Influenza at the human-animal interface

Summary and assessment as of 16 January 2013

Human infection with avian influenza A(H5N1) viruses and associated animal health events

From 2003 through 16 January 2013, 610 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported to WHO from 15 countries, of which 360 died. Since the last update on 17 December 2012, no new laboratory-confirmed human cases with influenza A(H5N1) virus infection were reported to WHO.

Recent poultry outbreaks in Indonesia have been attributed to influenza virus A(H5N1) clade 2.3.2.1. This clade has not been previously detected in Indonesia, although it has been circulating for some years in poultry and has been isolated from a few human cases with H5N1 infection in other countries.

Any time influenza viruses are circulating in poultry there is a risk of sporadic infections or small clusters of human cases. Based on current information, the public health risk from the H5N1 virus of the 2.3.2.1 clade (e.g. pathogenicity, transmissibility in humans) does not seem to be different from the public health risk associated with other H5N1 virus clades.

Public health risk assessment of avian influenza A(H5N1) viruses: The public health risk remains unchanged.
Figure 1: Epidemiological curve of avian influenza H5N1 cases in humans by country and month of onset

Number of Confirmed Human H5N1 Cases by month of onset as of 2013-01-16

Fig 2 Map of avian influenza H5N1 cases in humans for 2012

Areas with confirmed human cases for avian influenza A(H5N1) reported to WHO, 2012- to-date*

*All data refer to onset of illness
Data as of 16 January 2013
Source: WHO/HIP
**Human infection with other non-human influenza viruses**

**A(H3N2) variant virus infection**

No new human cases of influenza A(H3N2)v infection were reported from the United States of America (USA).

**Overall public health risk assessment of the 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. Close monitoring of the situation is warranted.

**Animal outbreaks with high pathogenic avian influenza viruses with potential public health impact**

Overall, official reports of animal influenza outbreaks have increased over the past months ([http://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI](http://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI)). This seasonal pattern is expected with the onset of winter in the northern hemisphere.

In Mexico, new influenza A(H7N3) outbreaks in poultry were reported. During last summer (2012) in Mexico, 2 cases of human infection with A(H7N3) were associated with a similar outbreak in poultry. These cases were mild, with conjunctivitis as the main clinical sign ([http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6136a4.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6136a4.htm)). This highlights the need for countries experiencing outbreaks of influenza virus infection in animals to raise disease awareness and implement appropriate biosafety measures to protect people working with or living nearby infected and potentially infected animals. Collaboration with animal health partners is necessary to optimally control this disease in animals and decrease risks to public health.

Due to the nature of constant evolving of influenza viruses, WHO continues to stress the importance of global monitoring of influenza viruses and recommends all Member States to strengthen routine influenza surveillance. All human infections with non-seasonal influenza viruses are reportable to WHO under IHR (2005).

**Relevant Links:**

- WHO human-animal interface web page

- 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](http://www.who.int/influenza/human_animal_interface/EN_GIP_LatestCumulativeNumberH5N1cases.pdf)

- H5N1 avian influenza: timeline of major events

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

- Food and Agriculture Organization of the UN (FAO) webpage: Avian Influenza

- OFFLU
  [http://www.offlu.net/index.html](http://www.offlu.net/index.html)