Influenza at the human-animal interface

Summary and assessment as of 17 December 2012

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

From 2003 through 17 December 2012, 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 January 2012, 32 human cases of influenza A(H5N1) virus infection have been reported to WHO.

Since the last update on 5 November 2012, two new laboratory-confirmed human cases with influenza A(H5N1) virus infection were reported to WHO, one from Egypt and the other a fatal case from Indonesia.

Table 1: laboratory-confirmed human cases with avian influenza A(H5N1) virus infection reported between 5 November and 17 December 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Province</th>
<th>Age (y)</th>
<th>Sex</th>
<th>Date of onset</th>
<th>Date of Hospitalisation</th>
<th>Date of death</th>
<th>Oseltamivir treatment Start date</th>
<th>Exposure to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Demietta governorate</td>
<td>2</td>
<td>F</td>
<td>3/12/2012</td>
<td>1/12/2012</td>
<td>4/12/2012</td>
<td>Backyard poultry (chicken and ducks)</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>West Java</td>
<td>4</td>
<td>M</td>
<td>30/11/2012</td>
<td>5/12/2012</td>
<td>6/12/2012</td>
<td>Poultry (duck) in neighbourhood</td>
<td></td>
</tr>
</tbody>
</table>

Based on previous years’ observations, an increase in reported H5N1 influenza events in poultry is expected for this time of year. Sporadic human cases reported this month in countries with known influenza A(H5N1) virus activity in poultry are within the expected range. No onward sustained human to human transmission was reported.

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 2012-12-17

- Azerbaijan (0)
- China (42)
- Bangladesh (8)
- Djibouti (1)
- Indonesia (192)
- Myanmar (1)
- Iraq (3)
- Nigeria (1)
- Laos (2)
- Pakistan (3)
- Turkey (12)
- Thailand (25)
- Vietnam (123)

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 dates refer to onset of illness
Data as of 17 December 2012
Source: WHO/NDC
Human infection with other non-human influenza viruses

A(H3N2) variant virus infection

The United States of America (USA) reported a new human case of influenza A(H3N2)v infection during week 47 from the state of Iowa. The case had no history of contact with swine or other livestock in the week before the onset of symptoms. Investigations are ongoing but no further cases were identified among the contacts of the case.

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.

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-human influenza viruses as such 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

H5N1 avian influenza: timeline of major events

WHO Archive: Avian Influenza situation updates

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

Updated unified nomenclature system for the highly pathogenic H5N1 avian influenza viruses
http://www.who.int/influenza/gisrs_laboratory/h5n1_nomenclature/en/index.html