

# 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 23 new human cases of avian influenza A(H7N9) reported by Mainland China health authorities in Guangdong (6 cases), Anhui (4 cases), Guangxi (4 cases), Jiangsu (3 cases), Jiangxi (2 cases), Hubei (1 case), Hunan (1 case), Shanghai (1 case) and Zhejiang (1 case). Since March 2013 (as of March 6, 2017), there were a total of 1282 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of March 6, 2017), 477 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 March 4, 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. There were no new human cases of avian influenza A(H5N1) reported by the World Health Organization (WHO) in 2017. From 2011 to 2015, 32 to 145 confirmed human cases of avian influenza A(H5N1) were reported to WHO annually (according to onset date). In 2016, there have been 10 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 February, 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	District / Area	Age (years)	Sex	Clinical condition at time of reporting	Date of report
Jiangxi	Shangrao	67	M	Severe pneumonia	03/03/2017
Hubei	Xianning	52	M	Severe pneumonia	03/03/2017
Jiangsu	Yancheng	41	M	Severe pneumonia	03/03/2017
Anhui	Fuyang	77	M	Fatal	03/03/2017
Jiangsu	Taizhou	49	M	Pneumonia	03/03/2017
Guangdong	Jiangmen	24	M	Severe pneumonia	03/03/2017
Guangdong	Dongguan	53	M	Severe pneumonia	03/03/2017
Guangdong	Huizhou	63	F	Severe pneumonia	03/03/2017
Jiangsu	Nantong	60	M	Severe pneumonia	03/03/2017
Guangxi	Yulin	28	F	Severe pneumonia	03/03/2017
Guangxi	Yulin	68	F	Severe pneumonia	03/03/2017
Anhui	Chuzhou	60	M	Fatal	03/03/2017
Anhui	Huainan	28	M	Severe pneumonia	03/03/2017
Jiangxi	Yichun	69	F	Pneumonia	03/03/2017
Guangdong	Guangzhou	66	M	Severe pneumonia	03/03/2017
Guangdong	Jiangmen	56	M	Severe pneumonia	03/03/2017
Hunan	Yongzhou	72	M	Fatal	03/03/2017
Shanghai	Chongming District	43	M	Under investigation	03/03/2017
Guangdong	Guangzhou	57	M	Severe pneumonia	03/03/2017
Anhui	Chuzhou	10	M	Pneumonia	03/03/2017
Zhejiang	Imported from Anhui	37	M	Under investigation	03/03/2017
Guangxi	Baise	-	-	Critical	06/03/2017
Guangxi	Wuzhou	-	-	Critical	06/03/2017

**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 (1282 cases in total) (as of March 6, 2017)	Cumulative no. of cases since October 2016 (484 cases in total) (as of March 6, 2017)
Mainland China	Zhejiang Province	299	80
	Guangdong Province	253	58
	Jiangsu Province	235	131
	Fujian Province	98	24
	Anhui Province	90	54
	Hunan Province	64	30
	Shanghai Municipality	57	6
	Jiangxi Province	45	31
	Hubei Province	25	23
	Shandong Province	15	6
	Beijing Municipality	11	2 <sup>&amp;</sup>
	Henan Province	11	7
	Guangxi Zhuang Autonomous Region	10	7
	Xinjiang Uygur Autonomous Region	10	-
	Guizhou Province	8	6
	Sichuan Province	8	8
	Hebei Province	4	-
	Liaoning Province	3	2
	Jilin Province	2	-
	Tianjin Municipality	2	-
Yunnan Province	2	2 <sup>@</sup>	
Hong Kong		20 <sup>*</sup>	4
Taiwan		5 <sup>*</sup>	1
Canada		2 <sup>*</sup>	-
Macao		2	2 <sup>#</sup>
Malaysia		1 <sup>*</sup>	-

<sup>&</sup> Cases imported from Hebei and Liaoning

<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	/ 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 March 4, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of March 4, 2017)
Mainland China	Guangdong	6	-
	Hunan	3	1
	Yunnan	2	-
	Anhui	1	-
	Hubei	1	-
	Jiangxi	1*	-
	Sichuan	1	-
	Guangxi Zhuang Autonomous Region	1	1

\* imported case from Guangdong

**Table 6. Outside Hong Kong: Confirmed human cases of avian influenza A(H5N1)**

	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	Overall
Cases	4	46	98	115	88	44	73	48	62	32	39	52	145	10	856
Deaths	4	32	43	79	59	33	32	24	34	20	25	22	42	3	452
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%	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 March 2017)	No. of recent cases <sup>^</sup> (December 2016 to March 2017)
Azerbaijan	8	0
Bangladesh	8	0
Cambodia	56	0
Canada	1	0
Mainland China	53	0
Djibouti	1	0
Egypt	356	0
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	856	0

<sup>^</sup> Details of recent cases (December 2016 to March 2017) are listed in *Table 9*.

**Table 9. Details of the recent confirmed human cases of avian influenza A(H5N1) reported to WHO (December 2016 to March 2017) (Sources: WHO)**

Date of report	Country	Province / Region	District /	Sex	Age	Outcome at the time of reporting
-	-	-	-	-	-	-

**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>	1(0)	<b>Avian influenza A(H9N2):</b> □ <b>Guangdong Province:</b> A 7-month-old girl with onset on December 11, 2016.
	<b>United States of America</b>	1(0)	<b>Avian influenza A(H7N2):</b> □ <b>United States of America:</b> 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
<b>In this reporting period</b>	0	0	-
<b>Previously reported cases since 2014</b>	8*	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 \(H5N6\)](#)
- # [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	2
H5N2	2
H5N3	1
H5N5	2
H5N6	2
H5N8	16
H7	1
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
Romania	Samples from poultry and birds in Galati, Arges, Bucuresti, Constanta and Mehedinți were tested positive for highly pathogenic avian influenza A (H5N8).	February 27, February 28 and March 3, 2017
Hungary	Samples from birds in Somogy, Hajdu-Bihar, Tolna, Veszprem, Csongrad, Fejer, Jasz-Nagykun-Szolnok, Borsod-Abauj-Zemplen, Zala, Vas, Budapest, Pest, Komarom-Esztergom, Szabolcs-Szatmar-Bereg and Bacs-Kiskun, were tested positive for highly pathogenic avian influenza A (H5N8).	February 28, 2017
Germany	Samples from poultry and birds in Hessen, Nordrhein-Westfalen, Bayern, Thuringen, Sachsen-Anhalt, Saarland, Niedersachsen, Rheinland-Pfalz, Brandenburg and Schleswig-Holstein were tested positive for highly pathogenic avian influenza A (H5N8).	February 28, 2017
Slovenia	Samples from birds in Novo Mesto were tested positive for highly pathogenic avian influenza A (H5N5).	March 1, 2017
Serbia	Samples from birds in Srbija were tested positive for highly pathogenic avian influenza A (H5N5).	March 1, 2017
	Samples from poultry and birds in Srbija were tested positive for highly pathogenic avian influenza A (H5N8).	March 1, 2017
Taiwan	Samples from poultry in Tainan, Yunlin, Chiayi and Yilan were tested positive for highly pathogenic avian influenza A (H5N6).	March 1, 2017
	Samples from poultry in Yunlin, Tainan and Chiayi were tested positive for highly pathogenic avian influenza A (H5N2).	March 1, 2017
Mainland China	Samples from poultry in Guangdong were tested positive for highly pathogenic avian influenza A (H7N9).	March 1, 2017
Italy	Samples from poultry in Veneto were tested positive for highly pathogenic avian influenza A (H5N8).	March 1, 2017
Poland	Samples from poultry and birds in Lubuskie, Pomorskie, Wielkopolskie, Dolnoslaskie and Kujawsko-Pomorskiego were tested positive for highly pathogenic avian influenza A (H5N8).	March 1, March 3 and March 6, 2017

<b>Places of occurrence</b>	<b>Details</b>	<b>OIE Report Date</b>
Bosnia and Herzegovina	Samples from birds in Sarajevo Centar were tested positive for highly pathogenic avian influenza A (H5N8).	March 2, 2017
Belgium	Samples from birds in Vlaams-Brabant were tested positive for highly pathogenic avian influenza A (H5N8).	March 2, 2017
Greece	Samples from poultry in Dytiki Makedonia were tested positive for highly pathogenic avian influenza A (H5N6).	March 3, 2017
Spain	Samples from poultry in Cataluna were tested positive for highly pathogenic avian influenza A (H5N8).	March 3, 2017
Lithuania	Samples from birds in Kaunas were tested positive for highly pathogenic avian influenza A (H5N8).	March 3, 2017
France	Samples from poultry in Pyrenees-Atlantiques were tested positive for low pathogenic avian influenza A (H5N2).	March 3, 2017
	Samples from poultry in Pyrenees-Atlantiques and Deux-Sevres were tested positive for low pathogenic avian influenza A (H5N3).	March 3, 2017
	Samples from poultry and birds in Rhone, Ain, Lot-et-Garonne and Vosges were tested positive for highly pathogenic avian influenza A (H5N8).	March 3, 2017
Nigeria	Samples from poultry in Nasarawa and Plateau were tested positive for highly pathogenic avian influenza A (H5N1).	March 3, 2017
Nepal	Samples from poultry in Gandaki were tested positive for highly pathogenic avian influenza A (H5N1).	March 5, 2017
Czech Republic	Samples from poultry in Karlovarsky were tested positive for highly pathogenic avian influenza A (H5N8).	March 5, 2017
United States of America	Samples from poultry in Tennessee were tested positive for highly pathogenic avian influenza A (H7).	March 6, 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 March 6, 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	02/03/2017 (H5N8)
Bhutan	-	-	H5	24/10/2016 (H5N1)	-	-
Bosnia and Herzegovina	-	-	H5	13/02/2017*	H5	02/03/2017 (H5N8)
Bulgaria	-	-	H5	24/02/2017 (H5N8)	H5	20/02/2017*
Cambodia	-	-	H5	31/01/2017 (H5N1)	-	-
Cameroon	-	-	H5	14/09/2016 (H5N1) 14/02/2017 (H5N8)	H5	14/02/2017 (H5N8)
Cote D'Ivoire	-	-	H5	03/10/2016 (H5N1)	-	-
Croatia	-	-	H5	16/02/2017 (H5N8)	H5	24/02/2017 (H5N8) 05/01/2017 (H5N5)
Czech Republic	-	-	H5	05/03/2017 (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) 22/02/2017 (H5N8)	H5	30/11/2016 (H5N8)
Finland	-	-	-	-	H5	10/02/2017 (H5N8)
France	-	-	H5	03/03/2017 (H5N8)	H5	03/03/2017 (H5N8)
Germany	-	-	H5	28/02/2017 (H5N8) 09/02/2017 (H5N5)	H5	28/02/2017 (H5N8) 24/01/2017 (H5N5)
Ghana	-	-	H5	23/11/2016 (H5N1)	-	-
Greece	-	-	H5	16/02/2017 (H5N8) 03/03/2017 (H5N6)	H5	16/02/2017 (H5N8) 27/01/2017 (H5N5)
Hong Kong	H7N9	11/01/2017 #	-	-	H5	08/12/2016 (H5N6)
Hungary	-	-	H5	24/02/2017 (H5N8)	H5	28/02/2017 (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	21/02/2017 (H5N8)
Israel	-	-	H5	16/02/2017 (H5N8)	H5	16/02/2017 (H5N8))
Italy	-	-	H5	01/03/2017 (H5N8)	H5	13/01/2017 (H5N5) 24/02/2017 (H5N8)
Japan	-	-	H5	10/02/2017 (H5N6)	H5	21/11/2016 (H5N6)
Kazakhstan	-	-	-	-	H5	20/01/2017*
Korea	-	-	H5	07/09/2016 (H5N8) 02/12/2016 (H5N6)	-	-
Kuwait	-	-	H5	22/01/2017 (H5N8)	-	-
Laos	-	-	H5	14/10/2016 (H5N1)	-	-
Lithuania	-	-	-	-	H5	03/03/2017 (H5N8)
Macau	H7N9	12/01/2017 #	H7	13/12/2016 (H7N9)	-	-
Mainland China						
	Anhui	H7N9	27/02/2017	-	-	-
	Fujian	H7N9	12/02/2017	-	-	-
	Gansu	-	-	H5	08/10/2016 (H5N6)	-
	Guangdong	H7N9	24/02/2017	H7	01/03/2017 (H7N9)	-
	Guangxi	H5N6	08/11/2016	-	-	-
		H7N9	06/03/2017	-	-	-
	Guizhou	H5N6	09/11/2016	H5	-	-
		H7N9	15/02/2017	-	-	-
	Hebei	H7N9	01/02/2017 <sup>o</sup>	-	-	-
	Henan	H7N9	14/02/2017	-	-	-
	Hubei	H7N9	16/02/2017	H5	08/10/2016 (H5N6)	H5
	Hunan	H5N6	18/11/2016	H5	12/01/2017 (H5N6)	-
		H7N9	22/02/2017	-	-	-
	Jiangsu	H7N9	22/02/2017	-	-	-
	Jiangxi	H7N9	17/02/2017	-	-	-

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)
Liaoning	H7N9	01/02/2017 <sup>#</sup>	-	-	-	-
Shandong	H7N9	15/02/2017	-	-	-	-
Shanghai	H7N9	21/02/2017	-	-	-	-
Shanxi	-	-	-	-	H5	09/02/2017 (H5N8)
Sichuan	H7N9	13/02/2017	H5	28/12/2016 (H5N6)	-	-
Xinjiang	-	-	H5	28/12/2016 (H5N6)	-	-
Zhejiang	H7N9	27/02/2017	-	-	-	-
Montenegro	-	-	-	-	H5	22/12/2016 (H5N5)
Myanmar	-	-	H5	07/02/2017 (H5N6)	-	-
Nepal	-	-	H5	05/03/2017 (H5N1)	-	-
Netherlands	-	-	H5	28/12/2016 (H5N8)	H5	14/12/2016 (H5N5) 17/02/2017 (H5N8)
Niger	-	-	H5	21/02/2017 (H5N1)	-	-
Nigeria	-	-	H5	03/03/2017 (H5N1) 08/02/2017 (H5N8)	H5	17/12/2016 (H5N8)
Poland	-	-	H5	06/03/2017 (H5N8)	H5	03/03/2017 (H5N8) 08/02/2017 (H5N5)
Portugal	-	-	-	-	H5	31/01/2017 (H5N8)
Macedonia	-	-	H5	30/01/2017 (H5N8)	H5	03/02/2017*
Romania	-	-	H5	28/02/2017 (H5N8)	H5	03/03/2017 (H5N8)
Russia	-	-	H5	26/01/2017*	H5	27/02/2017*
Serbia	-	-	H5	01/03/2017 (H5N8)	H5	01/03/2017 (H5N5) 01/03/2017 (H5N8)
Slovakia	-	-	H5	17/02/2017 (H5N8)	H5	24/02/2017 (H5N8)
Slovenia	-	-	-	-	H5	01/03/2017 (H5N5) 27/01/2017 (H5N8)
Spain	-	-	H5	03/03/2017 (H5N8)	H5	20/02/2017 (H5N8)
Sweden	-	-	H5	03/02/2017 (H5N8)	H5	17/02/2017 (H5N8)
Switzerland	-	-	-	-	H5	11/01/2017 (H5N8)
Taiwan	H7N9	05/02/2017 <sup>^</sup>	H5	01/03/2017 (H5N2) 09/01/2017 (H5N8) 01/03/2017 (H5N6)	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	15/02/2017 (H5N8)
United States of America	-	-	H7	06/03/2017*	H5	09/01/2017 (H5N2)
Vietnam	-	-	H5	23/02/2017 (H5N1) 20/02/2017 (H5N6)	-	-

Sources: WHO, OIE, NHFPC and other official websites <sup>#</sup> imported case from Guangdong <sup>\*</sup> without further subtype information <sup>^</sup> imported case from Guangdong <sup>%</sup> case exported to Beijing