

# 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 9 new human cases of avian influenza A(H7N9) reported by health authorities in Mainland China from Shandong (2 cases), Anhui (1 case), Guangxi (1 case), Hebei (1 case), Hubei (1 case), Inner Mongolia (1 case), Shaanxi (1 case) and Sichuan (1 case). Since March 2013 (as of June 3, 2017), there were a total of 1521 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of June 3, 2017), 715 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 3, 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.\*

\* 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 May, 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
<b>In this reporting period</b>	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
Inner Mongolia	Bayannaouer	56	M	Severe pneumonia	01/06/2017
Hubei	Xiangyang	59	M	Pneumonia	02/06/2017
Anhui	Bengbu	44	M	Severe pneumonia	02/06/2017
Shandong	Zibo	55	M	Pneumonia	02/06/2017
Hebei	Cangzhou	35	M	Pneumonia	02/06/2017
Guangxi	Baise	49	M	Fatal	02/06/2017
Shandong	Weihai	67	F	Pneumonia	02/06/2017
Shaanxi	Imported from Inner Mongolia	67	F	Under investigation	02/06/2017
Sichuan	Neijiang	61	F	Severe pneumonia	02/06/2017

**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 (1521 cases in total) (as of June 3, 2017)	Cumulative no. of cases since October 2016 (723 cases in total) (as of June 3, 2017)
Mainland China	Zhejiang Province	309	90
	Guangdong Province	258	63
	Jiangsu Province	248	144
	Fujian Province	107	33
	Anhui Province	96	60
	Hunan Province	92	58
	Shanghai Municipality	57	6
	Jiangxi Province	52	38
	Sichuan Province	36	36
	Hubei Province	31	29
	Guangxi Zhuang Autonomous Region	30	27
	Beijing Municipality	29	20
	Hebei Province	28	24
	Shandong Province	27	18
	Henan Province	26	22
	Guizhou Province	17	15
	Xinjiang Uygur Autonomous Region	10	-
	Chongqing Municipality	7	7
	Shaanxi Province	6	6 <sup>^</sup>
	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 <sup>*</sup>	5	
Taiwan	5 <sup>*</sup>	1	
Canada	2 <sup>*</sup>	-	
Macao	2	2 <sup>#</sup>	
Malaysia	1 <sup>*</sup>	-	

<sup>^</sup> The latest case 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**

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (16 cases in total) (as of June 3, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of June 3, 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	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%

§ 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
		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
<b>In this reporting period</b>	-	0(0)	-
<b>Previously reported cases (onset in the past 6 months)</b>	<b>Mainland China</b>	3(0)	<b>Avian influenza A(H9N2):</b> <ul style="list-style-type: none"> <li>▫ <b>Guangdong Province:</b> A 7-month-old girl with onset on December 11, 2016.</li> <li>▫ <b>Gansu Province:</b> An 11-month-old boy with onset on February 6, 2017.</li> <li>▫ <b>Beijing Municipality:</b> A 32-year-old man with onset on April 28, 2017.</li> </ul>
	<b>United States of America</b>	1(0)	<b>Avian influenza A(H7N2):</b> <ul style="list-style-type: none"> <li>▫ <b>United States of America:</b> A human case reported on January 16, 2017.</li> </ul>

**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
<b>In this reporting period</b>	0	0	-
<b>Previously reported cases since 2014</b>	9*	3 <sup>#</sup>	-

- \* [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
H5N5	1
H5N8	3
H7N9	1

**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
Italy	Samples from poultry in Lombardia were tested positive for highly pathogenic avian influenza A (H5N8).	May 31, 2017
Zimbabwe	Samples from poultry in Mashonaland East were tested positive for highly pathogenic avian influenza A (H5N8).	June 1, 2017
Netherlands	Samples from birds in Utrecht were tested positive for highly pathogenic avian influenza A (H5N5).	June 1, 2017
Mainland China	Samples from poultry in Shaanxi were tested positive for highly pathogenic avian influenza A (H7N9).	June 1, 2017
Belgium	Samples from birds in Luxembourg were tested positive for highly pathogenic avian influenza A (H5N8).	June 2, 2017
Nigeria	Samples from poultry in Kaduna and Kano were tested positive for highly pathogenic avian influenza A (H5N1).	June 2, 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 June 5, 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)
Austria	-	-	H5	06/04/2017 (H5N8)	H5	06/04/2017 (H5N8)
Bangladesh	-	-	H5	11/04/2017* 11/05/2017 (H5N1)	H5	21/01/2017 (H5N1)
Belgium	-	-	-	-	H5	02/06/2017 (H5N8)
Bosnia and Herzegovina	-	-	H5	13/02/2017*	H5	28/03/2017 (H5N8)
Bulgaria	-	-	H5	24/02/2017 (H5N8)	H5	09/05/2017 (H5N8)
Cambodia	-	-	H5	31/01/2017 (H5N1)	-	-
Cameroon	-	-	H5	04/04/2017 (H5N1) 14/02/2017 (H5N8)	H5	14/02/2017 (H5N8)
Democratic Republic of the Congo	-	-	H5	26/05/2017*	-	-
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	-	H5	02/05/2017 (H5N8)
Egypt	-	-	Endemic	Endemic (H5N1) 22/05/2017 (H5N8)	-	-
Finland	-	-	-	-	H5	28/04/2017 (H5N8)
France	-	-	H5	04/04/2017 (H5N8) 28/03/2017 (H5N1)	H5	03/04/2017 (H5N8)
Germany	-	-	H5	10/05/2017 (H5N8) 09/02/2017 (H5N5)	H5	26/05/2017 (H5N8) 24/01/2017 (H5N5)
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	10/04/2017 (H5N6)
Hungary	-	-	H5	26/04/2017 (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	31/05/2017 (H5N8)	H5	13/01/2017 (H5N5) 03/05/2017 (H5N8)
Japan	-	-	H5	23/03/2017 (H5N6)	H5	18/04/2017 (H5N6)
Kazakhstan	-	-	-	-	H5	20/01/2017*
Korea	-	-	H5	04/05/2017 (H5N6) 12/05/2017 (H5N8)	-	-
Kuwait	-	-	H5	22/01/2017 (H5N8)	-	-
Lithuania	-	-	-	-	H5	08/04/2017 (H5N8)
Macau	H7N9	12/01/2017 *	H7	13/12/2016 (H7N9)	-	-
Mainland China						
Anhui	H7N9	12/05/2017	-	-	-	-
Beijing	H7N9	13/05/2017	-	-	-	-
Chongqing	H7N9	08/05/2017	-	-	-	-
Fujian	H7N9	01/05/2017	-	-	-	-
Gansu	H7N9	17/04/2017	-	-	-	-
Guangdong	H7N9	23/04/2017	H7	09/05/2017 (H7N9)	-	-
Guangxi	H7N9	25/05/2017	-	-	-	-
Guizhou	H7N9	01/04/2017	-	-	-	-
Hebei	H7N9	24/05/2017	H7	24/05/2017 (H7N9)	-	-
Henan	H7N9	04/05/2017	H7	12/05/2017 (H7N9)	-	-
Hubei	H7N9	18/05/2017	H5	15/03/2017 (H5N6)	H5	18/01/2017 (H5N8)
Hunan	H7N9	08/05/2017	H5 H7	12/01/2017 (H5N6) 09/05/2017 (H7N9)	-	-
Inner Mongolia	H7N9	29/05/2017	-	-	-	-



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)
Jiangsu	H7N9	12/05/2017	-	-	-	-
Jiangxi	H7N9	13/03/2017	-	-	-	-
Jilin	H7N9	14/04/2017	-	-	-	-
Liaoning	H7N9	07/04/2017	-	-	-	-
Shaanxi	H7N9	02/05/2017	H7N9	01/06/2017	-	-
Shandong	H7N9	23/05/2017	-	-	-	-
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	21/05/2017	-	-	-	-
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	-	-	H5	05/03/2017 (H5N1) 10/03/2017 (H5N8)	H5	10/03/2017 (H5N1)
Netherlands	-	-	H5	28/12/2016 (H5N8)	H5	01/06/2017 (H5N5) 14/04/2017 (H5N8)
Niger	-	-	H5	21/02/2017 (H5N1) 13/04/2017 (H5N8)	-	-
Nigeria	-	-	H5	02/06/2017 (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)
Romania	-	-	H5	12/04/2017 (H5N8)	H5	18/04/2017 (H5N8)
Russia	-	-	H5	30/05/2017 (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	25/04/2017 (H5N8)	H5	17/05/2017 (H5N8)
Switzerland	-	-	-	-	H5	11/01/2017 (H5N8)
Taiwan	H7N9	05/02/2017 <sup>#</sup>	H5	15/05/2017 (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	08/05/2017 (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	-	-	H5	01/06/2017 (H5N8)	-	-

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