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 22 new human cases of avian influenza A(H7N9) reported by Mainland China health authorities in Guangxi (6 cases), Hunan (5 cases), Guangdong (3 cases), Guizhou (3 cases), Henan (2 cases), Chongqing (1 case), Fujian (1 case) and Jiangxi (1 case). Since March 2013 (as of March 18, 2017), there were a total of 1329 human cases of avian influenza A(H7N9) reported globally. Since October 2016 (as of March 18, 2017), 523 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 18, 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
In this reporting period	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
Chongqing	Fengjie	43	M	Severe pneumonia	16/03/2017
Guizhou	Qiandongnan	43	M	Severe pneumonia	17/03/2017
Hunan	Xiangtan	59	M	Severe pneumonia	17/03/2017
Guangdong	Qingyuan	63	M	Pneumonia	17/03/2017
Guangxi	Liuzhou	48	M	Severe pneumonia	17/03/2017
Henan	Nanyang	40	M	Under investigation	17/03/2017
Guizhou	Qiandongnan	53	M	Severe pneumonia	17/03/2017
Hunan	Xiangtan	33	M	Pneumonia	17/03/2017
Guangdong	Shenzhen	55	M	Fatal	17/03/2017
Guangdong	Qingyuan	51	M	Fatal	17/03/2017
Hunan	Changsha	63	M	Fatal	17/03/2017
Guangxi	Hechi	77	M	Severe pneumonia	17/03/2017
Jiangxi	Xinyu	62	M	Under investigation	17/03/2017
Guangxi	Hechi	52	M	Pneumonia	17/03/2017
Henan	Luoyang	51	M	Pneumonia	17/03/2017
Hunan	Zhuzhou	38	M	Fatal	17/03/2017
Hunan	Changsha	51	F	Pneumonia	17/03/2017
Fujian	Quanzhou	60	M	Severe pneumonia	17/03/2017
Guangxi	Hechi	58	F	Severe pneumonia	17/03/2017
Guangxi	Hechi	71	M	Pneumonia	17/03/2017
Guizhou	Zunyi	61	M	Severe pneumonia	17/03/2017
Guangxi	Hechi	48	M	Severe pneumonia	17/03/2017

Cumulative numbers of confirmed cases of human infection with avian Table 3. 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 (1329 cases in total) (as of March 18, 2017)	Cumulative no. of cases since October 2016 (531 cases in total) (as of March 18, 2017)	
	Zhejiang Province	299	80	
	Guangdong Province	256	61	
	Jiangsu Province	237	133	
	Fujian Province	101	27	
	Anhui Province	90	54	
	Hunan Province	71	37	
	Shanghai Municipality	57	6	
	Jiangxi Province	50	36	
	Hubei Province	26	24	
	Guangxi Zhuang Autonomous Region	19	16	
Mainland	Henan Province	17	13	
China	Shandong Province	15	6	
	Guizhou Province	13	11	
	Beijing Municipality	11	2 ^{&}	
	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 [@]	
	Hong Kong	21*	5	
	Taiwan	5*	1	
	Canada	2*	-	
Macao		2	2#	
	Malaysia	1*	-	

^{*} Cases imported from Hebei and Liaoning

© Cases imported from Jiangxi

* All cases imported from Mainland China

Outside Hong Kong: Confirmed cases of human infection with avian influenza Table 4. **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
New cases	-	0(0)	-	-	-	ı	-	-

^{*} The latest case imported from Mainland China

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 18, 2017)	Cumulative no. of cases since November 2016 (2 cases in total) (as of March 18, 2017)
	Guangdong Province	6	-
	Hunan Province	3	1
	Yunnan Province	2	-
Mainland	Anhui Province	1	-
China	Hubei Province	1	-
	Jiangxi Province	1*	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) \S

	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 [^] (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

[^] 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
-	-	-	-	ı	ı	-

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	
In this reporting period	-	0(0)	-	
Previously reported cases	Mainland China	1(0)	Avian influenza A(H9N2): Guangdong Province: A 7-month-old girl with onset on December 11, 2016.	
(onset in the past 6 months)	United States of 1(0) America		Avian influenza A(H7N2): United States of America: 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
In this reporting period	0	0	-
Previously reported cases since 2014	8*	3#	-

^{*} 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	3
H5N5	1
H5N6	3
H5N8	9
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

etails of reports		
Details	OIE Report Date	
Samples from birds in Skane and Stockholms were tested positive for highly pathogenic avian influenza A (H5N8).	March 13, 2017	
Samples from poultry in Plateau, Katsina and Bauchi were tested positive for highly pathogenic avian influenza A (H5N1).	March 13, 2017	
Samples from poultry in As Suways, Dumyat and Al Minya were tested positive for highly pathogenic avian influenza A (H5N8).	March 14, 2017	
Samples from poultry in Western Cape were tested positive for low pathogenic avian influenza A (H5N2).	March 14, 2017	
Samples from poultry in Moskovskaya Oblast were tested positive for highly pathogenic avian influenza A (H5N8).	March 15, 2017	
Samples from poultry in Hubei were tested positive for highly pathogenic avian influenza A (H5N6).	March 15, 2017	
Samples from birds in Kaunas and Klaipeda were tested positive for highly pathogenic avian influenza A (H5N8).	March 16 and March 19, 2017	
Samples from birds in Constanta and Neamt were tested positive for highly pathogenic avian influenza A (H5N8).	March 16, 2017	
Samples from poultry in Krapinsko-Zagorskoj were tested positive for highly pathogenic avian influenza A (H5N5).	March 17, 2017	
Samples from poultry in Tennessee were tested positive for highly pathogenic avian influenza A (H7N9).	March 17, 2017	
Samples from poultry in Hualien were tested positive for highly pathogenic avian influenza A (H5N6).	March 17, 2017	
Samples from poultry in Chiayi, Tainan, Pingtung, Yunlin and Kaohsiung were tested positive for highly pathogenic avian influenza A (H5N8).	March 17, 2017	
Samples from poultry in Yunlin, Changhua, Yilan, Tainan and Pingtung were tested positive for highly pathogenic avian influenza A (H5N2).	March 17, 2017	
Samples from poultry in Veneto were tested positive for highly pathogenic avian influenza A (H5N8).	March 17, 2017	
Samples from poultry in Lot-et-Garonne were tested positive for low pathogenic avian influenza A (H5N1).	March 17, 2017	
Samples from poultry in Pyrenees-Atlantiques were tested positive for low pathogenic avian influenza A (H5N2).	March 17, 2017	
Samples from birds in Friesland and Noord-Holland were tested positive for highly pathogenic avian influenza A (H5N8).	March 17, 2017	
Samples from poultry in Quang Tri were tested positive for highly pathogenic avian influenza A (H5N6).	March 19, 2017	
	Samples from birds in Skane and Stockholms were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Plateau, Katsina and Bauchi were tested positive for highly pathogenic avian influenza A (H5N1). Samples from poultry in As Suways, Dumyat and Al Minya were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Western Cape were tested positive for low pathogenic avian influenza A (H5N2). Samples from poultry in Moskovskaya Oblast were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Hubei were tested positive for highly pathogenic avian influenza A (H5N8). Samples from birds in Kaunas and Klaipeda were tested positive for highly pathogenic avian influenza A (H5N8). Samples from birds in Constanta and Neamt were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Krapinsko-Zagorskoj were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Tennessee were tested positive for highly pathogenic avian influenza A (H5N5). Samples from poultry in Hualien were tested positive for highly pathogenic avian influenza A (H5N6). Samples from poultry in Chiayi, Tainan, Pingtung, Yunlin and Kaohsiung were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Vunlin, Changhua, Yilan, Tainan and Pingtung were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Veneto were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Veneto were tested positive for highly pathogenic avian influenza A (H5N8). Samples from poultry in Pyrenees-Atlantiques were tested positive for low pathogenic avian influenza A (H5N8). Samples from birds in Friesland and Noord-Holland were tested positive for highly pathogenic avian influenza A (H5N8).	

For cumulative reports of avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds, please refer to the \underline{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 20, 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*	Н5	02/03/2017 (H5N8)
Bulgaria	-	-	H5	24/02/2017 (H5N8)	H5	20/02/2017*
Cambodia	-	-	H5	31/01/2017 (H5N1)	-	-
Cameroon				14/09/2016 (H5N1)		
	-	-	H5	14/02/2017 (H5N8)	H5	14/02/2017 (H5N8)
Cote D'Ivoire	-	-	H5	03/10/2016 (H5N1)	-	-
Croatia	-	-	Н5	16/02/2017 (H5N8) 17/03/2017 (H5N5)	Н5	24/02/2017 (H5N8) 05/01/2017 (H5N5)
Czech Republic						27/02/2017 (H5N8)
Czech Republic	-	-	H5	12/03/2017 (H5N8)	H5	15/02/2017 (H5N8) 15/02/2017 (H5N5)
Denmark	-	-	H5	21/11/2016 (H5N8)	H5	10/02/2017 (H5N8)
Egypt	-	-	Endemic	Endemic (H5N1)	H5	30/11/2016 (H5N8)
				14/03/2017 (H5N8)	H5	10/02/2017 (H5N8)
Finland	-	-	-	-		
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			-	16/02/2017 (H5N8)		16/02/2017 (H5N8)
Greece	-	-	H5	03/03/2017 (H5N6)	H5	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	-	-	Н5	12/01/2017 (H5N8)	Н5	19/01/2017 (H5N8)
T 1 '				22/02/2017 (H5N1)		27/12/2016 (H5N1)
Indonesia	-	-	Endemic	Endemic	-	- 10/12/2016 (115)(0)
Iran	-	-	H5	13/02/2017 (H5N8)	H5	18/12/2016 (H5N8)
Ireland	-	-	-	16/02/2017 (115)(0)	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	10/02/2017 (H5N6)	H5	21/11/2016 (H5N6)
Kazakhstan	_	-	-	-	H5	20/01/2017*
Korea		_	Н5	07/09/2016 (H5N8)	-	20/01/2017
17 '				02/12/2016 (H5N6)		
Kuwait	-	-	H5	22/01/2017 (H5N8)	-	-
Laos	-	-	H5	14/10/2016 (H5N1)	-	-
Lithuania	- HENO	-	-	- 12/12/2016 (HTN)	H5	19/03/2017 (H5N8)
Macau	H7N9	12/01/2017 #	H7	13/12/2016 (H7N9)	-	-
Mainland China	117310	27/02/2017				
Anhui	H7N9	27/02/2017	-	-	-	-
Chongqing	H7N9	06/03/2017	-	-	-	-
Fujian	H7N9	10/03/2017	-	-	-	-
Gansu	LIZNO	- 04/02/2017	H5	08/10/2016 (H5N6)	-	-
Guangdong	H7N9	04/03/2017	H7	01/03/2017 (H7N9)	-	-
Guangxi	H5N6 H7N9	08/11/2016 08/03/2017	-	-		
	H5N6	09/11/2016		+		
Guizhou	H7N9	08/03/2017	H5	-	-	-
Hebei	H7N9	01/02/2017%	_	_		_
Henan	H7N9	08/03/2017	-	 -		_
Hubei	H7N9	23/02/2017	H5	15/03/2017 (H5N6)	H5	18/01/2017 (H5N8)
Tiubei	11/11/	431 041 401 I	113	13/03/201/ (113110)	11./	10/01/201/ (113110)

Country/ Area	Huma	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)	
Hu	nan H5N6 H7N9	18/11/2016 13/03/2017	Н5	12/01/2017 (H5N6)	-	-	
Jiar	gsu H7N9	01/03/2017	-	-	-	-	
Jiai	gxi H7N9	04/03/2017	-	-	-	-	
Liao		01/02/2017%	-	-	-	-	
Shand	ong H7N9	15/02/2017	-	-	-	-	
Shan	thai H7N9	21/02/2017	-	-	-	-	
Sh	nxi -	_	-	-	H5	09/02/2017 (H5N8)	
Sich	uan H7N9	16/03/2017	H5	28/12/2016 (H5N6)	-	- ` ′	
Xinji		-	H5	28/12/2016 (H5N6)	-	-	
Zheji		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)	Н5	10/03/2017 (H5N1)	
Netherlands	-	-	H5	28/12/2016 (H5N8)	Н5	14/12/2016 (H5N5) 17/03/2017 (H5N8)	
Niger	_	_	H5	21/02/2017 (H5N1)	-	-	
Nigeria	-	-	H5	13/03/2017 (H5N1) 08/02/2017 (H5N8)	Н5	17/12/2016 (H5N8)	
Poland	-	-	Н5	10/03/2017 (H5N8)	Н5	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	16/03/2017 (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) 27/01/2017 (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#	Н5	17/03/2017 (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	12/03/2017 (H5N1) 19/03/2017 (H5N6)	-	-	

Sources: WHO, OIE, NHFPC and other official websites #imported case from Guangdong *without further subtype information ^imported case from Guangdong

[%] case exported to Beijing