

Human infection with avian influenza A(H5) viruses

Human infection with avian influenza A(H5N1) virus

Between 25 March 2022 and 31 March 2022, **no new cases** of human infection with avian influenza A(H5N1) virus were reported to WHO in the Western Pacific Region.

As of 31 March 2022, a total of 239 cases of human infection with avian influenza A(H5N1) virus have been 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 Lao PDR, with an onset date of 13 October 2020 (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 31 March 2022), Western Pacific Region

Country	2003-2009		2010-2014		2015		2016		2017		2018		2019		2020		2021		2022		Total	
	C	D	C	D	C	D	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	0	0	0	0	0	0	56	37
China	38	25	9	5	6	1	0	0	0	0	0	0	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	1	0	0	0	0	0	3	2
Viet Nam	112	57	15	7	0	0	0	0	0	0	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	1	0	0	0	0	0	239	134

Globally, from January 2003 to 31 March 2022, there have been 863 cases of human infection with avian influenza A(H5N1) virus reported from 18 countries. Of these 863 cases, 455 were fatal (CFR of 53%). The latest case was reported from United Kingdom in January 2022 ([source](#)).

Human infection with avian influenza A(H5N6) virus

Between 25 March 2022 and 31 March 2022, **no new cases** of human infection with avian influenza A(H5N6) virus were notified to WHO in the Western Pacific Region.

To date, a total of 75 laboratory-confirmed cases of human infection with influenza A(H5N6) virus including 32 deaths have been reported to WHO in the Western Pacific Region 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.

The rise in numbers of reported human cases of A(H5N6) infection may reflect the continued circulation of the virus in birds, and enhanced surveillance system and diagnostic capacity as a direct outcome from the response to the COVID-19 pandemic. The zoonotic threat remains elevated due to the spread of the viruses among birds. However, the overall pandemic risk associated with A(H5) is considered not significantly changed in comparison to previous years. WHO recommends Member States to remain vigilant and consider mitigation steps to reduce human exposure to potentially infected birds to reduce risk of additional zoonotic infection.

For information on risk assessments on Avian Influenza, visit:

<https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary>

[Assessment of risk associated with highly pathogenic avian influenza A\(H5N6\) virus](#)

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

Between 25 March 2022 and 31 March 2022, **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 25 March 2022 and 31 March 2022, **no new cases** of human infection with avian influenza A(H7N9) virus were reported to WHO in the Western Pacific Region. To date, a total of 1,568 laboratory-confirmed human infections with avian influenza A(H7N9) virus including 616 fatal cases (CFR: 39%) have been reported to WHO since early 2013. The last case of human infection with avian influenza A(H7N9) reported to WHO in the Western Pacific Region was in 2019.

Of the 1,568 human infections with avian influenza A(H7N9), 33 have reported mutations in the hemagglutinin gene indicating a change to high pathogenicity in poultry. These 33 cases were from Taiwan, China (one case had travel history to Guangdong), Guangxi, Guangdong, Hunan, Shaanxi, Hebei, Henan, Fujian, Yunnan, and 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) were 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 neighboring 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 behavior to humans as this may have serious public health impacts.

Human infection with avian influenza A(H9N2) virus

Between 25 March 2022 and 31 March 2022, **no new cases** of human infection with avian influenza A(H9N2) were reported to WHO in the Western Pacific Region.

To date, a total of 74 cases of human infection with avian influenza A(H9N2) including two deaths (both with underlying conditions) have been reported to WHO in the Western Pacific Region since December 2015.

Human infection with avian influenza A(H10N3) virus

Between 25 March 2022 and 31 March 2022, **no new cases** of human infection with avian influenza A(H10N3) virus were reported to WHO in the Western Pacific Region. To date, one case of avian influenza A(H10N3) virus has been reported globally.

Most previously reported human infections with avian influenza viruses were due to exposure to infected poultry or contaminated environments. Since avian influenza viruses, including avian influenza A(H10N3) viruses, continue to be detected in poultry populations, further sporadic human cases could be detected

in the future. Currently available epidemiologic information suggests that the avian influenza A(H10N3) virus has not acquired the ability for sustained human-to-human transmission, thus the likelihood of spread among human is low (source [1](#), [2](#)).

Animal infection with avian influenza virus

Between 25 March 2022 and 31 March 2022, **four new reports of outbreaks** of avian influenza among birds were reported to OIE from the Western Pacific Region ([source](#)).

On 25 March 2022, the Philippines reported four outbreaks of highly pathogenic avian influenza A(H5N1) among poultry in Sultan Kudarat Province. This is a first occurrence in this area. In total there were 114 cases leading to 69 deaths among 3,205 susceptible birds and the remaining 3,136 were culled ([source](#)).

On 27 March 2022, the Republic of Korea reported nineteen outbreaks of highly pathogenic avian influenza A(H5N1) among non-poultry in Gangwon Province, Gyeonggi Province, and Seoul. In total there were 46 cases leading to 45 deaths ([source](#)).

On 28 March 2022, the Taiwan, China reported five outbreaks of highly pathogenic avian influenza A(H5N2) among poultry in Tainan, New Taipei, Yunlin, Changhua in Taiwan. In total there were 8,507 cases leading to 8,507 deaths among 41,994 susceptible birds and the remaining 33,487 were culled ([source](#)).

On 30 March 2022, Japan reported one outbreak of highly pathogenic avian influenza A(H5N1) among poultry in Miyagi province. In total there were 250 cases leading to 250 deaths among 32,000 susceptible birds and the remaining 31,750 were culled ([source](#)).

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

- World Organization for 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](#)
- [Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases \(EMPRES\)](#)
- [FAO Global Animal Disease Information System \(EMPRES-i\)](#)

Other updates

- [Influenza at the human-animal interface summary and assessment](#), 1 October 2021
 - 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. Human infections with viruses of animal origin are expected at the human-animal interface wherever these viruses circulate in animals.
- [Recommended composition of influenza virus vaccines for use in the 2022 southern hemisphere influenza season \(who.int\)](#) 24 September 2021
- [WHO SAGE Seasonal Influenza Vaccination Recommendations during the COVID-19 Pandemic Interim guidance](#). 20 September 2020
- [Recommended composition of influenza virus vaccines for use in the 2022-2023 northern hemisphere influenza season \(who.int\)](#) 25 February 2022
- [WHO Consultation on the Composition of Influenza Virus Vaccines for Use in the 2022 Southern Hemisphere Influenza Season](#) 13 – 30 September 2021

- [WHO Information Meeting on the Composition of Influenza Virus Vaccines for Use in the 2022-23 Northern Hemisphere Influenza Season](#) 25 February 2022
- [Zoonotic influenza: candidate vaccine viruses and potency testing reagents.](#)