia	-	-	-	-	H5	08/11/2022 (H5N1)
Lithuania	-	-	-	-	H5	28/06/2022 (H5N1)
Mainland China						
Guangxi	H5	30/07/2022 (H5N6)	-	-	-	-
Hubei	-	-	-	-	H5	16/05/2022 (H5N8)
Jiangxi	H5	02/06/2022 (H5N6)	-	-	-	-
Qinghai	-	-	-	-	H5	29/07/2022 (H5N1)
Shanxi	-	-	-	-	Н5	16/05/2022 (H5N8)
Mexico	-	-	-	-	H5	02/11/2022 (H5N1)
Moldova	-	-	H5	14/11/2022 (H5N1)	-	-
Nepal	-	-	H5	29/06/2022 (H5N1)	-	-
Netherlands	-	-	H5	04/11/2022 (H5N1)	H5	17/10/2022 (H5N1)
Nigeria	-	-	H5	26/10/2022 (H5N1)	-	-
North Macedonia	-	-	-	-	H5	09/11/2022 (H5N1)
N.			***	22/10/2022 (115)(1)	***	28/09/2022 (H5N5)
Norway	-	-	Н5	23/10/2022 (H5N1)	H5	11/11/2022 (H5N1)
Philippines	-	-	H5	15/09/2022 (H5N1)	-	-
Poland	-	-	H5	21/09/2022 (H5N1)	H5	19/07/2022 (H5N1)
Portugal	-	-	H5	01/10/2022 (H5N1)	H5	26/09/2022 (H5N1)
Reunion	-	-	Н5	13/10/2022 (H5N1)	H5	12/10/2022 (H5N1)
D'.			115	14/11/2022 (117311)	IIC	28/06/2022*
Russia	-	-	H5	14/11/2022 (H5N1)	H5	21/10/2022 (H5N1)
Serbia	-	-	Н5	04/11/2022 (H5N1)	H5	14/11/2022 (H5N1)
Slovakia	-	-	Н5	01/06/2022 (H5N1)	-	-
Slovenia	-	-	-	-	Н5	04/11/2022 (H5N1)
C 4 AC			115	28/10/2022 (H5N1)	117	, , ,
South Africa	-	-	H5	14/11/2022 (H5N2)	H5	18/10/2022 (H5N1)

	Human cases		Poultry cases / o	other related samples	Wild bird cases / other related samples	
Countries / Areas	Subtype of virus	Date of last report / onset of last reported case (Subtype in this report)	Subtype of virus	Date of last report (Subtype in this report)	Subtype of virus	Date of last report (Subtype in this report)
Spain	Н5	23/09/2022 (H5N1) 13/10/2022 (H5N1)	Н5	23/09/2022 (H5N1)	Н5	11/11/2022 (H5N1)
Sweden	-	-	-	-	Н5	14/11/2022 (H5N1)
Taiwan	-	-	Н5	29/09/2022 (H5N2)	Н5	07/06/2022 (H5N2) 04/07/2021 (H5N1)
United Kingdom	-	-	Н5	12/11/2022 (H5N1)	Н5	28/10/2022 (H5N8) 12/11/2022 (H5N1)
United States of America	-	-	Н5	26/10/2022 (H5N4) 11/11/2022 (H5N1)	Н5	11/11/2022 (H5N1)
Vietnam	Н5	20/10/2022*	Н5	26/10/2022 (H5N1)	-	-

Sources: WHO, OIE, NHC and other official websites * without further subtype information