

Human infection with avian influenza A(H5) viruses

Human infection with avian influenza A(H5N1) virus

Between 9 June and 15 June 2017, **no new cases** of human infection with avian influenza A(H5N1) virus were reported to WHO in the Western Pacific Region.

As of 15 June 2017, a total of 238 cases of human infection with avian influenza A(H5N1) virus were reported from four countries within the Western Pacific Region since January 2003 (Table 1). The last case was reported on 14 January 2016. 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 15 June 2017), Western Pacific Region.

Country	2003-2010		2011		2012		2013		2014		2015		2016		2017		Total	
	C	D	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	0	0	56	37
China	40	26	1	1	2	1	2	2	2	0	6	1	0	0	0	0	53	31
Lao PDR	2	2	0	0	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	0	0	127	64
Total	171	95	9	9	9	6	30	17	13	6	6	1	0	0	0	0	238	134

From January 2003 to 15 June 2017, there were 859 cases of human infection with avian influenza A(H5N1) virus reported from 16 countries worldwide. Of these cases, 453 were fatal, resulting in a CFR of 52.7%.

(source: http://www.who.int/influenza/human_animal_interface/H5N1_cumulative_table_archives/en/)

Human infection with avian influenza A(H5N6) virus

Between 9 June and 15 June 2017, **no new cases** of human infection with avian influenza A(H5N6) virus were reported to WHO in the Western Pacific Region. The last case was reported on 1 December 2016 (source: <http://www.who.int/csr/don/07-december-2016-ah5n6-china/en/>). A total of 16 laboratory-confirmed cases of human infection with influenza A(H5N6) virus, including six deaths, have been reported to WHO from China since 2014.

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 are not 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 poultry 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

Between 9 June and 15 June 2017, **no new cases** of human infection with avian influenza A(H7N9) virus were published in Disease Outbreak News. The cases reported in the most recent publication in Disease Outbreak News (dated 8 June 2017) were notified to WHO on 19 May and on 26 May 2017 respectively (Source: <http://www.who.int/csr/don/08-june-2017-ah7n9-china/en/>). As of 15 June, a total of 1,512 laboratory-confirmed human infections with avian influenza A(H7N9) virus have been reported to WHO and published in Disease Outbreak News since early 2013.

WHO is continuing to assess the epidemiological situation and will conduct further risk assessments with new information when it is available. The number and geographical distribution of human infections with avian influenza A(H7N9) viruses in the fifth epidemic wave (since October 2016) is greater than previous waves.

Further sporadic human cases of avian influenza A(H7N9) virus 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.

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/

Animal infection with avian influenza virus

Between 9 June and 15 June 2017, there were two poultry outbreaks of highly pathogenic avian influenza A(H7N9) reported in poultry layer farms in Inner Mongolia (Saihan and Jiuyuan District), China.

http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=23996

http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?reportid=24044

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/aq/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

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

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

16 March 2017 posted on WHO website

http://www.who.int/influenza/human_animal_interface/Influenza_Summary_IRA_HA_interface_03_16_2017.pdf?ua=1

Recommended composition of influenza virus vaccines for use in the 2017-2018 northern hemisphere influenza season. 2 March 2017

http://www.who.int/influenza/vaccines/virus/recommendations/2017_18_north/en/

Recommended composition of influenza virus vaccines for use in the 2017 southern hemisphere influenza season. 29 September 2016

http://www.who.int/influenza/vaccines/virus/recommendations/2017_south/en/

Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines—2 March 2017

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

H7N9 situation update (FAO) —3 May 2017

http://www.fao.org/ag/againfo/programmes/en/empres/h7n9/situation_update.html

TIPRA Frequently Asked Questions—March 2017

http://www.who.int/influenza/areas_of_work/human_animal_interface/tipra_faqs/en/