# 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 5 new human cases of avian influenza A(H7N9) reported by the National Health and Family Planning Commission (NHFPC) from Beijing (1 case), Guangxi (1 case), Guizhou (1 case), Hunan (1 case) and Zhejiang (1 case). Since March 2013 (as of June 17, 2017), there were a total of 1538 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of June 17, 2017), 732 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 June 17, 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 three cases in Egypt.\*

<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 May, 2017.

# This week's highlights

(Sources: WHO, 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
Guangxi	Baise	55	M	Fatal	16/06/2017
Zhejiang	Ningbo	67	F	Severe pneumonia	16/06/2017
Hunan	Changsha	41	M	Severe pneumonia	16/06/2017
Beijing	Imported from Hebei	54	M	Severe pneumonia	16/06/2017
Guizhou	Bijie	68	M	Severe pneumonia	16/06/2017

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

been re	d H7N9 human cases have ported in the following countries / areas	Cumulative no. of cases since 2013 (1538 cases in total) (as of June 17, 2017)	Cumulative no. of cases since October 2016 (740 cases in total) (as of June 17, 2017)	
	Zhejiang Province	310	91	
	Guangdong Province	258	63	
	Jiangsu Province	249	145	
	Fujian Province	107	33	
	Anhui Province	98	62	
	Hunan Province	93	59	
	Shanghai Municipality	57	6	
	Jiangxi Province	52	38	
	Sichuan Province	36	36	
	Beijing Municipality	33	24	
	Guangxi Zhuang Autonomous Region	31	28	
	Hubei Province	31	29	
	Hebei Province	28	24	
Mainland	Henan Province	28	24	
China	Shandong Province	28	19	
	Guizhou Province	18	16	
	Xinjiang Uygur Autonomous Region	10	-	
	Chongqing Municipality	9	9	
	Shaanxi Province	7	7^	
	Gansu Province	5	5	
	Liaoning Province	4	3	
	Tianjin Municipality	4	2	
	Jilin Province	3	1	
	Tibet Autonomous Region	3	3	
	Shanxi Province	2	2	
	Yunnan Province	2	2 <sup>@</sup>	
	Inner Mongolia Autonomous Region	1	1	
	Hong Kong	21*	5	
	Taiwan	5*	1	
	Canada	2*	-	
	Macao	2	2#	
	Malaysia	1*	-	

<sup>^</sup> The latest two cases imported from Inner Mongolia
<sup>®</sup> Cases imported from Jiangxi
<sup>\*</sup> All cases imported from Mainland China

<sup>\*</sup> 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

been rep	H5N6 human cases have orted in the following ountries / areas	Cumulative no. of cases since 2014 (16 cases in total) (as of June 17, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of June 17, 2017)
	Guangdong Province	6	-
	Hunan Province	3	1
	Yunnan Province	2	-
Mainland	Anhui Province	1	-
China	Hubei Province	1	-
	Jiangxi Province	1*	-
	Sichuan Province	1	-
	Guangxi Zhuang Autonomous Region	1	1

<sup>\*</sup> 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	3	859
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%	33.3%	52.7%

<sup>§</sup> 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 June 2017)	No. of recent cases <sup>^</sup> (March 2017 to June 2017)
Azerbaijan	8	0
Bangladesh	8	0
Cambodia	56	0
Canada	1	0
Mainland China	53	0
Djibouti	1	0
Egypt	359	3
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	859	3

<sup>^</sup> Details of recent cases (March 2017 to June 2017) are listed in *Table 9*.

Table 9. Details of the recent confirmed human cases of avian influenza A(H5N1) reported to WHO (March 2017 to June 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
10/03/2017	Egypt	Fayoum Governorate	-	M	48	Died
16/05/2017	Egypt	Cairo Governorate	-	M	35	Recovered

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	3(0)	Avian influenza A(H9N2):  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.  Beijing Municipality: A 32-year-old man with onset on April 28, 2017.
	United States of America	1(0)	Avian influenza A(H7N2):  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
H5N2	2
H5N8	5
H7N9	2

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 Gyeongsangnam-do, Ulsan Metropolitan City, Jeju-do, Jeollabuk-do and Busan Metropolitan City were tested positive for highly pathogenic avian influenza A (H5N8).	June 12, 2017
Mainland China	Samples from poultry in Inner Mongolia, Guangxi and Fujian were tested positive for highly pathogenic avian influenza A (H7N9).	June 12 and June 13, 2017
Democratic Republic of the Congo	Samples from poultry in Ituri were tested positive for highly pathogenic avian influenza A (H5N8).	June 14, 2017
Belgium	Samples from poultry and birds in Luxembourg, Hainaut and West-Vlaanderen were tested positive for highly pathogenic avian influenza A (H5N8).	June 15 and June 19, 2017 (2 reports)
Nigeria	Samples from poultry in Adamawa were tested positive for highly pathogenic avian influenza A (H5N1).	June 15, 2017
Toirrog	Samples from poultry in Chiayi, Tainan and Yunlin were tested positive for low pathogenic avian influenza A (H5N2).	June 16, 2017
Taiwan	Samples from poultry in Yunlin were tested positive for highly pathogenic avian influenza A (H5N2).	June 16, 2017

For cumulative reports of avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds, please refer to the <u>OIE</u> 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 June 19, 2017)

Subtype of virus	Country/ Area	Human cases		Poultry cases / environmental samples		Wild bird cases / others	
Banglanch	·				Date of last report		Date of last report
1989    1989	Austria	-	-	H5		H5	06/04/2017 (H5N8)
Bonia and Herzegovian   -   -   H5	Bangladesh	-	-	H5	11/05/2017 (H5N1)	H5	21/01/2017 (H5N1)
Bilgaria		-	-				
Camboolis		-	-				
Camerous		-	-				09/05/2017 (H5N8)
Camering   -   -   -   -   -   -   -   -   -	Cambodia	-	-	H5		-	-
Bis		-	-		14/02/2017 (H5N8)	H5	14/02/2017 (H5N8)
Cache Republic   -   -   -   -   -   -   -   -   -	Democratic Republic of the Congo	-	-	H5		-	-
Cache Reputation   Cache Reput	Croatia	-	-	Н5	16/02/2017 (H5N8) 17/03/2017 (H5N5)	Н5	05/01/2017 (H5N5)
Endemic   Ende	Czech Republic	-	-	Н5	24/03/2017 (H5N8)	H5	
Segret   S	Denmark	-	-	H5	-	H5	
Finland	Egypt	-	-	Endemic	Endemic (H5N1) 22/05/2017 (H5N8)	-	-
France	Finland	-	-	-	-	H5	28/04/2017 (H5N8)
Cemany	France	-	-	Н5		Н5	
Greece	Germany	-	-	Н5	10/05/2017 (H5N8)	Н5	
Hong Kong	Greece	-	-	H5	24/03/2017 (H5N8)	Н5	16/02/2017 (H5N8)
Hungary   -	Hong Kong	H7N9	03/03/2017 ^	-	- ` '	H5	
India					26/04/2017 (H5N8)		
Indonesia   -		-	-		12/01/2017 (H5N8)		19/01/2017 (H5N8)
Iran	Indonesia	-	-	Endemic		-	-
Ireland		-	-		13/02/2017 (H5N8) 22/04/2017 (H5N1)	Н5	18/12/2016 (H5N8)
Israel	Ireland	-	-	-	-	H5	06/03/2017 (H5N8)
Harrow   H		-	-	H5	16/02/2017 (H5N8)		
Japan   -   -   H5   23/03/2017 (H5N6)   H5   18/04/2017 (H5N6)	Italy	-	-	Н5		H5	13/01/2017 (H5N5) 07/06/2017 (H5N8)
Kazakhstan   -   -   -   -   -   -   -   -   -	Japan	-	-	H5	23/03/2017 (H5N6)	Н5	18/04/2017 (H5N6)
Norea		-	-	-	-	H5	
Lithuania	Korea	-	-	Н5	04/05/2017 (H5N6) 12/06/2017 (H5N8)	-	-
Luxembourg	Kuwait	-	-	H5		-	-
Macau         H7N9         12/01/2017 "         H7         13/12/2016 (H7N9)         -         -           Mainland China         H7N9         30/05/2017         -         -         -         -           Beijing H7N9         30/05/2017         -         -         -         -         -           Chongqing H7N9         29/05/2017         -         -         -         -         -           Fujian H7N9         01/05/2017         H7         13/06/2017 (H7N9)         -         -         -         -           Gansu H7N9         17/04/2017         - <td>Lithuania</td> <td>-</td> <td>-</td> <td></td> <td></td> <td>H5</td> <td>08/04/2017 (H5N8)</td>	Lithuania	-	-			H5	08/04/2017 (H5N8)
Mainland China						-	-
Anhui H7N9 30/05/2017		H7N9	12/01/2017 *	H7	13/12/2016 (H7N9)	-	-
Beijing		HANO	20/05/2017				
Chongqing         H7N9         29/05/2017         -							
Fujian         H7N9         01/05/2017         H7         13/06/2017 (H7N9)         -         -           Gansu         H7N9         17/04/2017         -         -         -         -           Guangdong         H7N9         23/04/2017         H7         09/05/2017 (H7N9)         -         -           Guangxi         H7N9         06/06/2017         H7         13/06/2017 (H7N9)         -         -           Guizhou         H7N9         05/06/2017         -         -         -         -           Hebei         H7N9         24/05/2017         H7         24/05/2017 (H7N9)         -         -           Henan         H7N9         31/05/2017         H7         12/05/2017 (H7N9)         -         -           Hubei         H7N9         18/05/2017         H5         15/03/2017 (H5N6)         H5         18/01/2017 (H5N8)           Hunan         H7N9         01/06/2017         H5         12/01/2017 (H5N6)         -         -           Hunan         H7N9         29/05/2017         H7         13/06/2017 (H7N9)         -         -           Inner Mongolia         H7N9         29/05/2017         H7         13/06/2017 (H7N9)         -         -			30/05/2017		-		
Gansu         H7N9         17/04/2017         -					13/06/2017 (H7N9)		
Guangdong         H7N9         23/04/2017         H7         09/05/2017 (H7N9)         -         -           Guangxi         H7N9         06/06/2017         H7         13/06/2017 (H7N9)         -         -           Guizhou         H7N9         05/06/2017         -         -         -         -           Hebei         H7N9         24/05/2017         H7         24/05/2017 (H7N9)         -         -           Henan         H7N9         31/05/2017         H7         12/05/2017 (H7N9)         -         -           Hubei         H7N9         18/05/2017         H5         15/03/2017 (H5N6)         H5         18/01/2017 (H5N8)           Hunan         H7N9         01/06/2017         H5         12/01/2017 (H5N6)         -         -         -           Inner Mongolia         H7N9         29/05/2017         H7         13/06/2017 (H7N9)         -         -         -					-	<u> </u>	-
Guangxi         H7N9         06/06/2017         H7         13/06/2017 (H7N9)           Guizhou         H7N9         05/06/2017         -         -         -         -           Hebei         H7N9         24/05/2017         H7         24/05/2017 (H7N9)         -         -           Henan         H7N9         31/05/2017         H7         12/05/2017 (H7N9)         -         -           Hubei         H7N9         18/05/2017         H5         15/03/2017 (H5N6)         H5         18/01/2017 (H5N8)           Hunan         H7N9         01/06/2017         H5         12/01/2017 (H5N6)         -         -         -           Inner Mongolia         H7N9         29/05/2017         H7         13/06/2017 (H7N9)         -         -         -					09/05/2017 (H7N9)	-	_
Guizhou         H7N9         05/06/2017         -							
Henan   H7N9   31/05/2017   H7   12/05/2017 (H7N9)   -   -   -		H7N9	05/06/2017	-	-		-
Hubei         H7N9         18/05/2017         H5         15/03/2017 (H5N6)         H5         18/01/2017 (H5N8)           Hunan         H7N9         01/06/2017         H5         12/01/2017 (H5N6)         -         -         -           Inner Mongolia         H7N9         29/05/2017         H7         13/06/2017 (H7N9)         -         -         -						-	-
Hunan         H7N9         01/06/2017         H5 H7         12/01/2017 (H5N6) 09/05/2017 (H7N9)         -         -         -           Inner Mongolia         H7N9         29/05/2017         H7         13/06/2017 (H7N9)         -         -         -							
H7N9	Hubei	H7N9	18/05/2017	H5	15/03/2017 (H5N6)	H5	18/01/2017 (H5N8)
Inner Mongolia H7N9 29/05/2017 H7 13/06/2017 (H7N9)	Hunan	H7N9	01/06/2017	H5 H7		-	-
	Inner Mongolia	H7N9	29/05/2017		13/06/2017 (H7N9)	-	-
					\ /		

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)
Jiangxi	H7N9	13/03/2017	-	-	-	-
Jilin	H7N9	14/04/2017				
Liaoning	H7N9	07/04/2017	-	-	-	-
Shaanxi	H7N9	23/05/2017	H7N9	01/06/2017	-	-
Shandong	H7N9	03/06/2017	-	-	-	-
Shanghai	H7N9	21/02/2017	-	-	-	-
Shanxi	H7N9	07/05/2017	-	-	H5	09/02/2017 (H5N8)
Sichuan	H7N9	23/05/2017	H5	28/12/2016 (H5N6)	-	-
Tianjin	H7N9	26/04/2017	H7	24/05/2017 (H7N9)	-	-
Tibet	H7N9	28/03/2017	-	-	-	-
Xinjiang	-	-	H5	28/12/2016 (H5N6)	-	-
Zhejiang	H7N9	01/06/2017	-	- ` '	-	-
Malaysia	-	-	H5	27/03/2017 (H5N1)	-	-
Macedonia	-	-	H5	30/01/2017 (H5N8)	H5	03/02/2017*
Mexico	-	-	H7	04/05/2017 (H7N3)	-	-
Montenegro	-	-	-	- ` '	H5	22/12/2016 (H5N5)
Myanmar	-	-	H5	07/02/2017 (H5N6)	-	-
Nepal	=	-	Н5	05/03/2017 (H5N1) 10/03/2017 (H5N8)	Н5	10/03/2017 (H5N1)
Netherlands	-	-	Н5	28/12/2016 (H5N8)	Н5	01/06/2017 (H5N5) 14/04/2017 (H5N8)
Niger	-	-	H5	21/02/2017 (H5N1) 13/04/2017 (H5N8)	-	-
Nigeria	-	-	H5	15/06/2017 (H5N1) 08/02/2017 (H5N8)	H5	17/12/2016 (H5N8)
Poland	-	-	H5	24/03/2017 (H5N8)	Н5	08/03/2017 (H5N8) 08/02/2017 (H5N5)
Portugal	_	_	-	_	Н5	31/01/2017 (H5N8)
Romania	-	-	H5	12/04/2017 (H5N8)	H5	18/04/2017 (H5N8)
Russia	-	_	H5	07/06/2017 (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		_	Н5	03/03/2017 (H5N8)	H5	20/02/2017 (H5N8)
Sweden		_	H5	25/04/2017 (H5N8)	H5	17/05/2017 (H5N8)
Switzerland		-	-	25/04/2017 (1151(6)	H5	11/03/2017 (H5N8)
Taiwan	H7N9	05/02/2017#	Н5	16/06/2017 (H5N2) 17/03/2017 (H5N6) 07/06/2017 (H5N8)	H5	05/02/2017 (H5N6)
Tunisia	-	-	_	-	Н5	01/12/2016 (H5N8)
Uganda	-	-	H5	15/01/2017*	-	-
Ukraine	-	-	H5	12/01/2017 (H5N8)	H5	17/02/2017 (H5N8)
United Kingdom	-	-	H5	05/06/2017 (H5N8)	H5	13/03/2017 (H5N8)
United States of America	-	-	H7	17/03/2017 (H7N9)	H5	09/01/2017 (H5N2)
Vietnam	-	-	H5	15/05/2017 (H5N1) 14/04/2017 (H5N6)	-	-
Zimbabwe		_	Н5	01/06/2017 (H5N8)		_
		1	11.5	01/00/201/ (113110)		1

Sources: WHO, OIE, NHFPC and other official websites

<sup>^</sup> imported case from Fujian

<sup>#</sup> imported case from Guangdong

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