

Influenza at the human-animal interface

Summary and assessment as of 2 October 2014

Human infection with avian influenza A(H5N1) viruses

From 2003 through 2 October 2014, 668 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been officially reported to WHO from 16 countries. Of these cases, 393 have died.

Since the last WHO Influenza update on 27 June 2014, one new laboratory-confirmed human case of influenza A(H5N1) virus infection was reported to WHO. The case was reported from Egypt in a 2 ½ - year-old girl from Giza governorate. Identification of such sporadic cases is not unexpected as influenza A(H5N1) viruses are known to be circulating in poultry in the country.

Overall public health risk assessment for avian influenza A(H5N1) viruses: Whenever influenza viruses are circulating in poultry, sporadic infections or small clusters of human cases are possible, especially in people exposed to infected poultry or contaminated environments. Human infections remain rare and these influenza A(H5N1) viruses do not currently appear to transmit easily among people. As such, the risk of community-level spread of these viruses remains low.

Figure 1: Epidemiological curve of avian influenza A(H5N1) cases in humans by reporting country and month of onset.

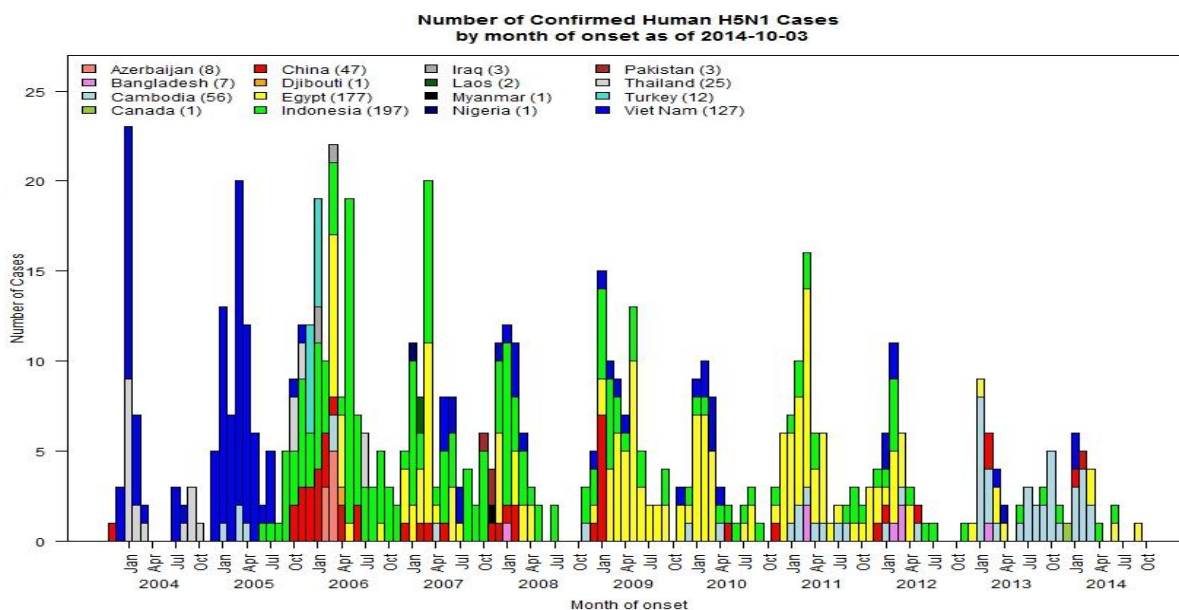


Table 1: Laboratory-confirmed human cases of avian influenza A(H5N1) virus infection (27 June 2014 – 2 October 2014)

Country	Province	Age	Sex	Date of onset	Date of Hospitalisation	Oseltamivir treatment Start date	Date of death	Exposure to
Egypt	Giza	2 1/2 years	F	22 Sept 2014	25 Sept 2014	25 Sept 2014	NA	Backyard poultry

NA: not applicable or not available

Human infection with other non-seasonal influenza viruses

Human infection with avian influenza A(H5N6) viruses

In April 2014, avian influenza A(H5N6) virus was detected in a respiratory tract sample from a patient who died of severe pneumonia in Sichuan province, China. The likely source of infection was exposure to infected poultry. No further cases among contacts were reported.

Outbreaks of illness and deaths in poultry due to highly pathogenic A(H5N6) avian influenza viruses have been reported to OIE from China, Lao People’s Democratic Republic and Viet Nam in recent months.

Overall public health risk assessment for avian influenza A(H5N6) viruses: This human case appears to be an isolated case, but given that the disease seems already widespread in poultry, further sporadic human cases or small clusters of infection would not be unexpected. More information is sought and close monitoring of the situation in humans and animals over the coming months is needed to better understand the risks H5N6 viruses pose to public health.

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

WHO is closely monitoring this event and separate risk assessments have been posted. Please find the most updated information at http://www.who.int/influenza/human_animal_interface/influenza_h7n9/Risk_Assessment/en/index.html

Human infection with influenza A(H3N2)v viruses

Two cases of human infection with influenza A(H3N2)v viruses were detected in August 2014 in the United States of America (USA). Both reported close contact with swine in the week before illness onset. Both patients fully recovered, and no ongoing human-to-human transmission has been identified.

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 and in past years cases have been associated with agricultural fairs that take place during the summer. The current likelihood of community level spread and public health impact of this virus is considered low.

Outbreaks in animals with avian influenza viruses with potential public health impact

The number of reported outbreaks of avian influenza in birds globally is currently at the level expected during this period of the year.

Further, owing in part to the emergence of avian influenza A(H7N9) virus, there is enhanced surveillance for non-seasonal influenza viruses in both humans and animals. It is therefore to be expected that influenza A(H5N1), A(H7N9), and other subtypes of influenza viruses will continue to be detected in humans and animals over the coming months.

Due to the constantly evolving nature of influenza viruses, WHO continues to stress the importance of global surveillance to detect virological, epidemiological and clinical changes associated with circulating influenza viruses that may affect human (or animal) health. All human infections with non-seasonal influenza viruses (those that are not currently circulating widely in human populations) are reportable to WHO under the IHR (2005). It is critical that influenza viruses from animals and people are fully characterized in appropriate animal or human health influenza reference laboratories.

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/EN_GIP_LatestCumulativeNumberH5N1cases.pdf

H5N1 avian influenza: timeline of major events

http://www.who.int/influenza/human_animal_interface/avian_influenza/H5N1_avian_influenza_update.pdf

Avian influenza A(H7N9) information

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

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>