

### 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 19, NUMBER 49**

Reporting period: Dec 3, 2023 - Dec 9, 2023 (Week 49)

(Published on Dec 12, 2023)

#### **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 Dec 9, 2023), 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 Dec 9, 2023), there were 88 human cases of avian influenza A(H5N6) reported globally and 87 of them occurred in Mainland China. The latest case was reported on September 27, 2023.
- 3. Since the previous issue of AIR, there were no new human cases of avian influenza A(H5N1). From 2013 to 2022, 0 to 145 confirmed human cases of avian influenza A(H5N1) were reported to the World Health Organization (WHO) annually (according to onset date).\* The latest case was reported on November 25, 2023.

<sup>\*</sup> 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 November, 2023.

### 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	50.0%
2022	6	1	16.7%
2023	12	4	33.3%
Overall	882	461	52.3%

<sup>§</sup> 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 (Dec 2003 to Dec 2023)	No. of recent cases (Jul to Dec 2023)
Azerbaijan	8	0
Bangladesh	8	0
Cambodia	62	4
Canada	1	0
Chile	1	0
Mainland China	55#	0
Djibouti	1	0
Ecuador	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	0
Thailand	25	0
Turkey	12	0
United Kingdom	5	2
United States of America	1	0
Vietnam	128	0
Overall	882	6

<sup>#</sup> 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 2023 respectively

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (88 cases in total) (as of Dec 9, 2023)	Cumulative no. of cases since Jan 2023 (6 cases in total) (as of Dec 9, 2023)
	Guangxi Zhuang Autonomous Region	21	1
	Guangdong Province	14	1
	Hunan Province	14	1
	Sichuan Province	13	1
Mainland	Chongqing Municipality	5	2
China	Jiangsu Province	5	0
	Jiangxi Province	3*	0
	Anhui Province	2	0
	Fujian Province	2	0
	Yunnan Province	2	0

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (88 cases in total) (as of Dec 9, 2023)	Cumulative no. of cases since Jan 2023 (6 cases in total) (as of Dec 9, 2023)
	Zhejiang Province	2	0
	Beijing Municipality	1	0
	Guizhou Province	1	0
	Henan Province	1	0
	Hubei Province	1	0
Lao People's Democratic Republic		1	0

<sup>\*</sup> one case was imported from Guangdong Province

 ${\it Table~6.} \quad \textbf{Cumulative numbers of confirmed cases of human infection with avian influenza~A(H7N9) since~2013~and since~October~2023~respectively$ 

Confirmed H7N9 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2013 (1568 cases in total) (as of Dec 9, 2023)	Cumulative no. of cases since Oct 2023 (0 case in total) (as of Dec 9, 2023)
	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 Dec 9, 2023)	Cumulative no. of cases since Oct 2023 (0 case in total) (as of Dec 9, 2023)
Malaysia	1*	0

<sup>\*</sup> 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 December 11, 2023)

	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	3(0)	Avian influenza A(H9N2):  Guangxi Zhuang Autonomous Region:  A 59-year-old man with onset on June 22, 2023.  Sichuan Province:  A 4-year-old girl with onset on August 7, 2023.  A case with onset on October 1, 2023.

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	2*	0	<ul> <li>A sample of faecal dropping collected from the Mai Po Nature Reserve tested positive for avian influenza A(H5N1) virus.</li> <li>A carcass of a Eurasian teal found in the Mai Po Nature Reserve was preliminarily tested positive for the H5 avian influenza virus. Further confirmatory tests are being conducted.</li> </ul>

<sup>\*</sup>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
Previously reported cases since 2015 (before this reporting period)	23*	1#	-

<sup>\*</sup> 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)

Environmental sample collected from Mai Po Nature Reserve on November 9, 2022 (H5N1)

Carcass of a black-faced spoonbill found in Mai Po Nature Reserve reported on November 30, 2022 (H5N1)

Black-faced spoonbill carcass found in Hong Kong Wetland Park reported on December 12, 2022 (H5N1)

Environmental sample from Mai Po Nature Reserve reported on December 8, 2023 (H5N1)

Eurasian teal carcass preliminarily tests positive for avian influenza virus, reported on December 11, 2023 (H5)

# 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)

# 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
H5	1
H5N1	30
H5N5	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
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Places of Occurrence	Details	OIE Report Date
Netherlands	Samples from poultry in Gelderland were tested positive for highly pathogenic avian influenza A(H5N1).	December 3, 2023
	Samples from birds in Saskatchewan were tested positive for highly pathogenic avian influenza A(H5) and A(H5N1).	December 5, 2023
	Samples from poultry and birds in Québec and Alberta were tested positive for highly pathogenic avian influenza A(H5N1).	December 5, 2023 December 8, 2023
Canada	Samples from birds in Northwest Territories and Ontario were tested positive for highly pathogenic avian influenza A(H5N1).	December 5, 2023
	Samples from birds in Newfoundland and Labrador were tested positive for highly pathogenic avian influenza A(H5N1) and A(H5N5).	December 5, 2023
	Samples from birds in Nova Scotia were tested positive for highly pathogenic avian influenza A(H5N5).	December 5, 2023
	Samples from poultry in British Columbia and Saskatchewan were tested positive for highly pathogenic avian influenza A(H5N1).	December 8, 2023
Croatia	Samples from poultry in Brodsko-Posavska were tested positive for highly pathogenic avian influenza A(H5N1).	December 5, 2023
Faroe Islands	Samples from birds in Streymoyar, Faeroe Exclusive Economic Zone and Eysturoyar were tested positive for highly pathogenic avian influenza A(H5N5).	December 5, 2023
	Samples from poultry and birds in Niedersachsen were tested positive for highly pathogenic avian influenza A(H5N1).	December 5, 2023 December 7, 2023 December 8, 2023
Germany	Samples from poultry in Brandenburg and Mecklenburg-Vorpommern were tested positive for highly pathogenic avian influenza A(H5N1).	December 6, 2023 December 7, 2023
	Samples from birds in Bayern, Hamburg and Baden-Württemberg were tested positive for highly pathogenic avian influenza A(H5N1).	December 8, 2023 December 11, 2023
Hungary	Samples from poultry and birds in Csongrád-Csanád were tested positive for highly pathogenic avian	December 5, 2023 December 8, 2023

Places of Occurrence	Details	OIE Report Date
	influenza A(H5N1).	
	Samples from birds in Hajdú-Bihar were tested positive for highly pathogenic avian influenza A(H5N1).	December 5, 2023
	Samples from poultry in Békés were tested positive for highly pathogenic avian influenza A(H5N1).	December 8, 2023
	Samples from poultry in Veneto were tested positive for highly pathogenic avian influenza A(H5N1).	December 6, 2023
Italy	Samples from birds in Piemonte and Emilia-Romagna were tested positive for highly pathogenic avian influenza A(H5N1).	December 6, 2023
	Samples from poultry and birds in Kagoshima were tested positive for highly pathogenic avian influenza A(H5N1).	December 6, 2023 December 11, 2023
Japan	Samples from poultry in Saitama were tested positive for highly pathogenic avian influenza A(H5N1).	December 6, 2023
	Samples from birds in Miyazaki, Hokkaido, Niigata, Saga, Tokyo, Miyagi, Toyama, Kochi and Kagawa were tested positive for highly pathogenic avian influenza A(H5N1).	December 11, 2023
Falkland Islands	Samples from birds in Falkland Islands were tested positive for highly pathogenic avian influenza A(H5N1).	December 7, 2023
Vous	Samples from poultry in Jeollanam-do were tested positive for highly pathogenic avian influenza A(H5N1).	December 7, 2023
Korea	Samples from birds in Jeollabuk-do were tested positive for highly pathogenic avian influenza A(H5N1).	December 7, 2023
United States of America	Samples from poultry and birds in South Dakota, Iowa and Montana were tested positive for highly pathogenic avian influenza A(H5N1).	December 7, 2023 December 8, 2023
	Samples from birds in Kansas, Michigan, Idaho and Colorado were tested positive for highly pathogenic avian influenza A(H5N1).	December 7, 2023
	Samples from poultry in California, Wisconsin, Arkansas, Ohio, Minnesota, Utah, Missouri, North Dakota and Georgia were tested positive for highly pathogenic avian	December 8, 2023

Places of Occurrence	Details	OIE Report Date			
	influenza A(H5N1).				
Israel	Israel Samples from poultry in HaDarom, Haifa and Jerusalem were tested positive for highly pathogenic avian influenza A(H5N1).				
Poland	Poland Samples from poultry in Zachodniopomorskie were tested positive for highly pathogenic avian influenza A(H5N1).				
United Kingdom	Samples from poultry and birds in Scotland were tested positive for highly pathogenic avian influenza A(H5N1).	December 8, 2023			
	Samples from poultry in England were tested positive for highly pathogenic avian influenza A(H5N1).	December 8, 2023			
Belgium	Belgium Samples from poultry in Vlaanderen were tested positive for highly pathogenic avian influenza A(H5N1).				
Sweden	Sweden Samples from birds in Sölvesborg were tested positive for highly pathogenic avian influenza A(H5N1).				

For cumulative reports of avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds, please refer to the OIE 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 December 11, 2023)

	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)
Argentina	-	-	Н5	30/06/2023*	H5	14/07/2023*
Austria	-	-	-	-	H5	30/11/2023 (H5N1)
Belgium	-	-	Н5	11/12/2023 (H5N1)	Н5	11/07/2023* 19/09/2023 (H5N1)
Bolivia	-	-	H5	06/09/2023 (H5N1)	=	-
Bulgaria	-	-	H5	27/11/2023*	-	-
Brazil	-	-	-	-	H5	16/11/2023 (H5N1)
Cambodia	Н5	23/11/2023 (H5N1)	H5	28/11/2023 (H5N1)	-	-
Canada	-	-	Н5	08/12/2023 (H5N1)	Н5	05/12/2023* 05/12/2023 (H5N1) 05/12/2023 (H5N5)
Chile	-	-	Н5	06/07/2023 (H5N1)	H5	28/09/2023 (H5N1)
Mainland China						
Chongqing	Н5	05/08/2023 (H5N6)	-	-	=	-
Guangxi	Н5	03/07/2023 (H5N6)	-	-	=	-
Tibet	-	-	-	-	H5	03/08/2023 (H5N1)
Colombia	-	-	-	-	H5	04/12/2023*
Costa Rica	-	-	-	-	H5	23/11/2023*
Croatia	-	-	H5	05/12/2023 (H5N1)	H5	01/12/2023 (H5N1)
Czech Republic	-	-	-	-	H5	26/07/2023 (H5N1)
Denmark	-	-	Н5	23/11/2023 (H5N1)	H5	30/11/2023 (H5N1)
Ecuador	-	-	H5	01/11/2023 (H5N1)	H5	22/11/2023 (H5N1)
Egypt	-	-	Endemic (H5)	Endemic (H5N1)	-	-
Estonia	-	-	-	-	H5	04/08/2023 (H5N1)
Falkland Islands	-	-	-	-	H5	07/12/2023 (H5N1)
Faroe Islands	-	-	-	-	H5	05/12/2023 (H5N5)
Finland	-	-	-	-	Н5	17/08/2023* 23/11/2023 (H5N1)
France	-	-	Н5	10/08/2023 (H5N1) 28/11/2023*	Н5	31/10/2023 (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)
Germany	-	-	Н5	07/12/2023 (H5N1)	Н5	24/11/2023 (H5N5) 11/12/2023 (H5N1)
Greenland	-	-	-	-	H5	16/11/2023 (H5N5)
Hong Kong Special Administrative Region	-	-	-	-	Н5	08/12/2023 (H5N1) 11/12/2023*
Hungary	-	-	Н5	08/12/2023 (H5N1)	H5	05/12/2023 (H5N1)
Iceland	-	-	-	-	H5	14/10/2023 (H5N5)
India	-	-	-	-	H5	24/10/2023 (H5N1)
Indonesia	-	-	Endemic (H5)	Endemic (H5N1)	-	-
Ireland	-	-	<del>-</del>	-	H5	15/09/2023 (H5N1)
Israel	-	-	Н5	08/12/2023 (H5N1)	H5	08/11/2023 (H5N1)
Italy	-	-	Н5	06/12/2023 (H5N1)	Н5	06/12/2023 (H5N1)
Japan	-	-	Н5	06/12/2023 (H5N1)	Н5	11/10/2023* 11/12/2023 (H5N1)
Korea	-	-	Н5	07/12/2023 (H5N1)	H5	07/12/2023 (H5N1)
Latvia	-	-	-	-	H5	15/08/2023 (H5N1)
Lithuania	-	-	-	-	H5	10/07/2023 (H5N1)
Luxembourg	-	-	-	-	Н5	11/06/2023 (H5N1)
Mexico	-	-	H5 H7	09/11/2023 (H5N1) 13/11/2023 (H7N3)	Н5	07/11/2023 (H5N1)
Mozambique	-	-	H7	17/10/2023*	_	-
Nepal	-	-	Н5	12/06/2023 (H5N1)	_	-
Netherlands	-	-	Н5	13/11/2023* 03/12/2023 (H5N1)	Н5	26/11/2023 (H5N1)
Nigeria	-	-	H5	04/09/2023 (H5N1)	-	-
Norway	-	-	Н5	16/10/2023 (H5N1)	Н5	09/11/2023* 17/11/2023 (H5N5) 20/11/2023 (H5N1)
Paraguay	-	-	-	-	H5	23/06/2023*
Peru	-	-	Н5	11/09/2023*	H5	12/10/2023*
Philippines	-	-	Н5	30/06/2023 (H5N1) 30/06/2023 (H5N6)	-	-

	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)
Poland	-	-	Н5	08/12/2023 (H5N1)	H5	17/07/2023 (H5N1)
Portugal	-	-	-	-	H5	21/11/2023 (H5N1)
Reunion	-	-	-	-	H5	18/07/2023 (H5N1)
Romania	-	-	Н5	01/11/2023 (H5N1)	H5	27/11/2023 (H5N1)
Russia	-	-	H5	16/10/2023 (H5N1)	H5	31/10/2023 (H5N1)
Serbia	-	-	-	-	H5	29/11/2023 (H5N1)
Slovenia	-	-	-	-	H5	24/11/2023 (H5N1)
South Africa			H5	28/11/2023*	H5	12/10/2023*
South Africa	-	-	H7	28/11/2023 (H7N6)	H7	03/10/2023 (H7N6)
South Georgia and the South Sandwich Islands	-	-	-	-	Н5	24/11/2023 (H5N1)
Spain	-	-	-	-	H5	01/12/2023 (H5N1)
Sweden	-	-	Н5	28/06/2023 (H5N1)	Н5	15/11/2023* 11/12/2023 (H5N1)
Switzerland	-	-	-	-	H5	13/07/2023 (H5N1)
Taiwan	-	-	H5	31/10/2023 (H5N1)	-	-
Togo	-	-	Н5	04/07/2023 (H5N1)	-	-
United Kingdom	Н5	14/07/2023 (H5N1)	Н5	08/12/2023 (H5N1)	Н5	24/11/2023 (H5N5) 08/12/2023 (H5N1)
United States of America	-	-	Н5	08/12/2023 (H5N1)	Н5	09/11/2023* 07/12/2023 (H5N1)
Uruguay	-	-	-	-	H5	27/10/2023*
Venezuela	-	-	-	-	Н5	09/10/2023 (H5N1)

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