

# 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 14 new human cases of avian influenza A(H7N9) reported by Mainland China health authorities in Sichuan (3 cases), Henan (2 cases), Shandong (2 cases), Tibet (2 cases), Anhui (1 case), Beijing (1 case), Hunan (1 case), Tianjin (1 case) and Zhejiang (1 case). Since March 2013 (as of April 15, 2017), there were a total of 1393 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of April 15, 2017), 587 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 15, 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 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
<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
Sichuan	Suining	48	M	Severe pneumonia	14/04/2017
Tibet	Lhasa	39	M	Under investigation	14/04/2017
Sichuan	Ziyang	50	F	Severe pneumonia	14/04/2017
Anhui	Fuyang	71	M	Severe pneumonia	14/04/2017
Henan	Nanyang	44	F	Under investigation	14/04/2017
Zhejiang	Jinhua	60	M	Severe pneumonia	14/04/2017
Shandong	Weihai	60	M	Fatal	14/04/2017
Hunan	Yongzhou	59	M	Severe pneumonia	14/04/2017
Shandong	Qingdao	60	M	Fatal	14/04/2017
Tibet	Lhasa	43	M	Under investigation	14/04/2017
Beijing	Yanqing	81	M	Mild	14/04/2017
Henan	Pingdingshan	54	M	Under investigation	14/04/2017
Sichuan	Suining	51	M	Severe pneumonia	14/04/2017
Tianjin	Wuqing	58	F	Severe pneumonia	14/04/2017

**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 (1393 cases in total) (as of April 15, 2017)	Cumulative no. of cases since October 2016 (595 cases in total) (as of April 15, 2017)
Mainland China	Zhejiang Province	304	85
	Guangdong Province	256	61
	Jiangsu Province	242	138
	Fujian Province	105	31
	Anhui Province	92	56
	Hunan Province	84	50
	Shanghai Municipality	57	6
	Jiangxi Province	51	37
	Hubei Province	28	26
	Guangxi Zhuang Autonomous Region	27	24
	Henan Province	21	17
	Shandong Province	18	9
	Guizhou Province	17	15
	Beijing Municipality	15	6
	Sichuan Province	14	14
	Xinjiang Uygur Autonomous Region	10	-
	Hebei Province	4	-
	Chongqing Municipality	3	3
	Liaoning Province	3	2
	Tianjin Municipality	3	1
Tibet Autonomous Region	3	3	
Jilin Province	2	-	
Yunnan Province	2	2 <sup>@</sup>	
Gansu 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
<b>New cases</b>	-	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 15, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of April 15, 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
<b>New cases</b>	-	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
<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%

§ 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 <sup>^</sup> (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

<sup>^</sup> 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
<b>In this reporting period</b>	-	-	-
<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**

	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
H5	1
H5N1	1
H5N2	1
H5N3	1
H5N6	2
H5N8	8

**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
Bangladesh	Samples from birds in Dhaka were tested positive for highly pathogenic avian influenza A (H5).	April 11, 2017
Italy	Samples from poultry in Emilia-Romagna and Veneto were tested positive for highly pathogenic avian influenza A (H5N8).	April 11 and April 13, 2017
Taiwan	Samples from poultry in Yunlin County, Kaohsiung City and Chiayi County were tested positive for highly pathogenic avian influenza A (H5N2).	April 11, 2017
Hungary	Samples from poultry in Bács-Kiskun were tested positive for highly pathogenic avian influenza A (H5N8).	April 12, 2017
Romania	Samples from birds in București, Teleorman and Ialomița were tested positive for highly pathogenic avian influenza A (H5N8).	April 12, 2017
Niger	Samples from poultry in Tillabéri were tested positive for highly pathogenic avian influenza A (H5N8).	April 13, 2017
Finland	Samples from birds in Lounais-Suomi were tested positive for highly pathogenic avian influenza A (H5N8).	April 13, 2017
Korea	Samples from poultry in Chungcheongbuk-do and Gyeonggi-do were tested positive for highly pathogenic avian influenza A (H5N6).	April 14, 2017
Vietnam	Samples from poultry in Thừa Thiên - Huế were tested positive for highly pathogenic avian influenza A (H5N6).	April 14, 2017
	Samples from poultry in Vĩnh Long and Quảng Ninh were tested positive for highly pathogenic avian influenza A (H5N1).	April 14, 2017
Russia	Samples from poultry in Moskovskaya Oblast were tested positive for highly pathogenic avian influenza A (H5N8).	April 14, 2017
France	Samples from poultry in Deux-Sèvres and Lot-et-Garonne were tested positive for low pathogenic avian influenza A (H5N3).	April 14, 2017
Netherlands	Samples from birds in Utrecht, Zuid-Holland and Drenthe were tested positive for highly pathogenic avian influenza A (H5N8).	April 14, 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 17, 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)
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	04/04/2017 (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	13/04/2017 (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	-	-	H5	10/04/2017 (H5N6)
Hungary	-	-	H5	12/04/2017 (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)	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) 24/02/2017 (H5N8)
Japan	-	-	H5	23/03/2017 (H5N6)	H5	21/11/2016 (H5N6)
Kazakhstan	-	-	-	-	H5	20/01/2017*
Korea	-	-	H5	14/04/2016 (H5N6)	-	-
Kuwait	-	-	H5	22/01/2017 (H5N8)	-	-
Laos	-	-	H5	14/10/2016 (H5N1)	-	-
Lithuania	-	-	-	-	H5	08/04/2017 (H5N8)
Macau	H7N9	12/01/2017 <sup>#</sup>	H7	13/12/2016 (H7N9)	-	-
Mainland China						
	Anhui	H7N9	29/03/2017	-	-	-
	Beijing	H7N9	11/04/2017	-	-	-
	Chongqing	H7N9	19/03/2017	-	-	-
	Fujian	H7N9	25/03/2017	-	-	-
	Gansu	H7N9	08/04/2017	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	01/04/2017	H5	-	-
	Hebei	H7N9	01/02/2017 <sup>9</sup>	-	-	-
	Henan	H7N9	06/04/2017	-	-	-
	Hubei	H7N9	11/03/2017	H5	15/03/2017 (H5N6)	H5
						18/01/2017 (H5N8)
	Hunan	H5N6	18/11/2016	H5	12/01/2017 (H5N6)	-
		H7N9	05/04/2017	H7	24/03/2017 (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)
Jiangsu	H7N9	01/04/2017	-	-	-	-
Jiangxi	H7N9	13/03/2017	-	-	-	-
Liaoning	H7N9	01/02/2017 <sup>a</sup>	-	-	-	-
Shandong	H7N9	04/04/2017	-	-	-	-
Shanghai	H7N9	21/02/2017	-	-	-	-
Shanxi	-	-	-	-	H5	09/02/2017 (H5N8)
Sichuan	H7N9	07/04/2017	H5	28/12/2016 (H5N6)	-	-
Tianjin	H7N9	06/04/2017	-	-	-	-
Tibet	H7N9	28/03/2017	-	-	-	-
Xinjiang	-	-	H5	28/12/2016 (H5N6)	-	-
Zhejiang	H7N9	04/04/2017	-	-	-	-
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) 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)
Macedonia	-	-	H5	30/01/2017 (H5N8)	H5	03/02/2017*
Romania	-	-	H5	12/04/2017 (H5N8)	H5	03/04/2017 (H5N8)
Russia	-	-	H5	14/04/2017 (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 <sup>#</sup>	H5	11/04/2017 (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	14/04/2017 (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

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

<sup>%</sup> case exported to Beijing