

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 17 new human cases of avian influenza A(H7N9) reported by Mainland China health authorities in Hunan (6 cases), Guangxi (3 cases), Jiangsu (3 cases), Fujian (2 cases), Guizhou (2 cases) and Zhejiang (1 case). Since March 2013 (as of April 1, 2017), there were a total of 1364 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of April 1, 2017), 558 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 1, 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 two new human cases of avian influenza A(H5N1) from Egypt reported by the World Health Organization (WHO). From 2011 to 2016, 10 to 145 confirmed human cases of avian influenza A(H5N1) were reported to 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 March, 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
Hunan	Loudi	81	M	Severe pneumonia	31/03/2017
Zhejiang	Imported from Henan	48	M	Fatal	31/03/2017
Jiangsu	Nanjing	60	M	Severe pneumonia	31/03/2017
Jiangsu	Lianyungang	62	M	Fatal	31/03/2017
Hunan	Loudi	61	M	Pneumonia	31/03/2017
Jiangsu	Suzhou	53	M	Severe pneumonia	31/03/2017
Guangxi	Hezhou	68	M	Pneumonia	31/03/2017
Guizhou	Qiannan Buyi and Miao Autonomous Prefecture	57	F	Severe pneumonia	31/03/2017
Guizhou	Qiannan Buyi and Miao Autonomous Prefecture	37	M	Fatal	31/03/2017
Hunan	Shaoyang	35	M	Severe pneumonia	31/03/2017
Guangxi	Guilin	50	M	Severe pneumonia	31/03/2017
Guangxi	Guilin	52	M	Pneumonia	31/03/2017
Fujian	Fuan	47	M	Severe pneumonia	31/03/2017
Hunan	Zhangjiajie	50	M	Severe pneumonia	31/03/2017
Hunan	Yueyang	57	M	Severe pneumonia	31/03/2017
Fujian	Pingtang	52	F	Pneumonia	31/03/2017
Hunan	Huaihua	71	F	Severe pneumonia	31/03/2017

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 (1364 cases in total) (as of April 1, 2017)	Cumulative no. of cases since October 2016 (566 cases in total) (as of April 1, 2017)
Mainland China	Zhejiang Province	302	83
	Guangdong Province	256	61
	Jiangsu Province	240	136
	Fujian Province	104	30
	Anhui Province	91	55
	Hunan Province	81	47
	Shanghai Municipality	57	6
	Jiangxi Province	51	37
	Hubei Province	28	26
	Guangxi Zhuang Autonomous Region	27	24
	Henan Province	18	14
	Guizhou Province	16	14
	Shandong Province	15	6
	Beijing Municipality	11	2 ^{&}
	Sichuan Province	11	11
	Xinjiang Uygur Autonomous Region	10	-
	Hebei Province	4	-
	Liaoning Province	3	2
	Chongqing Municipality	2	2
	Jilin Province	2	-
Tianjin Municipality	2	-	
Yunnan Province	2	2 [@]	
Hong Kong		21 [*]	5
Taiwan		5 [*]	1
Canada		2 [*]	-
Macao		2	2 [#]
Malaysia		1 [*]	-

[&] Cases imported from Hebei and Liaoning

[@] 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 1, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of April 1, 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	Egypt	2(1)	Egypt: There were two new human cases of avian influenza A(H5N1) virus infection. The first case was a 4-year-old boy of Menia Governorate who had recovered and the second case was a 48-year-old man of Fayoum Governorate who had died. Both had exposure to poultry or birds before onset of illness. (WHO, March 16, 2017)

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	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 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	8
H5N2	1
H5N8	12

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
Malaysia	Samples from poultry in Kelantan were tested positive for highly pathogenic avian influenza A (H5N1).	March 27, 2017
Taiwan	Samples from poultry in Tainan were tested positive for highly pathogenic avian influenza A (H5N8).	March 27, 2017
	Samples from poultry in Changhua, Tainan, Pingtung, Yunlin and Chiayi were tested positive for highly pathogenic avian influenza A (H5N2).	March 27, 2017
Belgium	Samples from birds in Brabant Wallon were tested positive for highly pathogenic avian influenza A (H5N8).	March 28, 2017
Bosnia and Herzegovina	Samples from birds in Ilidza were tested positive for highly pathogenic avian influenza A (H5N8).	March 28, 2017
Vietnam	Samples from poultry in Vinh Long and Ha Tinh were tested positive for highly pathogenic avian influenza A (H5N1).	March 28, 2017
Slovakia	Samples from birds in Trencin were tested positive for highly pathogenic avian influenza A (H5N8).	March 28, 2017
France	Samples from poultry in Landes and Charente-Maritime were tested positive for low pathogenic avian influenza A (H5N1).	March 28 and April 3, 2017
	Samples from poultry in Pyrénées-Atlantiques were tested positive for highly pathogenic avian influenza A (H5N1).	March 28, 2017
	Samples from poultry and birds in Gers, Landes and Pyrénées-Atlantiques were tested positive for highly pathogenic avian influenza A (H5N8).	March 28 and April 3(2 reports), 2017
Nigeria	Samples from poultry in Bauchi were tested positive for highly pathogenic avian influenza A (H5N1).	March 29 and April 4, 2017
Italy	Samples from poultry in Friuli-Venezia Giulia, Veneto and Piemonte were tested positive for highly pathogenic avian influenza A (H5N8).	March 30 and April 3, 2017
Slovenia	Samples from birds in Ptuj, Murska Sobota and Maribor were tested positive for highly pathogenic avian influenza A (H5N8).	March 31, 2017
Cameroon	Samples from poultry in Ouest were tested positive for highly pathogenic avian influenza A (H5N1).	March 31, 2017
Germany	Samples from poultry in Niedersachsen and Bayern were tested positive for highly pathogenic avian influenza A (H5N8).	March 31, 2017
Romania	Samples from poultry and birds in Teleorman and București were tested positive for highly pathogenic avian influenza A (H5N8).	April 3, 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 4, 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	11/11/2016 (H5N8)	H5	01/12/2016 (H5N8)
Bangladesh	-	-	H5	21/01/2017 (H5N1)	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	31/03/2017 (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	10/02/2017 (H5N8)
France	-	-	H5	03/04/2017 (H5N8) 28/03/2017 (H5N1)	H5	03-/04/2017 (H5N8)
Germany	-	-	H5	31/03/2017 (H5N8) 09/02/2017 (H5N5)	H5	23/03/2017 (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 [†]	-	-	H5	08/12/2016 (H5N6)
Hungary	-	-	H5	24/02/2017 (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)	H5	18/12/2016 (H5N8)
Ireland	-	-	-	-	H5	06/03/2017 (H5N8)
Israel	-	-	H5	16/02/2017 (H5N8)	H5	16/02/2017 (H5N8)
Italy	-	-	H5	03/04/2017 (H5N8)	H5	13/01/2017 (H5N5) 24/02/2017 (H5N8)
Japan	-	-	H5	23/03/2017 (H5N6)	H5	21/11/2016 (H5N6)
Kazakhstan	-	-	-	-	H5	20/01/2017*
Korea	-	-	H5	02/12/2016 (H5N6)	-	-
Kuwait	-	-	H5	22/01/2017 (H5N8)	-	-
Laos	-	-	H5	14/10/2016 (H5N1)	-	-
Lithuania	-	-	-	-	H5	19/03/2017 (H5N8)
Macau	H7N9	12/01/2017 [#]	H7	13/12/2016 (H7N9)	-	-
Mainland China						
	Anhui	H7N9	11/03/2017	-	-	-
	Chongqing	H7N9	06/03/2017	-	-	-
	Fujian	H7N9	18/03/2017	-	-	-
	Gansu	-	-	H5	08/10/2016 (H5N6)	-
	Guangdong	H7N9	04/03/2017	H7	01/03/2017 (H7N9)	-
	Guangxi	H5N6	08/11/2016	-	-	-
		H7N9	31/03/2017	-	-	-
	Guizhou	H5N6	09/11/2016	-	-	-
		H7N9	20/03/2017	H5	-	-
	Hebei	H7N9	01/02/2017 [‡]	-	-	-
	Henan	H7N9	15/03/2017	-	-	-
	Hubei	H7N9	11/03/2017	H5	15/03/2017 (H5N6)	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 24/03/2017	H5 H7	12/01/2017 (H5N6) 24/03/2017 (H7N9)	-	-
Jiangsu	H7N9	16/03/2017	-	-	-	-
Jiangxi	H7N9	13/03/2017	-	-	-	-
Liaoning	H7N9	01/02/2017 ^b	-	-	-	-
Shandong	H7N9	15/02/2017	-	-	-	-
Shanghai	H7N9	21/02/2017	-	-	-	-
Shanxi	-	-	-	-	H5	09/02/2017 (H5N8)
Sichuan	H7N9	16/03/2017	H5	28/12/2016 (H5N6)	-	-
Xinjiang	-	-	H5	28/12/2016 (H5N6)	-	-
Zhejiang	H7N9	18/03/2017	-	-	-	-
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) 17/03/2017 (H5N8)
Niger	-	-	H5	21/02/2017 (H5N1)	-	-
Nigeria	-	-	H5	04/04/2017 (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	03/04/2017 (H5N8)	H5	03/04/2017 (H5N8)
Russia	-	-	H5	15/03/2017 (H5N8)	H5	27/02/2017*
Serbia	-	-	H5	01/03/2017 (H5N8)	H5	01/03/2017 (H5N5) 01/03/2017 (H5N8)
Slovakia	-	-	H5	10/03/2017 (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	27/03/2017 (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	28/03/2017 (H5N1) 19/03/2017 (H5N6)	-	-

Sources: WHO, OIE, NHFPC and other official websites [#] imported case from Guangdong ^{*} without further subtype information [^] imported case from Guangdong [%] case exported to Beijing