

# 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 Mainland China health authorities in Henan (4 cases), Jiangxi (4 cases), Guangxi (3 cases), Sichuan (3 cases), Fujian (2 cases), Guizhou (2 cases), Hunan (2 cases), Jiangsu (2 cases), Chongqing (1 case) and Hubei (1 case). In addition, The Centre for Health Protection (CHP) of the Department of Health confirmed one imported human case of avian influenza A(H7N9). This case is the fifth case in Hong Kong this winter and the twenty-first case in Hong Kong. Since March 2013 (as of March 11, 2017), there were a total of 1307 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of March 11, 2017), 501 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 11, 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)	1(0)	<b>Hong Kong:</b> A 76-year-old man was confirmed positive for avian influenza A(H7N9). This imported case is the fifth case in Hong Kong this winter. He is now in critical condition. He travelled alone to Fuzhou, Fujian between February 11 and March 1 during which he visited a wet market there. (CHP, March 7 & March 8, 2017)

**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
Guizhou	Qiandongnan	40	M	Severe pneumonia	07/03/2017
Chongqing	Fengjie	66	M	Severe pneumonia	07/03/2017
Guangxi	Liuzhou	23	F	Severe pneumonia	10/03/2017
Hubei	Yellowstone	54	M	Severe pneumonia	10/03/2017
Henan	Kaifeng	37	M	Fatal	10/03/2017
Fujian	Ningde	39	M	Severe pneumonia	10/03/2017
Jiangxi	Ganzhou	59	M	Severe pneumonia	10/03/2017
Henan	Zhoukou	79	M	Severe pneumonia	10/03/2017
Hunan	Shaoyang	64	M	Severe pneumonia	10/03/2017
Jiangxi	Yichun	66	F	Under investigation	10/03/2017
Henan	Zhoukou	57	M	Severe pneumonia	10/03/2017
Jiangxi	Yichun	61	F	Under investigation	10/03/2017
Guangxi	Guilin	56	M	Fatal	10/03/2017
Jiangsu	Zhenjiang	76	M	Severe pneumonia	10/03/2017
Sichuan	Guang'an	65	F	Severe pneumonia	10/03/2017
Hunan	Shaoyang	15	F	Severe pneumonia	10/03/2017
Sichuan	Nanchong	40	M	Severe pneumonia	10/03/2017
Guangxi	Baise	38	M	Severe pneumonia	10/03/2017
Henan	Luoyang	20	M	Pneumonia	10/03/2017
Guizhou	Qiandongnan	40	M	Severe pneumonia	10/03/2017
Sichuan	Dazhou	64	M	Fatal	10/03/2017
Jiangsu	Taizhou	72	M	Pneumonia	10/03/2017
Jiangxi	Xinyu	42	F	Severe pneumonia	10/03/2017
Fujian	Pingtang	74	F	Pneumonia	10/03/2017

**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 (1307 cases in total) (as of March 11, 2017)	Cumulative no. of cases since October 2016 (509 cases in total) (as of March 11, 2017)
Mainland China	Zhejiang Province	299	80
	Guangdong Province	253	58
	Jiangsu Province	237	133
	Fujian Province	100	26
	Anhui Province	90	54
	Hunan Province	66	32
	Shanghai Municipality	57	6
	Jiangxi Province	49	35
	Hubei Province	26	24
	Henan Province	15	11
	Shandong Province	15	6
	Guangxi Zhuang Autonomous Region	13	10
	Beijing Municipality	11	2 <sup>&amp;</sup>
	Sichuan Province	11	11
	Guizhou Province	10	8
	Xinjiang Uygur Autonomous Region	10	-
	Hebei Province	4	-
	Liaoning Province	3	2
	Jilin Province	2	-
	Tianjin Municipality	2	-
Yunnan Province	2	2 <sup>@</sup>	
Chongqing Municipality	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> 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	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 March 11, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of March 11, 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 / City	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	4
H5N2	3
H5N6	2
H5N8	20

**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**

<b>Places of occurrence</b>	<b>Details</b>	<b>OIE Report Date</b>
France	Samples from poultry and birds in Landes, Pyrenees-Atlantiques, Lot-et-Garonne and Hautes-Pyrenees were tested positive for highly pathogenic avian influenza A (H5N8).	March 3, March 10 and March 13, 2017
	Samples from poultry in Pyrenees-Atlantiques and Landes were tested positive for low pathogenic avian influenza A (H5N2).	March 13, 2017
United States of America	Samples from poultry in Wisconsin were tested positive for low pathogenic avian influenza A (H5N2).	March 6, 2017
Ireland	Samples from birds in Galway were tested positive for highly pathogenic avian influenza A (H5N8).	March 6, 2017
Russia	Samples from poultry in Moskovskaya Oblast were tested positive for highly pathogenic avian influenza A (H5N8).	March 6, 2017
Romania	Samples from poultry and birds in Neamț, Arad, Bacau, Bucuresti, Constanța and Teleorman were tested positive for highly pathogenic avian influenza A (H5N8).	March 6, March 7, March 9 and March 10, 2017
Taiwan	Samples from poultry in Tainan and Hualien were tested positive for highly pathogenic avian influenza A (H5N6).	March 7, 2017
	Samples from poultry in Pingtung and Kaohsiung were tested positive for highly pathogenic avian influenza A (H5N8).	March 7, 2017
	Samples from poultry in Taipei, Changhua, Yunlin, Yilan, Chiayi and Tainan were tested positive for highly pathogenic avian influenza A (H5N2).	March 7, 2017
Poland	Samples from poultry and birds in Lubuskie, Malopolske and Wielkopolskie were tested positive for highly pathogenic avian influenza A (H5N8).	March 7, March 8 and March 10, 2017
Malaysia	Samples from poultry in Kelantan were tested positive for highly pathogenic avian influenza A (H5N1).	March 8, 2017
Vietnam	Samples from poultry in Bac Ninh, Tay Ninh, Cao Bang and Ha Tinh were tested positive for highly pathogenic avian influenza A (H5N1).	March 9 and March 12, 2017
	Samples from poultry in Cao Bang were tested positive for highly pathogenic avian influenza A (H5N6).	March 12, 2017

<b>Places of occurrence</b>	<b>Details</b>	<b>OIE Report Date</b>
Slovakia	Samples from poultry and birds in Nitra and Trnava were tested positive for highly pathogenic avian influenza A (H5N8).	March 10, 2017 (2 reports)
Nepal	Samples from poultry in Koshi were tested positive for highly pathogenic avian influenza A (H5N8).	March 10, 2017
	Samples from birds in Koshi were tested positive for highly pathogenic avian influenza A (H5N1).	March 10, 2017
Germany	Samples from poultry and birds in Niedersachsen, Mecklenburg-Vorpommern, Sachsen-Anhalt and Bayern were tested positive for highly pathogenic avian influenza A (H5N8).	March 10, 2017
Czech Republic	Samples from poultry in Moravskoslezsky were tested positive for highly pathogenic avian influenza A (H5N8).	March 12, 2017
United Kingdom	Samples from birds in Wales were tested positive for highly pathogenic avian influenza A (H5N8).	March 13, 2017
Hungary	Samples from birds in Tolna, Pest, Budapest, Somogy and Gyor-Moson-Sopron were tested positive for highly pathogenic avian influenza A (H5N8).	March 13, 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 13, 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	12/03/2017 (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	10/03/2017 (H5N8)	H5	13/03/2017 (H5N8)	
Germany	-	-	H5	10/03/2017 (H5N8) 09/02/2017 (H5N5)	H5	10/03/2017 (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	03/03/2017 <sup>†</sup>	-	-	H5	08/12/2016 (H5N6)	
Hungary	-	-	H5	24/02/2017 (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	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 <sup>#</sup>	H7	13/12/2016 (H7N9)	-	-	
Mainland China							
	Anhui	H7N9	27/02/2017	-	-	-	
	Chongqing	H7N9	23/02/2017	-	-	-	
	Fujian	H7N9	04/03/2017	-	-	-	
	Gansu	-	-	H5	08/10/2016 (H5N6)	-	
	Guangdong	H7N9	24/02/2017	H7	01/03/2017 (H7N9)	-	
		H5N6	08/11/2016	-	-	-	
	Guangxi	H7N9	01/03/2017	-	-	-	
		H5N6	09/11/2016	-	-	-	
	Guizhou	H7N9	03/03/2017	H5	-	-	
		H7N9	01/02/2017 <sup>§</sup>	-	-	-	
	Hebei	H7N9	27/02/2017	-	-	-	
	Henan	H7N9	27/02/2017	-	-	-	
	Hubei	H7N9	23/02/2017	H5	08/10/2016 (H5N6)	H5	18/01/2017 (H5N8)
		H5N6	18/11/2016	-	-	-	
	Hunan	H7N9	01/03/2017	H5	12/01/2017 (H5N6)	-	-
	Jiangsu	H7N9	01/03/2017	-	-	-	

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)
Jiangxi	H7N9	02/03/2017	-	-	-	-
Liaoning	H7N9	01/02/2017 <sup>6</sup>	-	-	-	-
Shandong	H7N9	15/02/2017	-	-	-	-
Shanghai	H7N9	21/02/2017	-	-	-	-
Shanxi	-	-	-	-	H5	09/02/2017 (H5N8)
Sichuan	H7N9	02/03/2017	H5	28/12/2016 (H5N6)	-	-
Xinjiang	-	-	H5	28/12/2016 (H5N6)	-	-
Zhejiang	H7N9	27/02/2017	-	-	-	-
Malaysia	-	-	H5	08/03/2017 (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) 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	10/03/2017 (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	10/03/2017 (H5N8)	H5	10/03/2017 (H5N8)
Russia	-	-	H5	06/03/2017 (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	10/03/2017 (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	07/03/2017 (H5N2) 07/03/2017 (H5N6) 07/03/2017 (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	06/03/2017*	H5	09/01/2017 (H5N2)
Vietnam	-	-	H5	12/03/2017 (H5N1) 12/03/2017 (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