

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 five new human cases of avian influenza A(H7N9) reported by the National Health and Family Planning Commission (NHFPC), including 4 cases in Jiangsu and 1 case in Fujian. In addition, Health Bureau of Macao reported the first human case of avian influenza A(H7N9) in Macao. The Centre for Health Protection (CHP) of the Department of Health confirmed one imported human case of avian influenza A(H7N9). This imported case is the first case in Hong Kong this winter and the seventeenth case in Hong Kong. Since March 2013 (as of December 19, 2016), there were a total of 808 human cases of avian influenza A(H7N9) reported globally. Since November 2016 (as of December 17, 2016), eight cases have been recorded in Mainland China. The latest case was reported on December 13, 2016.
2. Since the previous issue of AIR, there were no new human cases of avian influenza A(H5N6). Since 2014 (as of December 17, 2016), 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. There were no new human cases of avian influenza A(H5N1) reported by the World Health Organization (WHO). From 2011 to 2015, 32 to 145 confirmed human cases of avian influenza A(H5N1) were reported to WHO annually (according to onset date). In 2016, there have been 10 cases in Egypt so far.*

* 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 November, 2016.

This week's highlights

(Sources: WHO, NHFPC, Mainland health authorities, 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)	1(0)	Hong Kong: A 75-year-old man was confirmed positive for avian influenza A(H7N9). This imported case is the first case in Hong Kong this winter. He traveled to Changping, Dongguan alone on November 28 and returned to Hong Kong on December 9. He had visited wet market in Dongguan. He is now in serious condition and is under isolation and further management. (CHP, December 19, 2016)

Table 2. Outside Hong Kong: Confirmed cases of human infection with avian influenza A(H7N9)

	Place of occurrence	No. of cases	Province / Region / Municipality	City / District / Area	Age (years)	Sex	Condition at time of reporting	Date of report
New cases	Mainland China	6	Fujian	Fuzhou	59	M	Serious	13/12/2016
			Jiangsu	Kunshan	58	M	Serious	13/12/2016
			Jiangsu	Nantong	63	M	Serious	13/12/2016
			Jiangsu	Kunshan	32	M	Serious	13/12/2016
			Jiangsu	Suzhou	64	M	Serious	13/12/2016
			Macao	-	58	M	Asymptomatic	13/12/2016

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

Confirmed H7N9 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2013 (808 cases in total) (as of December 19, 2016)	Cumulative no. of cases since November 2016 (10 cases in total) (as of December 19, 2016)
Mainland China	Zhejiang Province	220	1
	Guangdong Province	196	1
	Jiangsu Province	109	5
	Fujian Province	75	1
	Shanghai Municipality	51	-
	Anhui Province	36	-
	Hunan Province	34	-
	Jiangxi Province	14	-
	Xinjiang Uygur Autonomous Region	10	-
	Beijing Municipality	9	-
	Shandong Province	9	-
	Hebei Province	4	-
	Henan Province	4	-
	Guangxi Province	3	-
	Guizhou Province	2	-
	Hubei Province	2	-
	Jilin Province	2	-
	Tianjin Municipality	2	-
Liaoning Province	1	-	
Canada	2*	-	
Hong Kong	17*	1	
Macao	1	1	
Malaysia	1*	-	
Taiwan	4*	-	

* All cases 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 December 17, 2016)	Cumulative no. of cases since November 2016 (2 case in total) (as of December 17, 2016)
Mainland China	Guangdong	6	-
	Hunan	3	1
	Yunnan	2	-
	Anhui	1	-
	Hubei	1	-
	Jiangxi	1*	-
	Sichuan	1	-
	Guangxi Zhuang Autonomous Region	1	1

* imported case from Guangdong

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

	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	Overall
Cases	4	46	98	115	88	44	73	48	62	32	39	52	145	10	856
Deaths	4	32	43	79	59	33	32	24	34	20	25	22	42	3	452
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%	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 December 2016)	No. of recent cases [^] (September 2016 to December 2016)
Azerbaijan	8	0
Bangladesh	8	0
Cambodia	56	0
Canada	1	0
Mainland China	53	0
Djibouti	1	0
Egypt	356	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	856	2

[^] Details of recent cases (September 2016 to December 2016) are listed in *Table 9*.

Table 9. Details of the recent confirmed human cases of avian influenza A(H5N1) reported to WHO (September 2016 to December 2016) (Sources: WHO)

Date of report	Country	Province / Region	District / City	Sex	Age	Outcome at the time of reporting
3/10/2016	Egypt	Fayoum	-	M	3	Fatal
3/10/2016	Egypt	Giza	-	F	3	Fatal

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	-	0(0)	-
Previously reported cases (onset in the past 6 months)	Mainland China	5(0)	Avian influenza A(H9N2): <ul style="list-style-type: none"> ▫ Guangdong Province: A 4-year-old girl with onset on June 10, 2016; a 3-year-old boy with onset on July 9, 2016; and a 29-year-old woman with onset on August 8, 2016. ▫ Yunnan Province: A 10-month-old boy with onset on August 7, 2016. ▫ Jiangxi Province: A 4-year-old girl with onset on August 2, 2016.

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

	No. of reports of H5 in poultry / wild birds	No. of reports of H7N9 in poultry / wild birds	Details
In this reporting period	0	0	-
Previously reported cases since 2014	8*	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 \(H5N6\)](#)
- # [Samples from a batch of live chickens imported from a registered poultry farm in Shunde District of Foshan City 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), A(H7N9) 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	2
H5N5	1
H5N8	22
H5N9	1

Table 13. Outside Hong Kong: Confirmed avian influenza A(H5), A(H7N9) 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
Sweden	Samples from birds in Kalmar län were tested positive for highly pathogenic avian influenza A (H5N8).	December 12, 2016
France	Samples from poultry and birds in Haute-Savoie, Tarn, Lot-et-Garonne, Gers, Pyrénées-Atlantiques, Aveyron and Landes were tested positive for highly pathogenic avian influenza A (H5N8).	December 12 (two reports), December 15 and December 16, 2016
	Samples from poultry in Gers were tested positive for low pathogenic avian influenza A (H5N9).	December 16, 2016
Romania	Samples from birds in Constanta were tested positive for highly pathogenic avian influenza A (H5N8).	December 13, 2016
Hungary	Samples from poultry in Bács-Kiskun, Csongrád and Békés were tested positive for highly pathogenic avian influenza A (H5N8).	December 13, December 14 and December 15, 2016
Germany	Samples from poultry and birds in Bayern, Schleswig-Holstein, Niedersachsen, Nordrhein-Westfalen, Sachsen-Anhalt, Brandenburg, Baden-Württemberg, Hessen and Thüringen were tested positive for highly pathogenic avian influenza A (H5N8).	December 13 and December 16, 2016
Netherlands	Samples from birds in Noord-Brabant were tested positive for highly pathogenic avian influenza A (H5N5).	December 14, 2016
	Samples from poultry and birds in Friesland, Noord-Holland, Groningen, Overijssel, Zeeland and Zuid-Holland were tested positive for highly pathogenic avian influenza A (H5N8).	December 14 (two reports) and December 16, 2016
Poland	Samples from poultry in Lubuskie and Podkarpackie were tested positive for highly pathogenic avian influenza A (H5N8).	December 14, December 16 and December 19, 2016
Switzerland	Samples from birds in Vaud and Thurgau were tested positive for highly pathogenic avian influenza A (H5N8).	December 14, 2016
Serbia	Samples from poultry in Južnobački were tested positive for highly pathogenic avian influenza A (H5N8).	December 15 and December 16, 2016
Russia	Samples from birds in Krasnodarskiy Kray were tested positive for highly pathogenic avian influenza A (H5).	December 16, 2016
Nigeria	Samples from poultry and birds in Kano were tested positive for highly pathogenic avian influenza A (H5N8).	December 17, 2016
Ukraine	Samples from poultry and birds in Kherson were tested positive for highly pathogenic avian influenza A (H5).	December 17, 2016
United Kingdom	Samples from poultry in Lincolnshire were tested positive for highly pathogenic avian influenza A (H5N8).	December 17, 2016

For cumulative reports of avian influenza A(H5N1) or A(H7N9) in poultry / wild birds, please refer to the [OIE](#) website.

Table 14. Countries / areas with documented avian influenza A (H7N9) or highly pathogenic avian influenza (including H5 and other subtypes) cases in the recent 6 months (including infections in humans/birds and relevant environmental samples) (as of December 19, 2016)

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	11/11/2016 (H5N8)	H5	01/12/2016 (H5N8)
Bhutan	-	-	H5	24/10/2016 (H5N1)	-	-
Cameroon	-	-	H5	14/09/2016 (H5N1)	-	-
Cote D'Ivoire	-	-	H5	03/10/2016 (H5N1)	-	-
Croatia	-	-	-	-	H5	18/11/2016 (H5N8)
Denmark	-	-	H5	21/11/2016 (H5N8)	H5	06/12/2016 (H5N8)
Egypt	H5N1	19/07/2016	Endemic	Endemic	H5	30/11/2016 (H5N8)
Finland	-	-	-	-	H5	09/12/2016 (H5N8)
France	-	-	H5	25/07/2016 (H5N1) 09/08/2016 (H5N2) 16/12/2016 (H5N8)	H5	12/12/2016 (H5N8)
Germany	-	-	H5	16/12/2016 (H5N8)	H5	13/12/2016 (H5N8)
Ghana	-	-	H5	23/11/2016 (H5N1)	-	-
Hong Kong	H7N9	19/12/2016 [#]	H7	05/06/2016 (H7N9)	H5	08/12/2016 (H5N6)
Hungary	-	-	H5	15/12/2016 (H5N8)	H5	04/11/2016 (H5N8)
India	-	-	H5	25/11/2016 (H5N8)	H5	09/11/2016 (H5N8)
Indonesia	-	-	Endemic	Endemic	-	-
Iran	-	-	H5	03/12/2016 (H5N8)	-	-
Iraq	-	-	H5	25/07/2016 (H5N1)	-	-
Israel	-	-	H5	05/12/2016 (H5N8)	-	-
Japan	-	-	H5	05/12/2016 (H5N6)	H5	21/11/2016 (H5N6)
Korea	-	-	H5	07/09/2016 (H5N8) 02/12/2016 (H5N6)	-	-
Laos	-	-	H5	14/10/2016 (H5N1)	-	-
Lebanon	-	-	H5	14/06/2016 (H5N1)	-	-
Macau	H7N9	13/12/2016	H7	13/12/2016 (H7N9)	-	-
Mainland China						
Beijing	H7N9	03/06/2016	-	-	-	-
Fujian	H7N9	09/11/2016	-	-	-	-
Gansu	-	-	H5	08/10/2016 (H5N6)	-	-
Guangdong	H7N9	09/11/2016	-	-	-	-
Guangxi	H5N6	08/11/2016	-	-	-	-
Guizhou	-	-	H5	31/08/2016 (H5N6)	-	-
Hebei	H7N9	12/08/2016	-	-	-	-
Henan	H7N9	21/07/2016 [^]	-	-	-	-
Hubei	-	-	H5	08/10/2016 (H5N6)	-	-
Hunan	H5N6	18/11/2016	H5	20/06/2016 (H5N6)	-	-
Jiangsu	H7N9	20/11/2016	-	-	-	-
Jiangxi	H7N9	12/08/2016 ^o	-	-	-	-
Liaoning	H7N9	17/06/2016	-	-	-	-
Tianjin	H7N9	15/06/2016	-	-	-	-
Zhejiang	H7N9	06/10/2016	-	-	-	-
Mexico	-	-	H7	01/06/2016 (H7N3)	-	-
Netherlands	-	-	H7 and H5	10/06/2016 (H7N9) 14/12/2016 (H5N8)	H5	14/12/2016 (H5N5) 16/12/2016 (H5N8)
Niger	-	-	H5	02/06/2016 (H5N1)	-	-
Nigeria	-	-	H5	28/11/2016 (H5N1) 17/12/2016 (H5N8)	H5	17/12/2016 (H5N8)
Poland	-	-	H5	19/12/2016 (H5N8)	H5	18/11/2016 (H5N8)
Romania	-	-	-	-	H5	13/12/2016 (H5N8)
Russia	-	-	H5	08/12/2016 (H5N8)	H5	16/12/2016*
Serbia	-	-	H5	16/12/2016 (H5N8)	H5	06/12/2016 (H5N8)
Sweden	-	-	H5	24/11/2016 (H5N8)	H5	12/12/2016 (H5N8)
Switzerland	-	-	-	-	H5	14/12/2016 (H5N8)
Taiwan	-	-	H5	17/10/2016 (H5N2) 08/12/2016 (H5N8)	-	-
Togo	-	-	H5	25/08/2016 (H5N1)	-	-
Tunisia	-	-	-	-	H5	01/12/2016 (H5N8)
Ukraine	-	-	H5	17/12/2016*	H5	17/12/2016*

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)
United Kingdom	-	-	H5	17/12/2016 (H5N8)	-	-
United States of America	-	-	-	-	H5	26/08/2016 (H5N2)
Vietnam	-	-	H5	01/07/2016 (H5N6) 02/10/2016 (H5N1)	-	-

Sources: WHO, OIE, NHFPC and other official websites # imported case from Guangdong ^ exported case to Anhui % exported cases to Beijing and Hebei * without further subtype information