

# 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 24 new human cases of avian influenza A(H7N9) reported by health authorities of Mainland China in Hebei (7 cases), Sichuan (6 cases), Chongqing (2 cases), Anhui (1 case), Beijing (1 case), Gansu (1 case), Guangxi (1 case), Henan (1 case), Hubei (1 case), Hunan (1 case), Jiangsu (1 case) and Shaanxi (1 case). Since March 2013 (as of May 6, 2017), there were a total of 1463 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of May 6, 2017), 657 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 May 6, 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
<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
Shaanxi	Xianyang	62	M	Fatal	03/05/2017
Chongqing	Dianjiang	25	F	Severe pneumonia	04/05/2017
Sichuan	Chengdu	82	M	Fatal	05/05/2017
Hubei	Wuhan	68	F	Fatal	05/05/2017
Jiangsu	Xuzhou	58	F	Fatal	05/05/2017
Gansu	Zhangye	60	M	Severe pneumonia	05/05/2017
Beijing	Changping	44	F	Severe pneumonia	05/05/2017
Hebei	Chengde	62	F	Fatal	05/05/2017
Hebei	Baoding	26	F	Pneumonia	05/05/2017
Sichuan	Chengdu	64	M	Fatal	05/05/2017
Sichuan	Abba	51	M	Fatal	05/05/2017
Hebei	Baoding	35	M	Fatal	05/05/2017
Hebei	Langfang	63	M	Severe pneumonia	05/05/2017
Sichuan	Abba	56	M	Fatal	05/05/2017
Sichuan	Chengdu	52	M	Severe pneumonia	05/05/2017
Hebei	Baoding	46	F	Under investigation	05/05/2017
Anhui	Hefei	73	F	Severe pneumonia	05/05/2017
Sichuan	Abba	76	F	Severe pneumonia	05/05/2017
Hebei	Chengde	62	M	Pneumonia	05/05/2017
Hunan	Xiangtan	31	M	Severe pneumonia	05/05/2017
Guangxi	Laibin	57	M	Severe pneumonia	05/05/2017
Hebei	Cangzhou	33	M	Severe pneumonia	05/05/2017
Henan	Zhumadian	50	M	Under investigation	05/05/2017
Chongqing	Yuzhong	43	M	Severe pneumonia	05/05/2017

**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 (1463 cases in total) (as of May 6, 2017)	Cumulative no. of cases since October 2016 (665 cases in total) (as of May 6, 2017)
Mainland China	Zhejiang Province	306	87
	Guangdong Province	258	63
	Jiangsu Province	244	140
	Fujian Province	106	32
	Anhui Province	94	58
	Hunan Province	91	57
	Shanghai Municipality	57	6
	Jiangxi Province	52	38
	Guangxi Zhuang Autonomous Region	29	26
	Hubei Province	29	27
	Sichuan Province	28	28
	Beijing Municipality	25	16
	Henan Province	23	19
	Shandong Province	22	13
	Guizhou Province	17	15
	Hebei Province	15	11
	Xinjiang Uygur Autonomous Region	10	-
	Chongqing Municipality	6	6
	Gansu Province	4	4
	Liaoning Province	4	3
	Jilin Province	3	1
Tianjin Municipality	3	1	
Tibet Autonomous Region	3	3	
Yunnan Province	2	2 <sup>@</sup>	
Shaanxi Province	1	1	
Hong Kong		21*	5
Taiwan		5*	1
Canada		2*	-
Macao		2	2 <sup>#</sup>
Malaysia		1*	-

<sup>@</sup> Cases imported from Jiangxi

\* 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 May 6, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of May 6, 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) <sup>§</sup>**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Overall
<b>Cases</b>	4	46	98	115	88	44	73	48	62	32	39	52	145	10	2	858
<b>Deaths</b>	4	32	43	79	59	33	32	24	34	20	25	22	42	3	1	453
<b>Case fatality rate</b>	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%

<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 May 2017)	No. of recent cases <sup>^</sup> (February 2017 to May 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

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

**Table 9. Details of the recent confirmed human cases of avian influenza A(H5N1) reported to WHO (February 2017 to May 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
<b>In this reporting period</b>	<b>Mainland China</b>	1(0)	<b>Avian influenza A(H9N2):</b> <ul style="list-style-type: none"> <li>▫ <b>Beijing Municipality:</b> A 32-year-old man with onset on April 28, 2017.</li> </ul>
<b>Previously reported cases (onset in the past 6 months)</b>	<b>Mainland China</b>	2(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> </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**

	<b>No. of reports of H5 in poultry / wild birds / environmental samples</b>	<b>No. of reports of H7N9 in poultry / wild birds / environmental samples</b>	<b>Details</b>
<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**

<b>Subtype of virus</b>	<b>No. of reports</b>
H5N1	2
H5N2	2
H5N6	1
H5N8	5
H7N3	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
Taiwan	Samples from poultry in Changhua, Kaohsiung, Pingtung, Hsinchu, Yunlin and Taipei were tested positive for low pathogenic avian influenza A (H5N2).	May 1, 2017
	Samples from poultry in Yunlin were tested positive for highly pathogenic avian influenza A (H5N2).	May 1, 2017
Denmark	Samples from birds in West Region and East Region were tested positive for highly pathogenic avian influenza A (H5N8).	May 2, 2017
Vietnam	Samples from poultry in Quảng Ninh and Nghe An were tested positive for highly pathogenic avian influenza A (H5N1).	May 2 and May 4, 2017
Italy	Samples from birds in Piemonte were tested positive for highly pathogenic avian influenza A (H5N8).	May 3, 2017
Mexico	Samples from poultry in Jalisco were tested positive for highly pathogenic avian influenza A (H7N3).	May 4, 2017
Korea	Samples from poultry in Chungcheongbuk-do, Chungcheongnam-do, Gyeonggi-do, Sejong, Jeollanam-do, Jeollabuk-do, Busan and Incheon were tested positive for highly pathogenic avian influenza A (H5N6).	May 4, 2017
Russia	Samples from poultry in Rostovskaya Oblast were tested positive for highly pathogenic avian influenza A (H5N8).	May 4, 2017
United Kingdom	Samples from poultry in England were tested positive for highly pathogenic avian influenza A (H5N8).	May 5 and May 8, 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 May 8, 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)
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)
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	02/05/2017 (H5N8)
Egypt	-	-	Endemic	Endemic (H5N1) 14/03/2017 (H5N8)	H5	30/11/2016 (H5N8)
Finland	-	-	-	-	H5	28/04/2017 (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 <sup>†</sup>	-	-	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	13/04/2017 (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)	-	-
Kuwait	-	-	H5	22/01/2017 (H5N8)	-	-
Lithuania	-	-	-	-	H5	08/04/2017 (H5N8)
Macau	H7N9	12/01/2017 <sup>#</sup>	H7	13/12/2016 (H7N9)	-	-
Mainland China						
Anhui	H7N9	20/04/2017	-	-	-	-
Beijing	H7N9	18/04/2017	-	-	-	-
Chongqing	H7N9	25/04/2017	-	-	-	-
Fujian	H7N9	18/04/2017	-	-	-	-
Gansu	H7N9	17/04/2017	-	-	-	-
Guangdong	H7N9	23/04/2017	H7	01/03/2017 (H7N9)	-	-
Guangxi	H5N6 H7N9	08/11/2016 29/04/2017	-	-	-	-
Guizhou	H5N6 H7N9	09/11/2016 01/04/2017	H5	-	-	-
Hebei	H7N9	27/04/2017	-	-	-	-
Henan	H7N9	24/04/2017	-	-	-	-
Hubei	H7N9	21/03/2017	H5	15/03/2017 (H5N6)	H5	18/01/2017 (H5N8)
Hunan	H5N6 H7N9	18/11/2016 27/04/2017	H5 H7	12/01/2017 (H5N6) 24/03/2017 (H7N9)	-	-
Jiangsu	H7N9	18/04/2017	-	-	-	-
Jiangxi	H7N9	13/03/2017	-	-	-	-



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)
Jilin	H7N9	14/04/2017				
Liaoning	H7N9	07/04/2017	-	-	-	-
Shandong	H7N9	21/04/2017	-	-	-	-
Shanghai	H7N9	21/02/2017	-	-	-	-
Shaanxi	H7N9	18/04/2017	-	-	-	-
Shanxi	-	-	-	-	H5	09/02/2017 (H5N8)
Sichuan	H7N9	26/04/2017	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)	-	-
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	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)
Romania	-	-	H5	12/04/2017 (H5N8)	H5	18/04/2017 (H5N8)
Russia	-	-	H5	04/05/2017 (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	13/03/2017 (H5N8)
Switzerland	-	-	-	-	H5	11/01/2017 (H5N8)
Taiwan	H7N9	05/02/2017 <sup>#</sup>	H5	01/05/2017 (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	04/05/2017 (H5N1) 14/04/2017 (H5N6)	-	-

Sources: WHO, OIE, NHFPC and other official websites

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

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

\* without further subtype information