

Human infection with avian influenza A(H5) viruses

Human infection with avian influenza A(H5N1) virus

Between 10 and 16 January 2020, **no new cases** of human infection with avian influenza A(H5N1) virus were reported to WHO in the Western Pacific Region.

As of 16 January 2020, 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). Of these cases, 134 were fatal, resulting in a case fatality rate (CFR) of 56%. The last case was reported from China, with an onset date of 27 December 2015 (one case, no death).

Table 1: Cumulative number of laboratory-confirmed human cases (C) and deaths (D) of influenza A(H5N1) virus infection reported to WHO, by date of onset (January 2003 to 16 January 2020), Western Pacific Region.

Country	2003-2009		2010-2014		2015		2016		2017		2018		2019		Total	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
Cambodia	9	7	47	30	0	0	0	0	0	0	0	0	0	0	56	37
China	38	25	9	5	6	1	0	0	0	0	0	0	0	0	53	31
Lao PDR	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Viet Nam	112	57	15	7	0	0	0	0	0	0	0	0	0	0	127	64
Total	161	91	71	42	6	1	0	0	0	0	0	0	0	0	238	134

Globally, from January 2003 to 16 January 2020, there were 861 cases of human infection with avian influenza A(H5N1) virus reported from 17 countries. Of these 861 cases, 455 were fatal (CFR of 53%). The last case was reported from Nepal on 30 April 2019 ([source](#)).

Human infection with avian influenza A(H5N6) virus

Between 10 and 16 January 2020, **no new cases** of human infection with avian influenza A(H5N6) virus were reported to WHO in the Western Pacific Region. To date, a total of 24 laboratory-confirmed cases of human infection with influenza A(H5N6) virus, including seven deaths at time of IHR report, 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, there is a risk for sporadic infection and small clusters of human cases due to exposure to infected poultry or contaminated environments. Therefore, sporadic human cases are not unexpected.

With continued incidence of avian influenza due to existing and new influenza A(H5) viruses in poultry, there is a need to remain vigilant 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 continued to detect human cases and 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/

For information on monthly risk assessments on Avian Influenza, visit: http://www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/

Human infection with avian influenza A(H7N4) virus in China

Between 10 and 16 January 2020, **no new cases** of human infection with avian influenza A(H7N4) virus were reported to WHO in the Western Pacific Region. To date, only one laboratory-confirmed case of human infection with influenza A(H7N4) virus has been reported to WHO. This case was reported from China on 14 February 2018.

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

Between 10 and 16 January 2020, **no new cases** of human infection with avian influenza A(H7N9) virus were reported to WHO in the Western Pacific Region. As of 16 January 2020, a total of 1,568 laboratory-confirmed human infections with avian influenza A(H7N9) virus have been reported to WHO since early 2013. Among them, 33 cases were infected with HPAI A(H7N9) virus, which have mutations in the hemagglutinin gene indicating a change to high pathogenicity in poultry. These 33 cases were from Taiwan (the case had travel history to Guangdong), Guangxi, Guangdong, Hunan, Shaanxi, Hebei, Henan, Fujian, Yunnan, Inner Mongolia. No increased transmissibility or virulence of the virus within human cases has been detected related to the HPAI A(H7N9) virus ([source](#)).

WHO is continuing to assess the epidemiological situation and will conduct further risk assessments as new information becomes available. The number and geographical distribution of human infections with avian influenza A(H7N9) viruses in the fifth epidemic wave (1 October 2016 to 30 September 2017) was greater than previous waves and the subsequent 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. However, 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 is 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 transmission behaviour to humans as this may have serious public health impacts.

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/

Human infection with avian influenza A(H9N2) in China

Between 10 and 16 January 2020, **no new cases** of human infection with avian influenza A(H9N2) virus was reported to WHO in the Western Pacific Region. In 2018 there were seven human cases of avian influenza A(H9N2) reported from China to WHO and six cases thus far in 2019. A total of 28 cases of human infection with avian influenza A(H9N2) in China have been reported since December 2015.

Animal infection with avian influenza virus

Between 10 and 16 January 2020, **six new outbreaks** of avian influenza were reported to OIE from the Western Pacific Region.

Highly pathogenic influenza virus (H5N2) in Taiwan, China

On 13 January 2020, one new outbreak of highly pathogenic avian influenza A (H5N2) among poultry was reported to OIE from Taiwan, China. In Yunlin County, 2,432 chicken died among 23,411 susceptible birds in one farm since 28 December 2019 and all remaining 20,979 birds were culled ([source](#)).

Highly pathogenic influenza virus (H5N5) in Taiwan, China

On 13 January 2020, three new outbreaks of highly pathogenic avian influenza A (H5N5) among poultry were reported to OIE from Taiwan, China. These three outbreaks occurred in two slaughterhouses in Taipei City and one farm in Yunlin County since 27 December 2019 with 1000 deaths among 10,895 susceptible birds and all remaining 9,895 birds were culled ([source](#)).

Highly pathogenic influenza virus (H5N6) in China

On 10 January 2020, two new outbreaks of highly pathogenic avian influenza A (H5N6) among poultry were reported to OIE from China. These two outbreaks occurred in one village and one natural park in Xinjiang since 29 December 2019 with 15 deaths among 150 susceptible swans ([source](#)).

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

- [World Organization of Animal Health \(OIE\) web page: Weekly disease information and Latest report on Avian Influenza](#)
- [Food and Agriculture Organization of the UN \(FAO\) webpage: Avian Influenza](#)
- [OFFLU: Animal Influenza](#)
- [Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases \(EMPRES\)](#)

Other updates

- [WHO Risk Assessment of human infection with avian influenza A virus.](#) 25 November 2019
 - Risk assessment summary: The overall public health risk from currently known influenza viruses at the human-animal interface has not changed, and the likelihood of sustained human-to-human transmission of these viruses remains low. Further human infections with viruses of animal origin are expected.
- [Recommended composition of influenza virus vaccines for use in the 2020 southern hemisphere influenza season.](#) 27 September 2019
- [WHO Consultation and Information Meeting on the Composition of Influenza Virus Vaccines for Use in the 2019-20 Northern Hemisphere Influenza Season.](#) 18-21 February 2019
- [Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines.](#) 30 September 2019
- [H7N9 situation update \(FAO\).](#) 4 December 2019
- [TIPRA Frequently Asked Questions.](#) March 2017