

# 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.

## VOLUME 13, NUMBER 12

Reporting period: March 19, 2017 – March 25, 2017 (Week 12)

(Published on March 28, 2017)

### Summary

1. Since the previous issue of Avian Influenza Report (AIR), there were 18 new human cases of avian influenza A(H7N9) reported by Mainland China health authorities in Guangxi (5 cases), Hunan (4 cases), Hubei (2 cases), Zhejiang (2 cases), Anhui (1 case), Fujian (1 case), Henan (1 case), Jiangxi (1 case) and Guizhou (1 case). Since March 2013 (as of March 25, 2017), there were a total of 1347 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of March 25, 2017), 541 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 25, 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	City / District / Area	Age (years)	Sex	Clinical condition at time of reporting	Date of report
Zhejiang	Huzhou	64	F	Pneumonia	24/03/2017
Hunan	Changsha	53	M	Severe pneumonia	24/03/2017
Guangxi	Liuzhou	69	F	Severe pneumonia	24/03/2017
Hunan	Zhuzhou	37	F	Severe pneumonia	24/03/2017
Hubei	Xiaogan	55	F	Severe pneumonia	24/03/2017
Guangxi	Guilin	53	M	Severe pneumonia	24/03/2017
Hubei	Xiaogan	69	F	Severe pneumonia	24/03/2017
Hunan	Yueyang	45	F	Severe pneumonia	24/03/2017
Fujian	Fuzhou	84	M	Severe pneumonia	24/03/2017
Guangxi	Imported from Hunan	79	M	Fatal	24/03/2017
Guangxi	Guilin	39	M	Severe pneumonia	24/03/2017
Guangxi	Yulin	72	M	Pneumonia	24/03/2017
Hunan	Shaoyang	86	M	Severe pneumonia	24/03/2017
Zhejiang	Quzhou	67	M	Severe pneumonia	24/03/2017
Henan	Gushi	74	M	Fatal	24/03/2017
Jiangxi	Xinyu	71	M	Severe pneumonia	24/03/2017
Anhui	Imported from Jiangsu	81	F	Severe pneumonia	24/03/2017
Guizhou	Qiandongnan	60	M	Severe pneumonia	24/03/2017

**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 (1347 cases in total) (as of March 25, 2017)	Cumulative no. of cases since October 2016 (549 cases in total) (as of March 25, 2017)
Mainland China	Zhejiang Province	301	82
	Guangdong Province	256	61
	Jiangsu Province	237	133
	Fujian Province	102	28
	Anhui Province	91	55
	Hunan Province	75	41
	Shanghai Municipality	57	6
	Jiangxi Province	51	37
	Hubei Province	28	26
	Guangxi Zhuang Autonomous Region	24	21
	Henan Province	18	14
	Shandong Province	15	6
	Guizhou Province	14	12
	Beijing Municipality	11	2 <sup>&amp;</sup>
	Sichuan Province	11	11
	Xinjiang Uygur Autonomous Region	10	-
	Hebei Province	4	-
	Liaoning Province	3	2
	Chongqing Municipality	2	2
	Jilin Province	2	-
Tianjin Municipality	2	-	
Yunnan Province	2	2 <sup>@</sup>	
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 25, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of March 25, 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)**

	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	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%

<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 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>	<b>Mainland China</b>	1(0)	<b>Avian influenza A(H9N2):</b> <ul style="list-style-type: none"> <li>▫ <b>Gansu Province:</b> An 11-month-old boy with onset on February 6, 2017.</li> </ul>
<b>Previously reported cases (onset in the past 6 months)</b>	<b>Mainland China</b>	1(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> </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>	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	3
H5N2	1
H5N6	1
H5N8	10
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**

<b>Places of occurrence</b>	<b>Details</b>	<b>OIE Report Date</b>
France	Samples from poultry and birds in Haut-Rhin, Bas-Rhin, Landes and Pyrénées-Atlantiques were tested positive for highly pathogenic avian influenza A (H5N8).	March 17, 2017 (2 reports)
Germany	Samples from poultry and birds in Niedersachsen, Rheinland-Pfalz, Brandenburg, Schleswig-Holstein and Bayern were tested positive for highly pathogenic avian influenza A (H5N8).	March 17 and March 23, 2017
Nigeria	Samples from poultry in Plateau and Bauchi were tested positive for highly pathogenic avian influenza A (H5N1).	March 20, 2017
Taiwan	Samples from poultry in Changhua, Yunlin, Kaohsiung and Pingtung were tested positive for highly pathogenic avian influenza A (H5N2).	March 20, 2017
Romania	Samples from poultry and birds in Constanța, București and Teleorman were tested positive for highly pathogenic avian influenza A (H5N8).	March 21, 2017
Slovenia	Samples from birds in Ptuj, Novo Mesto, Murska Sobota and Maribor were tested positive for highly pathogenic avian influenza A (H5N8).	March 22, 2017
Vietnam	Samples from poultry in Can Tho and Hau Giang were tested positive for highly pathogenic avian influenza A (H5N1).	March 22 and March 25, 2017
Japan	Samples from poultry in Miyagi and Chiba were tested positive for highly pathogenic avian influenza A (H5N6).	March 23, 2017
China	Samples from poultry in Hunan were tested positive for highly pathogenic avian influenza A (H7N9).	March 24, 2017
Belgium	Samples from birds in Limburg were tested positive for highly pathogenic avian influenza A (H5N8).	March 24, 2017
Czech Republic	Samples from poultry in Karlovarský were tested positive for highly pathogenic avian influenza A (H5N8).	March 24, 2017
Poland	Samples from poultry in Malopolske were tested positive for highly pathogenic avian influenza A (H5N8).	March 24, 2017
Greece	Samples from poultry in Dytiki Makedonia were tested positive for highly pathogenic avian influenza A (H5N8).	March 24, 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 27, 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	24/03/2017 (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) 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	10/02/2017 (H5N8)
France	-	-	H5	17/03/2017 (H5N8)	H5	17/03/2017 (H5N8)
Germany	-	-	H5	23/03/2017 (H5N8) 09/02/2017 (H5N5)	H5	23/03/2017 (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	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	17/03/2017 (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	07/09/2016 (H5N8) 02/12/2016 (H5N6)	-	-
Kuwait	-	-	H5	22/01/2017 (H5N8)	-	-
Laos	-	-	H5	14/10/2016 (H5N1)	-	-
Lithuania	-	-	-	-	H5	19/03/2017 (H5N8)
Macau	H7N9	12/01/2017 #	H7	13/12/2016 (H7N9)	-	-
Mainland China						
	Anhui	H7N9	11/03/2017	-	-	-
	Chongqing	H7N9	06/03/2017	-	-	-
	Fujian	H7N9	15/03/2017	-	-	-
	Gansu	-	-	H5	08/10/2016 (H5N6)	-
	Guangdong	H7N9	04/03/2017	H7	01/03/2017 (H7N9)	-
	Guangxi	H5N6	08/11/2016	-	-	-
		H7N9	14/03/2017	-	-	-
	Guizhou	H5N6	09/11/2016	H5	-	-
		H7N9	09/03/2017	-	-	-
	Hebei	H7N9	01/02/2017 <sup>h</sup>	-	-	-
	Henan	H7N9	15/03/2017	-	-	-
	Hubei	H7N9	11/03/2017	H5	15/03/2017 (H5N6)	18/01/2017 (H5N8)



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)
Hunan	H5N6 H7N9	18/11/2016 13/03/2017	H5 H7	12/01/2017 (H5N6) 24/03/2017 (H7N9)	-	-
Jiangsu	H7N9	01/03/2017	-	-	-	-
Jiangxi	H7N9	13/03/2017	-	-	-	-
Liaoning	H7N9	01/02/2017 <sup>ns</sup>	-	-	-	-
Shandong	H7N9	15/02/2017	-	-	-	-
Shanghai	H7N9	21/02/2017	-	-	-	-
Shanxi	-	-	-	-	H5	09/02/2017 (H5N8)
Sichuan	H7N9	16/03/2017	H5	28/12/2016 (H5N6)	-	-
Xinjiang	-	-	H5	28/12/2016 (H5N6)	-	-
Zhejiang	H7N9	14/03/2017	-	-	-	-
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) 17/03/2017 (H5N8)
Niger	-	-	H5	21/02/2017 (H5N1)	-	-
Nigeria	-	-	H5	20/03/2017 (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	21/03/2017 (H5N8)	H5	22/03/2017 (H5N8)
Russia	-	-	H5	15/03/2017 (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) 22/03/2017 (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	20/03/2017 (H5N2) 17/03/2017 (H5N6) 17/03/2017 (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	25/03/2017 (H5N1) 19/03/2017 (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