

Human infection with avian influenza A (H5) viruses

Human infection with avian influenza A (H5N1) virus

From 15 to 21 April 2016, **no new cases** of human infection with avian influenza A (H5N1) virus were reported to WHO in the Western Pacific Region.

From February 2003 to 21 April 2016, 238 cases of human infection with avian influenza A (H5N1) virus were reported from four countries within the Western Pacific Region (Table 1). Of these cases, 134 were fatal, resulting in a case fatality rate (CFR) of 56%.

Table 1: Cumulative number laboratory-confirmed human cases (C) and deaths (D) of influenza A (H5N1) virus infection reported to WHO (January 2003 to 4 April 2016), Western Pacific Region.

Country	2003-2010		2011		2012		2013		2014		2015		2016		Total	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
Cambodia	10	8	8	8	3	3	26	14	9	4	0	0	0	0	56	37
China	40	26	1	1	2	1	2	2	2	0	5	1	1	0	53	31
Lao PDR	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Viet Nam	119	59	0	0	4	2	2	1	2	2	0	0	0	0	127	64
Total	171	95	9	9	9	6	30	17	13	6	5	1	1	0	238	134

From February 2003 to 4 April 2016, there have been 850 cases of human infection with avian influenza A (H5N1) virus reported from 16 countries worldwide. Of these cases, 449 were fatal, resulting in a CFR of 52.8%.

Human infection with avian influenza A (H5N6) virus

On 21 April 2016, one (1) new case of human infection with avian influenza A (H5N6) virus was reported by China. The case is a 35-year-old male from Hubei Province. Date of illness onset was on 9 April 2016. The case was in critical condition at the time of report. Since May 2014, a total of eleven laboratory confirmed cases of human infection with influenza A (H5N6) virus have been reported. All cases have been reported from China.

Public health risk assessment for human infection with avian influenza A (H5) viruses

Whenever avian influenza viruses are circulating in poultry, sporadic infections and small clusters of human cases are possible in people exposed to infected poultry or contaminated environments, therefore sporadic human cases would not be unexpected.

With the rapid spread and magnitude of avian influenza outbreaks due to existing and new influenza A (H5) viruses in poultry in areas that have not experienced this disease in animals recently, there is a need for increased vigilance in the animal and public health sectors. Community awareness of the potential dangers for human health is essential to prevent infection in humans. Surveillance should be enhanced to detect human infections if they occur and to detect early changes in transmissibility and infectivity of the viruses.

For more information on confirmed cases of human infection with avian influenza A (H5) virus reported to WHO, visit: http://www.who.int/influenza/human_animal_interface/en/

Human infection with avian influenza A (H7N9) virus in China

On 18 April 2016, 17 new cases of human infection with avian influenza A (H7N9) virus from mainland China were reported. The cases were reported in the provinces of Anhui (4), Jiangsu (4), Guangdong (3), Fujian (3), Zhejiang (2), Hubei (1), and Shanghai (2). The median age of the patients is 60 years (ranging from 26 to 86 years). Of these 17 cases, 11 (65%) were male. One case was linked to two previously reported cases. None of the 17 cases were health care workers. Fifteen cases (88%) reported a history of exposure to live poultry, slaughtered poultry, or live poultry markets. Date of illness onset ranged from 24 February to 20 March 2016. As of 18 April 2016, 5 of the 17 cases died.

WHO is continuing to assess the epidemiological situation and will conduct further risk assessments with new information. Overall, the public health risk from avian influenza A (H7N9) viruses has not changed.

Further sporadic human cases of avian influenza A (H7N9) infection are expected in affected and possibly neighbouring areas. Should human cases from affected areas travel internationally, their infection may be detected in another country during or after arrival. If this were to occur, community level spread is considered unlikely as the virus does not have the ability to transmit easily among humans.

Public health risk assessment for avian influenza A (H7N9) viruses

On 23 February 2015, WHO conducted a public health risk assessment for avian influenza A (H7N9). This assessment found the overall public health risk from avian influenza A (H7N9) viruses has not changed since the previous assessment, published on 2 October 2014. To date, there has been no evidence of sustained human-to-human transmission of avian influenza A (H7N9) virus. Human infections with the A (H7N9) virus are unusual and need to be monitored closely in order to identify changes in the virus and/or its transmission behaviour to humans as it may have a serious public health impact.

For more information on human infection with avian influenza A (H7N9) virus reported to WHO:

http://www.who.int/influenza/human_animal_interface/influenza_h7n9/en/

For more information on risk assessment for avian influenza A (H7N9) virus:

http://www.who.int/influenza/human_animal_interface/influenza_h7n9/RiskAssessment_H7N9_23Feb20115.pdf

Animal infection with avian influenza

From 15 to 21 April 2016, three new animal outbreaks with avian influenza virus were reported in the Western Pacific Region, all in Taiwan, China (two HPAI H5N2 and one HPAI H5N8).

HPAI (H5N2) outbreak in geese in Taiwan, China

Two new outbreaks of HPAI (H5N2) infection in breeding geese were reported in Taiwan, China. Both outbreaks occurred in Taibao city in Chiayi County. The first outbreak started on 6 April 2016 and the second one started on 9 April 2016. In total, 558 of 3555 susceptible birds died due to the infection and 2997 were destroyed during this outbreak.

http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=20037

HPAI (H5N8) outbreak in native chickens in abattoir in Taiwan, China

One new outbreak of HPAI (H5N8) infection in native chickens in abattoir was reported in Daliao district, Kaohsiung city in Taiwan, China. The outbreak started on 6 April 2016. A total of 2 of 615 susceptible birds died and 613 were destroyed during the outbreak.

http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=20039

For more information on animal infection with avian influenza viruses with potential public health impact, visit:

- World Organization of Animal Health (OIE) web page:
<http://www.oie.int/animal-health-in-the-world/web-portal-on-avian-influenza/>
and <http://www.oie.int/animal-health-in-the-world/update-on-avian-influenza>
- Food and Agriculture Organization of the UN (FAO) webpage: Avian Influenza:
<http://www.fao.org/avianflu/en/index.html>
- OFFLU: <http://www.offlu.net/>
- EMPRES: <http://www.fao.org/ag/aqainfo/programmes/en/empres.html>

Latest information on human seasonal influenza

For the latest information on the seasonal influenza situation in the Western Pacific Region, visit:

http://www.wpro.who.int/emerging_diseases/Influenza/en/index.html

For latest information on the global seasonal influenza situation, visit:

- Epidemiology:
http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance
- Virology:
http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport

Other updates

Influenza at the human-animal interface — Summary and assessment as of 4 April 2016

http://www.who.int/influenza/human_animal_interface/Influenza_Summary_IRA_HA_interface_04_04_2016.pdf

WHO Risk Assessment of human infection with avian influenza A(H7N9) virus

23 February 2015 posted on WHO website

http://www.who.int/influenza/human_animal_interface/influenza_h7n9/RiskAssessment_H7N9_23Feb20115.pdf?ua=1

WHO Recommended composition of influenza virus vaccines for use in the 2016-2017 northern hemisphere influenza season—25 February 2016

http://www.who.int/influenza/vaccines/virus/recommendations/2016_17_north/en/

Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines—25 February 2016

http://www.who.int/influenza/vaccines/virus/characteristics_virus_vaccines/en/

H7N9 situation update (FAO) —20 April 2016

http://www.fao.org/ag/aqainfo/programmes/en/empres/H7N9/wave_4/Situation_update_2016_04_20.html