

## 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 29**

Reporting period: July 14, 2024 – July 20, 2024 (Week 29) (Published on July 23, 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 July 20, 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 July 20, 2024), there were 92 human cases of avian influenza A(H5N6) reported globally and 91 of them occurred in Mainland China. The latest case was reported on June 14, 2024.
- 3. Since the previous issue of AIR, there was one new human case of avian influenza A(H5N1) from the United States of America 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 case was reported on July 19, 2024.

<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 <u>report</u> was published in June, 2024.

### This week's highlights

(Sources: World Health Organization (WHO), 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
19/07/2024	United States of America	Colorado	Weld County	-	> 18	Recovering from illness	H5N1

Table 3. Confirmed human cases of avian influenza A(H5N1) reported to WHO / 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%
2023	12	4	33.3%
2024	14	2	14.3%
Overall	896	463	51.7%

<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 July 2024)	No. of recent cases (Mar to July 2024)
Australia	1	1
Azerbaijan	8	0
Bangladesh	8	0
Cambodia	69	2
Canada	1	0
Chile	1	0
Mainland China	56#	1
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	5	4
Vietnam	129	1
Overall	896	9

<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 (92 cases in total) (as of July 20, 2024)	Cumulative no. of cases since Jan 2024 (3 cases in total) (as of July 20, 2024)
	Guangxi Zhuang Autonomous Region	21	0
	Sichuan Province	15	1
	Guangdong Province	14	0
Mainland	Hunan Province	14	0
China	Chongqing Municipality	5	0
	Jiangsu Province	5	0
	Fujian Province	4	2
	Jiangxi Province	3*	0

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (92 cases in total) (as of July 20, 2024)	Cumulative no. of cases since Jan 2024 (3 cases in total) (as of July 20, 2024)
	Anhui Province	2	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

Table 6. 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 July 20, 2024)	Cumulative no. of cases since Oct 2023 (0 case in total) (as of July 20, 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
	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

Confirmed H7N9 human cases have been reported in the following countries / areas	Cumulative no. of cases since 2013 (1568 cases in total) (as of July 20, 2024)	Cumulative no. of cases since Oct 2023 (0 case in total) (as of July 20, 2024)
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 July 22, 2024)

	Place of occurrence	No. of cases (No. of deaths)	Details
	Mainland China	1(0)	Avian influenza A(H9N2):  Guizhou Province:  A 31-year-old woman with onset on June 15, 2024.
In this reporting period	United States of America	2(0)	Avian influenza A(H5):  Colorado:  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.
Previously reported cases (onset/ reported in the past 6 months)	Mainland China	6(0)	Avian influenza A(H9N2):  Anhui Province:  A six-year-old boy with onset on January 2, 2024.  Guangxi Zhuang Autonomous Region:  A three-year-old boy with onset on February 2, 2024.  A three-year-old boy with onset on May 2, 2024.  Jiangxi Province:  A 11-year-old boy with onset on February 11, 2024.  Guangdong Province:  A three-year-old boy with onset on February 17, 2024.  Avian influenza A(H10N3):  Yunnan Province:

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

Place of occurrence	No. of cases (No. of deaths)	Details	
		<ul> <li>A 51-year-old man with onset on February 28, 2024.</li> </ul>	
Hong Kong Special Administrative Region	1(0)	Avian influenza A(H9N2):  A 22-month-old girl with onset on February 15, 2024.	
India	1(0)	Avian influenza A(H9N2):  West Bengal state:  A four-year-old boy with onset on January 26, 2024.	
Vietnam	1(0)	Avian influenza A(H9N2):  Tiền Giang Province:  A 37-year-old man with onset on March 10, 2024.	
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	4(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.	

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 (before this reporting period)	28*	1#	-

\* 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	1
H5N1	6

Subtype of virus	No. of reports		
H5N5	1		
H7N3	1		
H7N8	1		

 ${\it Table~10.} \ \ \, \textbf{Outside~Hong~Kong:~Confirmed~avian~influenza~A(H5)~or~other~highly~pathogenic~avian~influenza~in~poultry~/~wild~birds~/~environmental~samples~reported~in~this~week~-~details~of~reports$ 

Places of Occurrence	Details	OIE Report Date
Const	Samples from birds in Newfoundland and Labrador, Nova Scotia, Québec and Prince Edward Island were tested positive for highly pathogenic avian influenza A(H5N1) and A(H5N5).	July 15, 2024
Canada	Samples from birds in Manitoba, British Columbia, New Brunswick, Saskatchewan, Alberta and Ontario were tested positive for highly pathogenic avian influenza A(H5N1).	July 15, 2024
Peru	Samples from birds in Cusco were tested positive for highly pathogenic avian influenza A(H5).	July 16, 2024
	Samples from poultry and birds in Iowa were tested positive for highly pathogenic avian influenza A(H5N1).	July 18, 2024
United States of America	Samples from poultry in Colorado, Michigan, Minnesota and New Mexico were tested positive for highly pathogenic avian influenza A(H5N1).	July 18, 2024
	Samples from birds in Idaho and Maine were tested positive for highly pathogenic avian influenza A(H5N1).	July 18, 2024
Australia	Samples from poultry in Victoria were tested positive for highly pathogenic avian influenza A(H7N3).	July 19, 2024
Australia	Samples from poultry in New South Wales were tested positive for highly pathogenic avian influenza A(H7N8).	July 19, 2024
Bhutan	Samples from poultry in Samtse were tested positive for highly pathogenic avian influenza A(H5N1).	July 19, 2024
France	Samples from birds in Normandie and Bretagne were tested positive for highly pathogenic avian influenza A(H5N1).	July 19, 2024
Taiwan	Samples from poultry in Yunlin County were tested	July 19, 2024

Places of Occurrence	Details	OIE Report Date	
	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  $\underline{WOAH}$  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 July 22, 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	-	-	-	-	Н5	12/03/2024* 17/04/2024 (H5N1)
Australia	Н5	25/02/2024 (H5N1)	Н7	01/07/2024 (H7N9) 19/07/2024 (H7N3) 19/07/2024 (H7N8)	Н7	12/07/2024 (H7N8)
Austria	-	-	-	-	H5	19/04/2024 (H5N1)
Belgium	-	-	Н5	02/01/2024 (H5N1)	Н5	28/03/2024 (H5N1) 31/01/2024*
Bhutan	-	-	Н5	19/07/2024 (H5N1)	-	-
Bosnia and Herzegovina	-	-	-	-	H5	19/02/2024 (H5N1)
Brazil	-	-	-	-	Н5	14/06/2024 (H5N1)
Bulgaria	-	-	Н5	26/01/2024* 12/05/2024 (H5N1)	-	-
Burkina Faso	-	-	Н5	04/06/2024 (H5N1)	-	-
Cambodia	Н5	08/07/2024 (H5N1)	Н5	09/07/2024 (H5N1)	-	-
Canada	-	-	Н5	04/07/2024 (H5N1)	Н5	12/04/2024* 15/07/2024 (H5N1) 15/07/2024 (H5N5)
Chile	-	-	-	-	H5	26/01/2024 (H5N1)
Mainland China						
Fujian	H5	08/05/2024 (H5N6)	-	-	-	-
Guangxi	H5	26/03/2024 (H5N1)	-	-	-	-
Qinghai	-	-	-	-	H5	21/05/2024 (H5N1)
Tibet	-	-	-	-	H5	05/06/2024*
Zhejiang	-	-	-	-	H5	20/06/2024 (H5N6)
Costa Rica	-	-	=	-	H5	11/01/2024*
Croatia	-	-	-	-	H5	19/01/2024 (H5N1)
Cyprus	-	-	-	-	H5	19/02/2024 (H5N1)
Czech Republic	-	-	Н5	18/04/2024 (H5N1)	H5	20/03/2024 (H5N1)
Denmark	-	-	Н5	20/02/2024 (H5N1)	H5	15/04/2024 (H5N1)
Ecuador	-	-	Н5	09/04/2024 (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)
Egypt	-	-	Endemic (H5)	Endemic (H5N1)	-	-
Falkland Islands	-	-	-	-	Н5	08/02/2024 (H5N1)
Finland	-	-	-	-	Н5	19/01/2024* 04/06/2024 (H5N1)
France	-	-	Н5	18/01/2024*	Н5	06/02/2024* 19/07/2024 (H5N1)
Gabon	-	-	Н5	21/06/2024 (H5N1)	=	-
			H5	17/05/2024 (H5N1)		01/03/2024 (H5N5)
Germany	-	-	Н7	03/07/2024 (H7N5)	Н5	22/03/2024 (H5N8) 28/06/2024 (H5N1)
Hong Kong Special Administrative Region	-	-	-	-	Н5	05/01/2024 (H5N1)
Hungary	-	-	Н5	23/05/2024 (H5N1)	Н5	19/03/2024 (H5N1)
India	-	-	Н5	24/05/2024 (H5N1)	-	-
Indonesia	-	-	Endemic (H5)	Endemic (H5N1)	-	-
Iraq	-	-	-	-	Н5	29/05/2024 (H5N1)
Israel	-	-	-	-	Н5	22/02/2024 (H5N1)
Italy	-	=	Н5	28/02/2024 (H5N1)	Н5	06/03/2024 (H5N1)
Japan	-	-	Н5	15/03/2024 (H5N6) 11/06/2024 (H5N1)	Н5	11/06/2024 (H5N1) 11/06/2024 (H5N5)
Kazakhstan	-	-	-	-	Н5	03/01/2024*
Korea	-	-	Н5	19/02/2024 (H5N6) 10/06/2024 (H5N1)	Н5	19/02/2024 (H5N1) 19/02/2024 (H5N6)
Latvia	-	-	-	-	Н5	08/04/2024 (H5N1)
Lithuania	-	-	-	-	Н5	13/02/2024 (H5N1)
Mexico	-	-	H7 H5	22/02/2024 (H7N3) 11/04/2024 (H5N1)	Н5	12/03/2024 (H5N1) 25/03/2024 (H5N2)
Moldova	_	-	Н5	23/02/2024 (H5N1)	Н5	09/04/2024 (H5N1)
Netherlands	-	-	Н5	09/01/2024 (H5N1)	H5	03/04/2024 (H5N1)
Nigeria	-	-	Н5	05/03/2024 (H5N1)	=	-
Norway	-	-	Н5	23/02/2024 (H5N1)	Н5	20/02/2024 (H5N5) 08/04/2024* 18/06/2024 (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)
Peru	-	-	H5	08/07/2024*	Н5	16/07/2024*
Philippines	-	-	H5	04/04/2024 (H5N1)	-	-
Poland	-	-	Н5	25/03/2024 (H5N1)	Н5	10/07/2024 (H5N1)
Romania	-	-	H5	09/05/2024 (H5N1)	Н5	29/03/2024 (H5N1)
Russia	-	-	Н5	16/02/2024 (H5N1)	-	-
Slovakia	-	-	H5	04/03/2024 (H5N1)	-	-
Slovenia	-	-	-	-	Н5	26/04/2024 (H5N1)
South Africa		-	Н5	28/05/2024*	Н5	28/05/2024*
South Africa	-		H7	24/06/2024 (H7N6)	H7	20/02/2024 (H7N6)
South Georgia and the South Sandwich Islands	-	-	-	-	Н5	18/04/2024 (H5N1)
Spain	-	-	-	-	H5	28/06/2024 (H5N1)
Sweden	-	-	Н5	20/03/2024* 08/04/2024 (H5N1)	Н5	07/03/2024* 18/03/2024 (H5N1)
Switzerland	-	-	-	-	Н5	01/02/2024 (H5N1)
Taiwan	-	-	Н5	19/07/2024 (H5N1)	Н5	09/04/2024 (H5N1)
Timor-Leste	-	-	-	-	Н5	15/04/2024 (H5N1)
Ukraine	-	-	-	-	Н5	15/04/2024 (H5N1)
United Kingdom	-	-	Н5	15/02/2024 (H5N1)	Н5	19/04/2024 (H5N1) 03/05/2024 (H5N5)
United States of America	Н5	19/07/2024* 19/07/2024 (H5N1)	Н5	18/07/2024 (H5N1)	Н5	18/07/2024 (H5N1)
Vietnam	Н5	11/03/2024 (H5N1)	-	-	-	-

Sources: WHO, WOAH, NHC and other official websites

<sup>\*</sup> without further subtype information