

## 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 20, NUMBER 42**

<u>Reporting period: Oct 13, 2024 – Oct 19, 2024 (Week 42)</u> (Published on October 22, 2024)

#### **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 October 19, 2024), 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 October 19, 2024), there were 93 human cases of avian influenza A(H5N6) reported globally and 92 of them occurred in Mainland China. The latest case was reported on July 24, 2024.
- 3. Since the previous issue of AIR, there were three new human cases of avian influenza A(H5N1) in the United States of America (USA) reported by the U.S. Centers for Disease Control and Prevention. From 2014 to 2023, 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 three cases were reported on October 18, 2024.

<sup>\*</sup> Since November 21, 2012, WHO only publishes information on human cases with avian influenza A(H5N1) infection in "Influenza at human – animal interface: Monthly Risk Assessment Summary". 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 2024.

### This week's highlights

(Sources: World Health Organization (WHO), Overseas health authorities, National Health Commission (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 (WOAH; Founded as 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
18/10/2024	USA	California	Central Valley	ı	>18	Mild	H5N1
18/10/2024	USA	California	Central Valley	-	>18	Mild	H5N1
18/10/2024	USA	California	Central Valley		>18	Mild	H5N1

Table 3. Confirmed human cases of avian influenza A(H5N1) reported to WHO / Overseas health authorities / NHC since 2003 (by onset date)  $\S$ 

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%

Year	Cases	Deaths	Case fatality rate
2023	12	4	33.3%
2024	28	3	10.7%
Overall	910	464	51.0%

<sup>§</sup> Further breakdown by countries is available at WHO website

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

Countries /Areas	Cumulative no. of cases (Dec 2003 to October 2024)	No. of recent cases (June to October 2024)
Australia	1	0
Azerbaijan	8	0
Bangladesh	8	0
Cambodia	72	5
Canada	1	0
Chile	1	0
Mainland China	56#	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	0
United States of America	16	12
Vietnam	129	0
Overall	910	17

<sup>#</sup> Including two cases from Mainland China detected in Hong Kong and one case imported from Vietnam

Table 5. Cumulative numbers of confirmed cases of human infection with avian influenza A(H5N6) since 2014 and since January 2024 respectively (by date of reporting)

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (93 cases in total) (as of October 19, 2024)	Cumulative no. of cases since Jan 2024 (4 cases in total) (as of October 19, 2024)
Mainland	Guangxi Zhuang Autonomous Region	21	0
China	Sichuan Province	15	1
	Guangdong Province	14	0

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (93 cases in total) (as of October 19, 2024)	Cumulative no. of cases since Jan 2024 (4 cases in total) (as of October 19, 2024)
	Hunan Province	14	0
	Chongqing Municipality	5	0
	Jiangsu Province	5	0
	Fujian Province	4	2
	Anhui Province	3	1
	Jiangxi Province	3*	0
	Yunnan Province	2	0
	Zhejiang Province	2	0
	Beijing Municipality	1	0
	Guizhou Province	1	0
	Henan Province	1	0
	Hubei Province	1	0
Lao People	e's Democratic Republic	1	0

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

Cumulative numbers of confirmed cases of human infection with avian Table 6. influenza A(H7N9) since 2013 and since October 2024 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 October 19, 2024)	Cumulative no. of cases since Oct 2024 (0 case in total) (as of October 19, 2024)
	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
36:1 1	Guangxi Zhuang Autonomous Region	31	0
Mainland China	Hubei Province	31	0
Cillia	Hebei Province	29	0
	Henan Province	28	0
	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

Confirmed H7N9 human cases have been reported in the following countries / areas	Cumulative no. of cases since 2013 (1568 cases in total) (as of October 19, 2024)	Cumulative no. of cases since Oct 2024 (0 case in total) (as of October 19, 2024)
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
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 October 21, 2024)

	Place of occurrence	No. of cases (No. of deaths)	Details
In this reporting period	United States of America	7(0)	Avian influenza A(H5):  California:  It was reported on October 18, 2024 that 13 adult dairy farm workers have exposure to H5N1-infected cattle. However, six of them were reported as infected with avian influenza A(H5N1).
Previously reported cases (onset/ reported in the past 6 months)	Mainland China	4(0)	Avian influenza A(H9N2):  Chongqing Municipality:  A three-year-old boy with onset on September 4, 2024.  Guangdong Province:  A three-year-old girl with onset on August 12, 2024.  Guangxi Zhuang Autonomous Region:  A three-year-old boy with onset on May 2, 2024.  Guizhou Province:  A 31-year-old woman with onset on June 15, 2024.
	Ghana 1(0)		Avian influenza A(H9N2):  Upper East Region:

<sup>\*</sup>The latest case imported from Mainland China

Place of occurrence	No. of cases (No. of deaths)	Details
		<ul> <li>A child under five years old with onset on May 5, 2024. This is the first human infection with avian influenza A(H9N2) virus reported in Ghana.</li> </ul>
Mexico	1(1)	Avian influenza A(H5N2): A 59-year-old man with onset on April 17, 2024. This is the first human case of infection with an avian influenza A(H5N2) virus reported globally.
United States of America	5(0)	Avian influenza A(H5):  Colorado:  An adult male with onset on June 26, 2024, in association with an ongoing multistate outbreak of avian influenza A(H5N1) in dairy cattle.  It was reported on July 14, 2024 that four adult farm workers were involved in the depopulation of poultry with infection of avian influenza A(H5N1) virus. However, one of these four adult farm workers was reported as infected with avian influenza A(H5N1) on July 19, 2024.  It was reported on July 19, 2024 that two additional adult farm workers were involved in the depopulation of poultry with infection of avian influenza A(H5N1) virus. However, one of these two adult farm workers was reported as infected with avian influenza A(H5N1) on July 26, 2024.

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	No. of reports of H7N9 in poultry / wild birds / environmental	Details
samples	samples	

	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 (before this reporting period)	28*	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 January 2 & January 9, 2018 (H5N6)

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

A black-headed gull carcass found in Ngau Hom Tsuen, Lau Fau Shan, reported on February 9, 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 April 7, 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 reported on November 16, 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 found in the Mai Po Nature Reserve reported on December 21, 2023 (H5N1)

Pin-tailed snipe and Eurasian teal carcasses found in the Hong Kong Wetland Park reported on December 28, 2023 (H5N1)

Eurasian wigeon carcass found in the Hong Kong Wetland Park, reported on January 5, 2024 (H5N1)

Eurasian wigeon sample collected from the Hong Kong Wetland Park, reported on January 5, 2024 (H5N1)

# 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	3		
H5N1	26		
H5N5	3		

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
Bulgaria	Samples from poultry in Plovdiv were tested positive for highly pathogenic avian influenza A(H5N1).	October 14, 2024
Poland	Samples from poultry in Wielkopolskie and Dolnośląskie were tested positive for highly pathogenic avian influenza A(H5N1).	October 14, 2024 October 21, 2024
	Samples from birds in Québec were tested positive for highly pathogenic avian influenza A(H5N1).	October 15, 2024
Canada	Samples from birds in Nova Scotia were tested positive for highly pathogenic avian influenza A(H5N5).	October 15, 2024
	Samples from poultry in Saskatchewan were tested positive for highly pathogenic avian influenza A(H5N1).	October 16, 2024
	Samples from poultry in Bretagne were tested positive for highly pathogenic avian influenza A(H5).	October 15, 2024
France	Samples from birds in Bourgogne-Franche-Comté, Bretagne and Pays de la Loire were tested positive for highly pathogenic avian influenza A(H5N1).	October 21, 2024
Germany	Samples from birds in Hamburg, Thüringen and Schleswig-Holstein were tested positive for highly pathogenic avian influenza A(H5N1).	October 15, 2024 October 16, 2024
	Samples from birds in Niedersachsen were tested positive for highly pathogenic avian influenza A(H5N5).	October 15, 2024
Belgium	Samples from birds in Vlaanderen were tested positive for highly pathogenic avian influenza A(H5).	October 16, 2024
Hungary	Samples from poultry in Hajdú-Bihar, and Fejér were tested positive for highly pathogenic avian influenza A(H5N1).	October 16, 2024
	Samples from birds in Somogy, and Komárom-Esztergom were tested positive for highly pathogenic avian influenza A(H5N1).	October 18, 2024
	Samples from poultry and birds in	October 16, 2024 October 18, 2024

Places of Occurrence	Details	OIE Report Date
	Jász-Nagykun-Szolnok were tested positive for highly pathogenic avian influenza A(H5N1).	
Table	Samples from poultry and birds in Lombardia were tested positive for highly pathogenic avian influenza A(H5N1).	October 16, 2024
Italy	Samples from poultry in Emilia-Romagna were tested positive for highly pathogenic avian influenza A(H5N1).	October 16, 2024
Moldova	Samples from birds in Donduseni and Nisporeni were tested positive for highly pathogenic avian influenza A(H5N1).	October 16, 2024
Crack Domublic	Samples from poultry and birds in Plzeňský were tested positive for highly pathogenic avian influenza A(H5N1).	October 17, 2024 October 20, 2024
Czech Republic	Samples from birds in Jihočeský were tested positive for highly pathogenic avian influenza A(H5N1).	October 20, 2024
United States of America	Samples from poultry in Washington and Utah were tested positive for highly pathogenic avian influenza A(H5N1).	October 17, 2024
Austria	Samples from birds in Oberösterreich, Salzburg and Steiermark were tested positive for highly pathogenic avian influenza A(H5N1).	October 18, 2024
Japan	Samples from poultry in Hokkaido were tested positive for highly pathogenic avian influenza A(H5) and A(H5N1).	
Slovenia	Samples from birds in Podravska were tested positive for highly pathogenic avian influenza A(H5N1).	October 18, 2024
United Kingdom	Samples from birds in England were tested positive for highly pathogenic avian influenza A(H5N5).	
Israel	Samples from birds in HaMerkaz and HaZafon were tested positive for highly pathogenic avian influenza A(H5N1).	
Serbia	Samples from birds in Južno-Bački, Grad Beograd and Borski were tested positive for highly pathogenic avian influenza A(H5N1).	October 21, 2024
Slovakia	Samples from birds in Žilinský were tested positive for	October 21, 2024

Places of Occurrence	Details	OIE Report Date
	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  $\underline{WOAH}$  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 October 21, 2024)

	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)
Antarctica	-	-	=	-	H5	17/04/2024 (H5N1)
Argentina	-	-	-	-	H5	06/08/2024 (H5N1)
Australia	-	-	Н7	01/07/2024 (H7N9) 26/07/2024 (H7N8) 09/10/2024 (H7N3)	Н7	09/10/2024 (H7N8)
Austria	-	-	Н5	09/10/2024 (H5N1)	H5	18/10/2024 (H5N1)
Belgium	-	-	-	-	Н5	23/08/2024 (H5N1) 16/10/2024*
Bhutan	-	-	Н5	10/09/2024 (H5N1)	-	-
Brazil	-	-	-	-	H5	14/06/2024 (H5N1)
Bulgaria	-	-	Н5	14/10/2024 (H5N1)	-	-
Burkina Faso	-	-	Н5	04/06/2024 (H5N1)	-	-
Cambodia	Н5	11/08/2024 (H5N1)	Н5	01/08/2024 (H5N1)	=	-
Canada	-	-	Н5	16/10/2024 (H5N1)	Н5	20/09/2024* 15/10/2024 (H5N1) 15/10/2024 (H5N5)
Mainland China						
Anhui	H5	17/06/2024 (H5N6)	-	-	-	-
Fujian	H5	08/05/2024 (H5N6)	-	-	-	-
Qinghai	-	-	-	-	H5	21/05/2024 (H5N1)
Tibet	-	-	-	-	H5	05/06/2024*
Zhejiang	-	-	-	-	H5	20/06/2024 (H5N6)
Croatia	-	-	-	-	H5	08/10/2024 (H5N1)
Czech Republic	-	-	Н5	17/10/2024 (H5N1)	H5	20/10/2024 (H5N1)
Denmark	-	-	Н5	11/09/2024 (H5N1)	H5	26/09/2024 (H5N1)
Ecuador	-	-	Н5	09/04/2024 (H5N1)	-	-
Egypt	-	-	Endemic (H5)	Endemic (H5N1)	-	-
Faroe Islands	-	-	-	-	Н5	08/10/2024 (H5N5)
Finland	-	-	-	-	Н5	04/06/2024 (H5N1)
France	-	-	Н5	15/10/2024*	H5	21/10/2024 (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)
Gabon	-	-	Н5	21/06/2024 (H5N1)	-	-
Germany	_	_	H5	27/09/2024 (H5N1)	Н5	15/10/2024 (H5N5)
Comming			Н7	03/07/2024 (H7N5)		16/10/2024 (H5N1)
Hungary	-	-	H5	16/10/2024 (H5N1)	Н5	18/10/2024 (H5N1)
Iceland	-	-	-	-	Н5	09/10/2024 (H5N5)
India	-	-	H5	13/09/2024 (H5N1)	-	-
Indonesia	-	-	Endemic (H5)	Endemic (H5N1)	-	-
Iraq	-	-	-	-	Н5	29/05/2024 (H5N1)
Israel	-	-	H5	18/09/2024 (H5N1)	Н5	19/10/2024 (H5N1)
Italy	-	-	Н5	16/10/2024 (H5N1)	Н5	16/10/2024 (H5N1)
Japan	-	-	Н5	21/10/2024 (H5N1)	Н5	11/06/2024 (H5N1) 11/06/2024 (H5N5) 04/10/2024*
Korea	-	-	H5	10/06/2024 (H5N1)	-	-
Latvia	-	-	-	-	Н5	08/04/2024 (H5N1)
Mexico	_	-	H5	11/04/2024 (H5N1)	Н5	28/08/2024 (H5N1)
			H7	21/08/2024 (H7N3)		, , ,
Moldova	-	-	-	-	Н5	16/10/2024 (H5N1)
Netherlands	-	-	-	-	Н5	03/04/2024 (H5N1)
Nigeria	-	-	H5	11/09/2024 (H5N1)	-	-
Norway	-	-	-	-	H5	08/04/2024* 18/06/2024 (H5N1)
Peru	-	-	H5	08/07/2024*	Н5	09/10/2024*
Philippines	-	-	H5	04/04/2024 (H5N1)	-	-
Poland	-	-	H5	21/10/2024 (H5N1)	Н5	25/09/2024 (H5N1)
Portugal	-	-	-	-	Н5	27/08/2024 (H5N1)
Romania	-	-	H5	09/05/2024 (H5N1)	-	-
Serbia	-	-	-	-	Н5	21/10/2024 (H5N1)
Slovakia	-	-	-	-	Н5	21/10/2024 (H5N1)
Slovenia	-	-	-	-	Н5	18/10/2024 (H5N1)
South Africa	_	-	H5	17/09/2024*	Н5	28/05/2024*
	-		H7	08/10/2024 (H7N6)		20/03/2024

	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)
South Georgia and the	-	-	=	-	Н5	18/04/2024 (H5N1)
South Sandwich Islands						
Spain	-	-	-	-	H5	07/10/2024 (H5N1)
Sweden	-	-	Н5	08/04/2024 (H5N1)	-	-
Taiwan	-	-	H5	18/09/2024 (H5N1)	H5	09/04/2024 (H5N1)
Timor-Leste	-	-	-	-	H5	15/04/2024 (H5N1)
Ukraine	-	-	-	-	Н5	24/09/2024* 25/09/2024 (H5N1)
United Kingdom	-	-	-	-	Н5	19/04/2024 (H5N1) 18/10/2024 (H5N5)
United States of America	Н5	18/10/2024* 18/10/2024 (H5N1)	Н5	17/10/2024 (H5N1)	Н5	10/10/2024 (H5N1)

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