

Influenza at the human-animal interface

Summary and assessment as of 4 September 2015

Human infection with avian influenza A(H5) viruses

Since the last WHO Influenza update on 17 July 2015, no new laboratory-confirmed human cases of avian influenza A(H5N1) virus infection were reported to WHO.

From 2003 through 4 September 2015, 844 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been officially reported to WHO from 16 countries. Of these cases, 449 have died.

Various influenza A(H5) subtypes, such as influenza A(H5N1), A(H5N2), A(H5N3), A(H5N6) and A(H5N8), continue to be detected in birds in West Africa, Asia, Europe, and North America, according to reports received by OIE. Although these influenza A(H5) viruses might have the potential to cause disease in humans, so far no human cases of infection have been reported, with exception of the human infections with influenza A(H5N1) viruses and the four human infections with influenza A(H5N6) virus detected in China since 2014.

Overall public health risk assessment for avian influenza A(H5) viruses: Overall, the public health risk assessment for avian influenza A(H5) viruses remains unchanged since the assessment of 17 July 2015. http://www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/

Human infection with other non-seasonal influenza viruses

Human infections with avian influenza A(H7N9) viruses in China

Since the last WHO Influenza update on 17 July 2015, no new laboratory-confirmed human cases of avian influenza A(H7N9) virus infection were reported to WHO.

A total of 677 laboratory-confirmed cases of human infection with avian influenza A(H7N9) viruses, including at least 275 deaths¹, have been reported to WHO.

Overall public health risk assessment for avian influenza A(H7N9) viruses: Overall, the public health risk from avian influenza A(H7N9) viruses has not changed since the assessment of 23 February 2015.

¹ The total number of fatal cases is published on a monthly basis by China National Health and Family Planning Commission.

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

Please find the most updated information at

<http://www.who.int/csr/don/18-july-2015-avian-influenza-china/en>

http://www.who.int/influenza/human_animal_interface/avian_influenza/archive/en/ and

http://www.who.int/influenza/vaccines/virus/201502_zoonotic_vaccinevirusupdate.pdf?ua=1

Human infection with an avian influenza A(H9N2) virus in Bangladesh

One laboratory-confirmed case of human infection with an avian influenza A(H9N2) virus was reported to WHO from Bangladesh. The case was a 3.5-year-old girl who developed mild illness on 1 February 2015 and recovered from her illness by 7 February. An influenza A(H9) virus was detected upon testing of a respiratory sample from the case and the virus was later confirmed as an influenza A(H9N2) virus, similar to other A(H9N2) viruses previously isolated in Bangladesh. The case had close contact with poultry, including sick quails, prior to her onset of illness. No further cases were detected among her close contacts.

This is the second case of human infection with an avian influenza A(H9N2) virus reported to WHO from Bangladesh. The previous case occurred in 2011. Avian influenza A(H9N2) viruses are known to be circulating in poultry populations in Bangladesh.

Overall public health risk assessment for avian influenza A(H9N2) viruses: Further human cases and small clusters could occur as this virus is circulating in poultry populations across Asia and Middle East. This virus does not seem to transmit easily between humans and tends to result in mild clinical disease, therefore the current likelihood of community-level spread and public health impact of this virus is considered low.

Human infections with influenza A(H3N2)v viruses

Two laboratory-confirmed cases of human infection with influenza A(H3N2)v viruses were detected in the United States of America. The first case, from the state of Minnesota, was reported to WHO in July and involved a young, immunocompromised individual who had direct contact with swine in the week prior to illness onset in July 2015. The second case occurred in the state of Michigan in June 2015 and also had direct contact with swine prior to illness onset. Both cases were hospitalized as a result of their illnesses and no further cases were detected among the contacts of the patients. These are the first and second cases of human infection with influenza A(H3N2)v viruses detected in 2015 in the USA, bringing the total number of human infections with these viruses detected in the USA since December 2005 to 353.²

Overall public health risk assessment for influenza A(H3N2)v viruses: Further human cases and small clusters may be expected as this virus is circulating in the swine population in the USA. In past years, cases have been associated with agricultural fairs where people were in close contact with potentially infected swine populations. The current likelihood of community level spread and public health impact

² <http://www.cdc.gov/flu/weekly/>

of this virus is considered low.

Human infection with an influenza A(H1N1)v virus

One case of human infection with influenza A(H1N1)v virus was detected in the United States of America (USA), bringing the total number of human infections with these viruses detected in the USA since December 2005 to 19. The case was hospitalized as a result of the illness and had contact with swine in the week prior to the onset of illness. No further cases were detected among the close contacts of the case.²

Overall public health risk assessment for avian influenza A(H1N1)v viruses: Further human cases and small clusters may be expected as this virus is circulating in the swine population in the USA. So far, human cases have been associated with close contact to potentially infected swine populations. The current likelihood of community level spread and public health impact of this virus is considered low.

Links:

WHO Human-Animal Interface web page

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

Cumulative Number of Confirmed Human Cases of Avian Influenza A/(H5N1) Reported to WHO

http://www.who.int/influenza/human_animal_interface/H5N1_cumulative_table_archives/en/

Avian Influenza A(H7N9) Information

http://who.int/influenza/human_animal_interface/influenza_h7n9/en/index.html

WHO Avian Influenza Food Safety Issues

http://www.who.int/foodsafety/areas_work/zoonose/avian/en/

World Organisation of Animal Health (OIE) web page: Web portal on Avian Influenza

<http://www.oie.int/animal-health-in-the-world/web-portal-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/index.html>