Influenza at the human-animal interface

Summary and assessment as of 24 March 2014

Human infection with avian influenza A(H5N1) viruses

From 2003 through 24 March 2014, 664 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been officially reported to WHO from 15 countries. Of these cases, 391 have died.

Since the last WHO Influenza at the Human-Animal Interface Summary and Assessment on 25 February 2014, six new laboratory-confirmed human cases of influenza A(H5N1) virus infection were reported to WHO.

Cambodia reported four cases, all in children, and 3 of them had a fatal outcome. The children came from 4 different provinces and poultry die-offs had been reported in the neighbourhoods of all four children in the weeks before they developed symptoms.

Egypt reported two human cases from 2 different governorates. Both had contact with sick and dead poultry. They were the first human cases reported from Egypt since April 2013.

Overall public health risk assessment for avian influenza A(H5N1) viruses: as long as influenza viruses are circulating in poultry, sporadic infections or small clusters of human cases are possible, especially in people exposed to infected household poultry or contaminated environments. This influenza A(H5N1) virus does not currently appear to transmit easily among people. As such, the risk of community-level spread of this virus remains low.

Table 1: Laboratory-confirmed human cases of avian influenza A(H5N1) virus infection (25 February 2014 – 24 March 2014)

<table>
<thead>
<tr>
<th>Country</th>
<th>Province</th>
<th>Age</th>
<th>Sex</th>
<th>Date of onset</th>
<th>Date of Hospitalisation</th>
<th>Oseltamivir treatment Start date</th>
<th>Date of death</th>
<th>Exposure to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Phnom Penh</td>
<td>3</td>
<td>M</td>
<td>22 Feb 2014</td>
<td>28 Feb 2014</td>
<td>NA</td>
<td>2 March 2014</td>
<td>Dead poultry in the neighbourhood</td>
</tr>
<tr>
<td>Kandal</td>
<td>8 M</td>
<td>24 Feb 2014</td>
<td>4 March 2014</td>
<td>5 March 2014</td>
<td>NA</td>
<td>6 March 2014</td>
<td>Dead poultry in the neighbourhood</td>
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<tr>
<td>Kampong Chhnang</td>
<td>11 M</td>
<td>3 March 2014</td>
<td>5 March 2014</td>
<td>NA</td>
<td>6 March 2014</td>
<td>Helped prepare dead chickens and ducks for food and was exposed to dead poultry in neighbourhood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Province</td>
<td>Age</td>
<td>Sex</td>
<td>Date of onset</td>
<td>Date of Hospitalisation</td>
<td>Oseltamivir treatment Start date</td>
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<tr>
<td>Egypt</td>
<td>Behaira Governorate</td>
<td>56</td>
<td>F</td>
<td>6 March 2014</td>
<td>9 March 2014</td>
<td>9 March 2014</td>
<td>NA</td>
<td>Dead and sick poultry (ducks and chickens)</td>
</tr>
<tr>
<td>Demitta</td>
<td>Governorate</td>
<td>4</td>
<td>M</td>
<td>7 March 2014</td>
<td>12 March 2014</td>
<td>12 March 2014</td>
<td>NA</td>
<td>Dead and sick poultry (ducks and chickens)</td>
</tr>
</tbody>
</table>

NA: not applicable or not available

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

Human infection with other non-seasonal influenza viruses

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
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 still high as is expected during this period of the year.

Further, owing in part to the emergence of avian influenza A(H7N9) virus and associated infections of humans in China, there is enhanced surveillance for non-seasonal subtypes of influenza in both humans and animals in China, the countries neighbouring China, and globally. It is therefore to be expected that more avian influenza A(H5N1), A(H7N9), and a variety of other influenza subtypes and reassortant viruses will be detected over the coming months.

Because of the constantly evolving nature of influenza viruses, WHO continues to stress the importance of global monitoring to detect virological, epidemiological and clinical changes that may affect public (or animal) health. To be able to detect changes early, WHO recommends that all Member States strengthen routine influenza surveillance. All human infections with non-seasonal influenza viruses are reportable to WHO under the IHR (2005). It is critical that influenza viruses from animals and people are characterized in appropriate animal or human health influenza reference laboratories.

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
Avian influenza A(H7N9) information

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