

Human infection with avian influenza A(H5) viruses

Human infection with avian influenza A(H5N1) virus

From 25 November to 1 December 2016, **no new cases** of human infection with avian influenza A(H5N1) virus were reported to WHO in the Western Pacific Region.

From January 2003 to 1 December 2016, a total of 238 cases of human infection with avian influenza A(H5N1) virus were reported from four countries within the Western Pacific Region (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 1 December 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	6	1	0	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	6	1	0	0	238	134

From January 2003 to 1 December 2016, there were 856 cases of human infection with avian influenza A(H5N1) virus reported from 16 countries worldwide. Of these cases, 452 were fatal, resulting in a CFR of 52.8%.

Human infection with avian influenza A(H5N6) virus

The last human infection with avian influenza A(H5N6) was reported to WHO on 21 November 2016 (source: http://www.who.int/influenza/human_animal_interface/Influenza_Summary_IRA_HA_interfa ce_11_15_2016.pdf?ua=1). This case was 47-year-old female resident of Hunan Province, China who developed symptoms on 18 November 2016. She was admitted to hospital on the same day and her condition was reported as severe. To date, 15 cases of human infection with avian influenza A(H5N6), including 6 deaths, have been reported to WHO 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 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 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

From 25 November to 1 December 2016, **no new cases** of human infection with avian influenza A(H7N9) virus from the Western Pacific Region were reported. The last case was reported on 17 November. <http://www.who.int/csr/don/17-november-2016-ah7n9-china/en/>

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_23Feb2015.pdf

Animal infection with avian influenza

From 25 November to 1 December 2016, additional animal outbreaks with avian influenza virus were reported in Japan.

Avian influenza H5 infection in poultry, Japan

Two new outbreaks of AI H5 infection in poultry were reported in Aomori and Niigata. The outbreaks started on 28 November 2016. In total, 140 birds died due to infection. Aomori and Niigata prefecture are culling 165 000 ducks and 310 000 chickens, respectively.

http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=21714

Highly pathogenic avian influenza (HPAI) H5N6 infection in poultry, Korea

An outbreak of HPAI H5N6 infection in poultry was reported on 16 November 2016 in Sani-myeon district, Jeollanam-do. Since then, a total of 14 outbreaks have been reported in the country in Jeollanam-Do (n=2), Chungcheongbuk-do (n=11) and Gyeonggi-do (n=1) provinces. A total of 4790 poultry died and 182 810 poultry were culled.

http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=21637.

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/againfo/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 21 November 2016
http://www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/index.html

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_23Feb2015.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/

WHO Recommended composition of influenza virus vaccines for use in the 2016-2017 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—29 September 2016

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

H7N9 situation update (FAO) —20 October 2016

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