

# 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), 25 new human cases of avian influenza A(H7N9) were reported by health authorities in Mainland China. The cases were from Guangdong (2), Zhejiang (7), Jiangsu (6), Hunan (6), Fujian (3) and Shandong (1) respectively. Also, one imported human case of avian influenza A(H7N9) was confirmed by the Centre for Health Protection (CHP) of the Department of Health. This imported case is the second case in Hong Kong this year and the fifteenth case in Hong Kong. Since March 2013 (as of March 19, 2016), there were a total of 757 human cases of avian influenza A(H7N9) reported globally. Since October 2015 (as of March 19, 2016), 78 cases have been recorded in Mainland China.
2. Since the previous issue of AIR, one new human case of avian influenza A(H5N6) from Guangdong was reported by the National Health and Family Planning Commission (NHFPC). Since 2014 (as of March 19, 2016), 10 human cases of avian influenza A(H5N6) were reported to World Health Organization (WHO) and all occurred in Mainland China.
3. There were no new human cases of avian influenza A(H5N1) reported by WHO. From 2011 to 2015, 32 to 145 confirmed human cases of avian influenza A(H5N1) were reported to WHO annually (according to onset date).\*

\* 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, 2016.

## This week's highlights

(Sources: WHO, National Health and Family Planning Commission (NHFPC), Mainland health authorities, 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)**

	<b>No. of H5 cases (No. of deaths)</b>	<b>No. of H7N9 cases (No. of deaths)</b>	<b>Details</b>
<b>In this reporting period</b>	0(0)	1(0)	<b>Hong Kong:</b> A 81-year-old woman was confirmed positive for avian influenza A(H7N9). This imported case is the second case in Hong Kong this year. The patient, with underlying illnesses, travelled to Kaiping, Guangdong on March 5 and returned to Hong Kong on March 17. During the stay in Kaiping, she visited a wet market near her residence in Kaiping within the incubation period. She is now in stable condition. (CHP, March 18, 2016)

**Table 2. Outside Hong Kong: Confirmed cases of human infection with avian influenza A(H7N9)**

	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>	Mainland China	25(7)	Guangdong	Shantou	56	M	-	16/03/2016
			Guangdong	Zhongshan	39	F	-	16/03/2016
			Hunan	Yongzhou	52	M	fatal	18/03/2016
			Hunan	Chenzhou	75	M	-	18/03/2016
			Zhejiang	Huzhou	67	M	-	18/03/2016
			Hunan	Yongzhou	48	M	fatal	18/03/2016
			Zhejiang	Hangzhou	55	F	-	18/03/2016
			Jiangsu	Huaian	41	M	fatal	18/03/2016
			Zhejiang	Hangzhou	43	F	-	18/03/2016
			Jiangsu	Suzhou	35	M	-	18/03/2016
			Hunan	Chenzhou	78	M	-	18/03/2016
			Jiangsu	Suzhou	35	M	-	18/03/2016
			Zhejiang	Hangzhou	70	M	fatal	18/03/2016
			Hunan	Yongzhou	36	M	-	18/03/2016
			Hunan	Zhuzhou	62	F	fatal	18/03/2016
			Shandong	Yantai	57	M	fatal	18/03/2016
			Jiangsu	Wuxi	54	M	-	18/03/2016
			Zhejiang	Shaoxing	57	M	-	18/03/2016
			Fujian	Fuzhou	58	M	-	18/03/2016
			Zhejiang	Wenzhou	69	M	-	18/03/2016
			Fujian	Zhangzhou	74	M	fatal	18/03/2016
			Zhejiang*	Huangshan, Anhui Province	29	M	-	18/03/2016
			Jiangsu	Wuxi	21	F	-	18/03/2016
			Jiangsu	Wuxi	26	M	-	18/03/2016
			Fujian*	Huangshan, Anhui Province	56	F	-	18/03/2016

\* imported cases from Anhui

**Table 3. Cumulative numbers of confirmed cases of human infection with avian influenza A(H7N9) since 2013 and since October 2015 respectively**

Confirmed H7N9 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2013 (757 cases in total) (as of March 19, 2016)	Cumulative no. of cases since October 2015 (80 cases in total) (as of March 19, 2016)
Mainland China	Zhejiang Province	215	31
	Guangdong Province	194	13 <sup>#</sup>
	Jiangsu Province	91	13
	Fujian Province	69	6
	Shanghai Municipality	52 <sup>&amp;</sup>	4 <sup>&amp;</sup>
	Hunan Province	34	8
	Anhui Province	30	-
	Jiangxi Province	12	1
	Xinjiang Uygur Autonomous Region	10	-
	Shandong Province	8	1
	Beijing Municipality	6	-
	Henan Province	4	-
	Guangxi Province	3	-
	Jilin Province	2	-
	Guizhou Province	2	-
	Hubei Province	2 <sup>@</sup>	1 <sup>@</sup>
Hebei Province	1	-	
Canada	2 <sup>*</sup>	-	
Hong Kong	15 <sup>*</sup>	2 <sup>*</sup>	
Malaysia	1 <sup>*</sup>	-	
Taiwan	4 <sup>*</sup>	-	

# Refer to Figure 1 for geographical distribution

& Including one case imported from Anhui

@ Including one case imported from a neighboring province

\* All cases 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>	Mainland China	1(1)	Guangdong	Huizhou	40	F	Fatal	15/3/2016

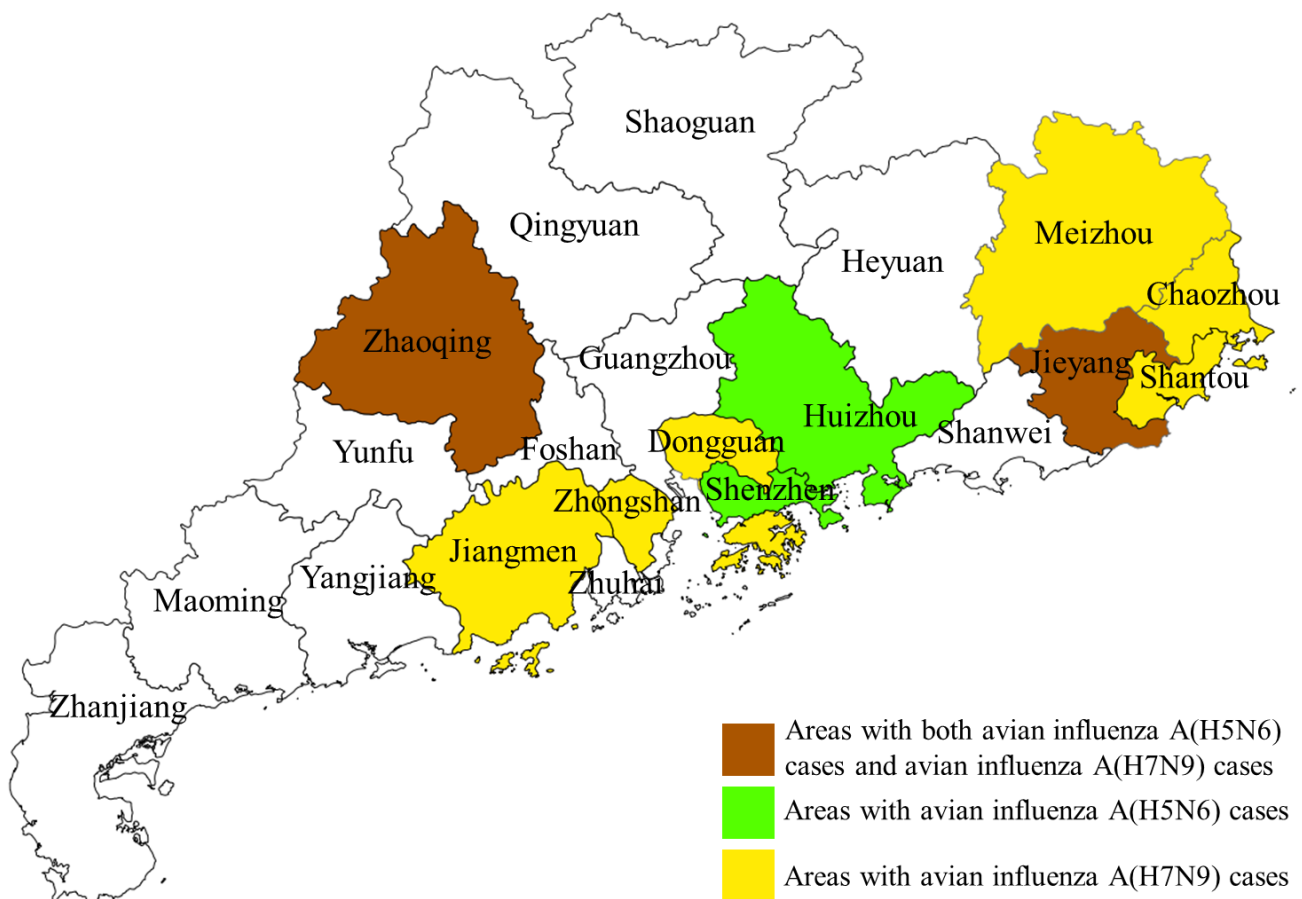
**Table 5. Cumulative number of confirmed cases of human infection with avian influenza A(H5N6) reported to WHO since 2014 and since October 2015 respectively**

Confirmed H5N6 human cases have been reported in the following countries / areas		Cumulative no. of cases since 2014 (10 cases in total) (as of March 19, 2016)	Cumulative no. of cases since October 2015 (6 cases in total) (as of March 19, 2016)
Mainland China	Guangdong	6	5 <sup>#</sup>
	Yunan	2	-
	Sichuan	1	-
	Jiangxi	1*	1*

<sup>#</sup> Refer to Figure 1 for geographical distribution

\* imported case from Guangdong

**Figure 1. Geographical distribution of human cases of avian influenza A(H5N6) and avian influenza A(H7N9) in Guangdong since October 2015 (latest case was reported on 19/3/2016)**



Note: Included a H5N6 case who was living in Jieyang during the incubation period and confirmed in Jiangxi Province

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

	<b>Place of occurrence</b>	<b>No. of cases (No. of deaths)</b>	<b>Details</b>
<b>New Cases</b>	-	0(0)	-

For the cumulative no. of human cases by place, please refer to [WHO/WPRO](http://www.who.int/wpro) website.

**Table 7. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHFPC since 2003 (by onset date) <sup>§</sup>**

	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Overall</b>
<b>Cases</b>	4	46	98	115	88	44	73	48	62	32	39	52	145	846
<b>Deaths</b>	4	32	43	79	59	33	32	24	34	20	25	22	42	449
<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%	53.1%

<sup>§</sup> Further breakdown by countries is available at [WHO](http://www.who.int) website

**Table 8. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHFPC since 2003 (by date of reporting)**

<b>Country</b>	<b>Cumulative no. of cases (December 2003 to March 2016)</b>	<b>No. of recent cases<sup>^</sup> (December 2015 to March 2016)</b>
Azerbaijan	8	0
Bangladesh	8	1
Cambodia	56	0
Canada	1	0
Mainland China	53	1
Djibouti	1	0
Egypt	346	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	846	2

<sup>^</sup> Details of recent cases (December 2015 to March 2016) are listed in *Table 9*.

**Table 9. Details of the recent confirmed human cases of avian influenza A(H5N1) reported to WHO / NHFPC (December 2015 to March 2016) (Sources: WHO, NHFPC)**

<b>Date of report</b>	<b>Country</b>	<b>Province / Region</b>	<b>District / City</b>	<b>Sex</b>	<b>Age</b>	<b>Outcome at the time of reporting</b>
14/1/2016	Mainland China	Sichuan	Chengdu	M	42	Critical
20/1/2016	Bangladesh	-	Mymensing	M	60	Recovered

**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>Sichuan Province:</b> One human case of avian influenza A(H9N2) affecting a 57-year-old woman was reported. The patient remains hospitalized. (<i>WHO</i>, February 25, 2016)</li> </ul>
<b>Previously reported cases (in the past 6 months)</b>	<b>Mainland China</b>	4(0)	<b>Avian influenza A(H9N2):</b> <ul style="list-style-type: none"> <li>▫ <b>Anhui Province:</b> A 4-year-old girl reported on December 14, 2015<sup>i</sup></li> <li>▫ <b>Hunan Province:</b> A two-year-old boy, a fifteen-year-old girl and a one-year-old girl reported on December 14, 2015<sup>ii</sup></li> </ul>
	<b>Bangladesh</b>	2(0)	<b>Avian influenza A(H9N2):</b> <ul style="list-style-type: none"> <li>▫ <b>Bangladesh:</b> A 3.5-year-old girl reported on September 4, 2015<sup>iii</sup></li> <li>▫ <b>Bangladesh:</b> A 46-year-old man reported on January 20, 2016<sup>iv</sup></li> </ul>

<sup>i</sup> The WHO reported one confirmed human case of avian influenza A(H9N2) in Anhui Province of Mainland China in the Monthly Risk Assessment Summary in December 2015.

<sup>ii</sup> The WHO reported three confirmed human cases of avian influenza A(H9N2) in Hunan Province of Mainland China in the Monthly Risk Assessment Summary in December 2015.

<sup>iii</sup> The WHO reported one confirmed human case of avian influenza A(H9N2) in Bangladesh in the Monthly Risk Assessment Summary in September 2015.

<sup>iv</sup> The WHO reported one confirmed human case of avian influenza A(H9N2) in Bangladesh in the Monthly Risk Assessment Summary in January 2016.



**Table 11. Hong Kong: Confirmed reports of avian influenza A(H5) or avian influenza A(H7N9) in poultry / wild birds since 2014**

	No. of reports of H5 in poultry / wild birds	No. of reports of H7N9 in poultry / wild birds	Details
<b>In this reporting period</b>	0	0	-
<b>Previously reported cases since 2014</b>	6*	2 <sup>#</sup>	-

\* The Government confirmed that the carcass of a peregrine falcon found at a construction site in Hung Shui Kiu, Yuen Long on April 9, 2015 was tested positive for H5N6 virus.

The Government confirmed that the carcass of an oriental magpie robin found in Sai Kung on April 29, 2015 was tested positive for H5N6 virus.

The Government confirmed that the carcass of an oriental magpie robin found in Kwai Chung on November 17, 2015 was tested positive for H5N6 virus.

The Government confirmed that the carcass of an great egret found in Diamond Hill, Wong Tai Sin on December 31, 2015 was tested positive for H5N6 virus.

The Government confirmed that a chicken carcass found in Lung Kwu Tan, Tuen Mun on February 14, 2016 was tested positive for H5N6 virus.

The Government confirmed that a chicken carcass found in Tai O on February 18, 2016 was tested positive for H5N6 virus.

# The Government confirmed on January 27, 2014 that a number of samples from a batch of live chickens imported from a registered poultry farm in Shunde District of Foshan City in Guangdong were tested positive for H7N9 virus.

The Government found on December 30, 2014 a number of samples from a consignment of live chickens from a registered farm in Huicheng District of Huizhou in Guangdong tested positive for H7N9 virus.

**Table 12. Outside Hong Kong: Confirmed avian influenza A(H5), A(H7N9) or other highly pathogenic avian influenza in poultry / wild birds reported in this week**

Places of occurrence	No. of reports of H5N2	No. of reports of H5N9	Details
<b>France, South Africa</b>	1	1	<p><b>France:</b> Samples from poultry in Landes Province were tested positive for highly pathogenic avian influenza A(H5N9). (<i>OIE</i>, March 15, 2016)</p> <p><b>South Africa:</b> Samples from poultry in Western Cape Province and Eastern Cape Province were tested positive for low pathogenic avian influenza A(H5N2). (<i>OIE</i>, March 15, 2016)</p>

For cumulative reports of avian influenza A(H5N1) or A(H7N9) in poultry / wild birds, please refer to the [OIE](#) website.

Table 13. Countries / areas with documented avian influenza A H5, H7N9 or other highly pathogenic avian influenza cases in the recent 6 months (including infections in humans/birds and relevant environmental samples) (as of March 21, 2016)

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)
Bangladesh	H5N1	20/01/2016	-	-	H5	15/02/2016 (H5N1)
Cambodia	-	-	H5	16/11/2015 (H5N1)	-	-
Cote D'Ivoire	-	-	H5	02/02/2016 (H5N1)	-	-
Egypt	-	-	Endemic	Endemic	-	-
France	-	-	H5	15/03/2016 (H5N9)	-	-
Ghana	-	-	H5	02/02/2016 (H5N1)	-	-
Hong Kong	H7N9	18/03/2016 <sup>#</sup>	-	-	H5	23/02/2016 (H5N6)
India	-	-	H5	19/01/2016 (H5N1)	-	-
Indonesia	-	-	Endemic	Endemic	-	-
Laos	-	-	H5	08/10/2015 (H5N6)	-	-
Macau	-	-	H7	03/02/2016 (H7)	-	-
Mainland China						
Anhui	H7N9	12/03/2016 <sup>&amp;</sup>	-	-	-	-
Fujian	H7N9	18/03/2016	-	-	-	-
Guangdong	H7N9 H5N6	16/03/2016 15/03/2016	H5	-	-	-
Guizhou	-	-	H5	29/02/2016 (H5N6)	-	-
Hunan	H7N9	18/03/2016	H5	18/01/2016 (H5N6)	-	-
Jiangsu	H7N9	18/03/2016	H5	-	-	-
Jiangxi	H7N9 H5N6	05/01/2016 11/01/2016 <sup>^</sup>	H5	11/03/2016 (H5N6)	-	-
Shandong	H7N9	18/03/2016	-	-	-	-
Shanghai	H7N9	08/02/2016	-	-	-	-
Sichuan	H5N1	14/01/2016	-	-	-	-
Zhejiang	H7N9	18/03/2016	-	-	-	-
Mexico	-	-	H7N3	03/03/2016 (H7N3)	-	-
Nigeria	-	-	H5	14/03/2016 (H5N1)	-	-
Palestinian Autonomous Territories	-	-	-	-	H5	15/10/2015*
Republic of Korea	-	-	H5	04/12/2015 (H5N8)	-	-
Taiwan	-	-	H5	07/03/2016 (H5N2) 07/03/2016 (H5N8)	-	-
United States	-	-	H7N8	15/01/2016 (H7N8)	-	-
Vietnam	-	-	H5	16/02/2016 (H5N6) 26/02/2016 (H5N1)	-	-

Sources: WHO, OIE, NHFPC and other official websites

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

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

<sup>&</sup> imported case from Anhui to Shanghai

\* without further subtype information