

Avian Influenza Report



Avian Influenza Report is a weekly report produced by the Respiratory Disease Office, Centre for Health Protection of the Department of Health. This report highlights global avian influenza activity in humans and birds.

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Summary

1. Since the previous issue of Avian Influenza Report (AIR), there were 29 new human cases of avian influenza A(H7N9) reported by Mainland China health authorities in Beijing (7 cases), Hunan (5 cases), Hebei (4 cases), Sichuan (3 cases), Shandong (2 cases), Zhejiang (2 cases), Anhui (1 case), Gansu (1 case), Guangxi (1 case), Jiangxi (1 case), Jilin (1 case) and Liaoning (1 case). Since March 2013 (as of April 24, 2017), there were a total of 1422 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of April 24, 2017), 616 cases have been recorded in Mainland China.
2. Since the previous issue of AIR, there were no new human cases of avian influenza A(H5N6). Since 2014 (as of April 22, 2017), 16 human cases of avian influenza A(H5N6) were reported globally and all occurred in Mainland China. The latest case was reported on December 1, 2016.
3. Since the previous issue of AIR, there were no new human cases of avian influenza A(H5N1). From 2011 to 2016, 10 to 145 confirmed human cases of avian influenza A(H5N1) were reported to the World Health Organization (WHO) annually (according to onset date). In 2017, there have been so far two cases in Egypt.*

* 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 April, 2017.

This week's highlights

(Sources: WHO, National Health and Family Planning Commission (NHFPC), 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(H5) / avian influenza A(H7N9)

	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 cases of human infection with avian influenza A(H7N9)

New cases in Mainland China since previous issue of AIR

Province / Region / Municipality	City / District / Area	Age (years)	Sex	Clinical condition at time of reporting	Date of report
Hebei	Langfang	67	M	Fatal	18/04/2017
Beijing	Imported from Shandong	56	M	Severe pneumonia	21/04/2017
Hunan	Yueyang	65	M	Severe pneumonia	21/04/2017
Hunan	Changsha	55	F	Fatal	21/04/2017
Anhui	Imported from Tianjin	50	M	Fatal	21/04/2017
Shandong	Weifang	44	M	Fatal	21/04/2017
Beijing	Daxing District	34	M	Pneumonia	21/04/2017
Beijing	Imported from Hebei	41	F	Severe pneumonia	21/04/2017
Jiangxi	Imported from Fujian	53	F	Fatal	21/04/2017
Hebei	Chengde	70	M	Fatal	21/04/2017
Hebei	Chengde	50	F	Severe pneumonia	21/04/2017
Hunan	Yongzhou	44	F	Under investigation	21/04/2017
Beijing	Imported from Hebei	36	F	Severe pneumonia	21/04/2017
Hunan	Yueyang	47	F	Severe pneumonia	21/04/2017
Zhejiang	Ningbo	72	M	Pneumonia	21/04/2017
Shandong	Weihai	46	M	Pneumonia	21/04/2017
Zhejiang	Ningbo	63	M	Severe pneumonia	21/04/2017
Hebei	Chengde	58	F	Fatal	21/04/2017
Gansu	Zhangye	43	F	Mild	21/04/2017
Beijing	Tongzhou District	72	M	Fatal	21/04/2017
Hunan	Yueyang	79	M	Pneumonia	21/04/2017
Sichuan	Chengdu	60	M	Severe pneumonia	21/04/2017
Sichuan	Suining	54	M	Severe pneumonia	21/04/2017
Beijing	Changping District	55	F	Severe pneumonia	21/04/2017
Guangxi	Nanning River	70	M	Mild	21/04/2017
Beijing	Shunyi District	64	M	Severe pneumonia	21/04/2017
Liaoning	Shenyang	61	F	Severe pneumonia	21/04/2017
Sichuan	Chengdu	53	M	Severe pneumonia	21/04/2017
Jilin	Tonghua	34	M	Critical	24/04/2017

Table 3. Cumulative numbers of confirmed cases of human infection with avian influenza A(H7N9) since 2013 and since October 2016 respectively

Confirmed H7N9 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2013 (1422 cases in total) (as of April 24, 2017)	Cumulative no. of cases since October 2016 (624 cases in total) (as of April 24, 2017)
Mainland China	Zhejiang Province	306	87
	Guangdong Province	256	61
	Jiangsu Province	242	138
	Fujian Province	105	31
	Anhui Province	93	57
	Hunan Province	89	55
	Shanghai Municipality	57	6
	Jiangxi Province	52	38
	Guangxi Zhuang Autonomous Region	28	25
	Hubei Province	28	26
	Beijing Municipality	22	13
	Henan Province	21	17
	Shandong Province	20	11
	Guizhou Province	17	15
	Sichuan Province	17	17
	Xinjiang Uygur Autonomous Region	10	-
	Hebei Province	8	4
	Liaoning Province	4	3
	Chongqing Municipality	3	3
	Jilin Province	3	1
	Tianjin Municipality	3	1
Tibet Autonomous Region	3	3	
Gansu Province	2	2	
Yunnan Province	2	2 [@]	
Hong Kong		21 [*]	5
Taiwan		5 [*]	1
Canada		2 [*]	-
Macao		2	2 [#]
Malaysia		1 [*]	-

[@] Cases imported from Jiangxi

^{*} All cases imported from Mainland China

[#] The latest case imported from Mainland China

Table 4. Outside Hong Kong: Confirmed cases of human infection with avian influenza A(H5N6)

	Place of occurrence	No. of cases (No. of deaths)	Province / Region / Municipality	City / District / Area	Age (years)	Sex	Condition at time of reporting	Date of report
New cases	-	0(0)	-	-	-	-	-	-

Table 5. Cumulative number of confirmed cases of human infection with avian influenza A(H5N6) since 2014 and since November 2016 respectively

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (16 cases in total) (as of April 22, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of April 22, 2017)
Mainland China	Guangdong Province	6	-
	Hunan Province	3	1
	Yunnan Province	2	-
	Anhui Province	1	-
	Hubei Province	1	-
	Jiangxi Province	1*	-
	Sichuan Province	1	-
	Guangxi Zhuang Autonomous Region	1	1

* imported case from Guangdong

Table 6. Outside Hong Kong: Confirmed human cases of avian influenza A(H5N1) since previous issue of AIR

	Place of occurrence	No. of cases (No. of deaths)	Details
New cases	-	0(0)	-

For the cumulative no. of human cases by place, please refer to [WHO](#) website.

Table 7. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHFPC since 2003 (by onset date) §

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Overall
Cases	4	46	98	115	88	44	73	48	62	32	39	52	145	10	2	858
Deaths	4	32	43	79	59	33	32	24	34	20	25	22	42	3	1	453
Case fatality rate	100%	69.6%	43.9%	68.7%	67.0%	75.0%	43.8%	50.0%	54.8%	62.5%	64.1%	42.3%	29.0%	30.0%	50%	52.8%

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

Table 8. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHFPC since 2003 (by date of reporting)

Country	Cumulative no. of cases (December 2003 to April 2017)	No. of recent cases [^] (January 2017 to April 2017)
Azerbaijan	8	0
Bangladesh	8	0
Cambodia	56	0
Canada	1	0
Mainland China	53	0
Djibouti	1	0
Egypt	358	2
Indonesia	199	0
Iraq	3	0
Laos	2	0
Myanmar	1	0
Nigeria	1	0
Pakistan	3	0
Thailand	25	0
Turkey	12	0
Vietnam	127	0
Overall	858	2

[^] Details of recent cases (January 2017 to April 2017) are listed in *Table 9*.

Table 9. Details of the recent confirmed human cases of avian influenza A(H5N1) reported to WHO (January 2017 to April 2017) (Sources: WHO)

Date of report	Country	Province / Region	District / City	Sex	Age	Outcome at the time of reporting
16/03/2017	Egypt	Menia Governorate	-	M	4	Recovered
		Fayoum Governorate	-	M	48	Died

Table 10. Outside Hong Kong: Confirmed human cases of avian influenza A infections other than avian influenza A(H5N1 / H5N6 / H7N9) reported in the past 6 months

	Place of occurrence	No. of cases (No. of deaths)	Details
In this reporting period	-	-	-
Previously reported cases (onset in the past 6 months)	Mainland China	2(0)	Avian influenza A(H9N2): <ul style="list-style-type: none"> ▫ Guangdong Province: A 7-month-old girl with onset on December 11, 2016. ▫ Gansu Province: An 11-month-old boy with onset on February 6, 2017.
	United States of America	1(0)	Avian influenza A(H7N2): <ul style="list-style-type: none"> ▫ United States of America: A human case reported on January 16, 2017.

Table 11. Hong Kong: Confirmed reports of avian influenza A(H5) or avian influenza A(H7N9) in poultry / wild birds / environmental samples since 2014

	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 2014	9*	3 [#]	-

- * [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 \(H5N6\)](#)
- # [Samples from a batch of live chickens imported from a registered poultry farm in Shunde District of Foshan in Guangdong were tested positive for H7N9 virus on January 27, 2014.](#)
[Samples from a consignment of live chickens from a registered farm in Huicheng District of Huizhou in Guangdong were tested positive for H7N9 virus on December 30, 2014.](#)
[A sample of faecal droppings of live poultry taken from a poultry stall in Yan Oi Market in Tuen Mun was tested positive for H7N9 virus on June 5, 2016.](#)

Table 12. 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	1
H5N6	2
H5N8	3

Table 13. 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
Korea	Samples from poultry in Jeollabuk-do, Gyeonggi-do, Chungcheongnam-do, Chungcheongbuk-do, Jeollanam-do and Gangwon-do were tested positive for highly pathogenic avian influenza A (H5N6).	April 14, 2017
Japan	Samples from birds in Kagoshima, Tottori, Miyagi, Iwate, Akita, Hokkaido, Niigata, Aichi, Ibaraki, Fukushima, Aomori, Mie, Kyoto, Nagasaki, Hyogo, Shiga, Yamaguchi, Oita, Tochigi, Ishikawa, Tokyo and Gifu were tested positive for highly pathogenic avian influenza A (H5N6).	April 18, 2017
Romania	Samples from birds in București were tested positive for highly pathogenic avian influenza A (H5N8).	April 18, 2017
Vietnam	Samples from poultry in Can Tho were tested positive for highly pathogenic avian influenza A (H5N1).	April 19, 2017
Russia	Samples from poultry in Rostovskaya Oblast were tested positive for highly pathogenic avian influenza A (H5N8).	April 20, 2017
Slovakia	Samples from poultry in Kosice were tested positive for highly pathogenic avian influenza A (H5N8).	April 21, 2017

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 14. 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 recent 6 months (as of April 24, 2017)

Country/ Area	Human cases		Poultry cases / environmental samples		Wild bird cases / others	
	Subtype of virus	Date of last report	Subtype of virus	Date of last report (Subtype in this report)	Subtype of virus	Date of last report (Subtype in this report)
Algeria	-	-	-	-	H7	02/11/2016 (H7N1)
Austria	-	-	H5	06/04/2017 (H5N8)	H5	06/04/2017 (H5N8)
Bangladesh	-	-	H5	11/04/2017 (H5) *	H5	21/01/2017 (H5N1)
Belgium	-	-	-	-	H5	28/03/2017 (H5N8)
Bhutan	-	-	H5	24/10/2016 (H5N1)	-	-
Bosnia and Herzegovina	-	-	H5	13/02/2017*	H5	28/03/2017 (H5N8)
Bulgaria	-	-	H5	24/02/2017 (H5N8)	H5	20/02/2017*
Cambodia	-	-	H5	31/01/2017 (H5N1)	-	-
Cameroon	-	-	H5	04/04/2017 (H5N1) 14/02/2017 (H5N8)	H5	14/02/2017 (H5N8)
Cote D'Ivoire	-	-	H5	03/10/2016 (H5N1)	-	-
Croatia	-	-	H5	16/02/2017 (H5N8) 17/03/2017 (H5N5)	H5	24/02/2017 (H5N8) 05/01/2017 (H5N5)
Czech Republic	-	-	H5	24/03/2017 (H5N8)	H5	27/02/2017 (H5N8) 15/02/2017 (H5N5)
Denmark	-	-	H5	21/11/2016 (H5N8)	H5	10/02/2017 (H5N8)
Egypt	-	-	Endemic	Endemic (H5N1) 14/03/2017 (H5N8)	H5	30/11/2016 (H5N8)
Finland	-	-	-	-	H5	13/04/2017 (H5N8)
France	-	-	H5	04/04/2017 (H5N8) 28/03/2017 (H5N1)	H5	03/04/2017 (H5N8)
Germany	-	-	H5	31/03/2017 (H5N8) 09/02/2017 (H5N5)	H5	07/04/2017 (H5N8) 24/01/2017 (H5N5)
Ghana	-	-	H5	23/11/2016 (H5N1)	-	-
Greece	-	-	H5	24/03/2017 (H5N8) 03/03/2017 (H5N6)	H5	16/02/2017 (H5N8) 27/01/2017 (H5N5)
Hong Kong	H7N9	03/03/2017 ^a	-	-	H5	10/04/2017 (H5N6)
Hungary	-	-	H5	12/04/2017 (H5N8)	H5	13/03/2017 (H5N8)
India	-	-	H5	12/01/2017 (H5N8) 22/02/2017 (H5N1)	H5	19/01/2017 (H5N8) 27/12/2016 (H5N1)
Indonesia	-	-	Endemic	Endemic	-	-
Iran	-	-	H5	13/02/2017 (H5N8) 22/04/2017 (H5N1)	H5	18/12/2016 (H5N8)
Ireland	-	-	-	-	H5	06/03/2017 (H5N8)
Israel	-	-	H5	16/02/2017 (H5N8)	H5	16/02/2017 (H5N8)
Italy	-	-	H5	13/04/2017 (H5N8)	H5	13/01/2017 (H5N5) 24/02/2017 (H5N8)
Japan	-	-	H5	23/03/2017 (H5N6)	H5	18/04/2017 (H5N6)
Kazakhstan	-	-	-	-	H5	20/01/2017*
Korea	-	-	H5	14/04/2016 (H5N6)	-	-
Kuwait	-	-	H5	22/01/2017 (H5N8)	-	-
Laos	-	-	H5	14/10/2016 (H5N1)	-	-
Lithuania	-	-	-	-	H5	08/04/2017 (H5N8)
Macau	H7N9	12/01/2017 ^b	H7	13/12/2016 (H7N9)	-	-
Mainland China						
Anhui	H7N9	07/04/2017	-	-	-	-
Beijing	H7N9	18/04/2017	-	-	-	-
Chongqing	H7N9	19/03/2017	-	-	-	-
Fujian	H7N9	31/03/2017 ^c	-	-	-	-
Gansu	H7N9	13/04/2017	H5	08/10/2016 (H5N6)	-	-
Guangdong	H7N9	04/03/2017	H7	01/03/2017 (H7N9)	-	-
Guangxi	H5N6 H7N9	08/11/2016 15/04/2017	-	-	-	-
Guizhou	H5N6 H7N9	09/11/2016 01/04/2017	H5	-	-	-
Hebei	H7N9	10/04/2017	-	-	-	-
Henan	H7N9	06/04/2017	-	-	-	-
Hubei	H7N9	11/03/2017	H5	15/03/2017 (H5N6)	H5	18/01/2017 (H5N8)

Country/ Area	Human cases		Poultry cases / environmental samples		Wild bird cases / others	
	Subtype of virus	Date of last report	Subtype of virus	Date of last report (Subtype in this report)	Subtype of virus	Date of last report (Subtype in this report)
Hunan	H5N6 H7N9	18/11/2016 15/04/2017	H5 H7	12/01/2017 (H5N6) 24/03/2017 (H7N9)	-	-
Jiangsu	H7N9	01/04/2017	-	-	-	-
Jiangxi	H7N9	13/03/2017	-	-	-	-
Jilin	H7N9	24/04/2017	-	-	-	-
Liaoning	H7N9	07/04/2017	-	-	-	-
Shandong	H7N9	14/04/2017	-	-	-	-
Shanghai	H7N9	21/02/2017	-	-	-	-
Shanxi	-	-	-	-	H5	09/02/2017 (H5N8)
Sichuan	H7N9	15/04/2017	H5	28/12/2016 (H5N6)	-	-
Tianjin	H7N9	06/04/2017	-	-	-	-
Tibet	H7N9	28/03/2017	-	-	-	-
Xinjiang	-	-	H5	28/12/2016 (H5N6)	-	-
Zhejiang	H7N9	11/04/2017	-	-	-	-
Malaysia	-	-	H5	27/03/2017 (H5N1)	-	-
Montenegro	-	-	-	-	H5	22/12/2016 (H5N5)
Myanmar	-	-	H5	07/02/2017 (H5N6)	-	-
Nepal	-	-	H5	05/03/2017 (H5N1) 10/03/2017 (H5N8)	H5	10/03/2017 (H5N1)
Netherlands	-	-	H5	28/12/2016 (H5N8)	H5	14/12/2016 (H5N5) 14/04/2017 (H5N8)
Niger	-	-	H5	21/02/2017 (H5N1) 13/04/2017 (H5N8)	-	-
Nigeria	-	-	H5	10/04/2017 (H5N1) 08/02/2017 (H5N8)	H5	17/12/2016 (H5N8)
Poland	-	-	H5	24/03/2017 (H5N8)	H5	08/03/2017 (H5N8) 08/02/2017 (H5N5)
Portugal	-	-	-	-	H5	31/01/2017 (H5N8)
Macedonia	-	-	H5	30/01/2017 (H5N8)	H5	03/02/2017*
Romania	-	-	H5	12/04/2017 (H5N8)	H5	18/04/2017 (H5N8)
Russia	-	-	H5	20/04/2017 (H5N8)	H5	27/02/2017*
Serbia	-	-	H5	01/03/2017 (H5N8)	H5	01/03/2017 (H5N5) 01/03/2017 (H5N8)
Slovakia	-	-	H5	21/04/2017 (H5N8)	H5	28/03/2017 (H5N8)
Slovenia	-	-	-	-	H5	01/03/2017 (H5N5) 31/03/2017 (H5N8)
Spain	-	-	H5	03/03/2017 (H5N8)	H5	20/02/2017 (H5N8)
Sweden	-	-	H5	03/02/2017 (H5N8)	H5	13/03/2017 (H5N8)
Switzerland	-	-	-	-	H5	11/01/2017 (H5N8)
Taiwan	H7N9	05/02/2017 [#]	H5	11/04/2017 (H5N2) 17/03/2017 (H5N6) 27/03/2017 (H5N8)	H5	05/02/2017 (H5N6)
Tunisia	-	-	-	-	H5	01/12/2016 (H5N8)
Uganda	-	-	H5	15/01/2017*	-	-
Ukraine	-	-	H5	12/01/2017 (H5N8)	H5	17/02/2017 (H5N8)
United Kingdom	-	-	H5	24/02/2017 (H5N8)	H5	13/03/2017 (H5N8)
United States of America	-	-	H7	17/03/2017 (H7N9)	H5	09/01/2017 (H5N2)
Vietnam	-	-	H5	19/04/2017 (H5N1) 14/04/2017 (H5N6)	-	-

Sources: WHO, OIE, NHFPC and other official websites

[^] imported case from Fujian

[#] imported case from Guangdong

^{*} without further subtype information

[%] case exported to Jiangxi