Influenza at the human-animal interface

Summary and assessment as of 5 May 2014

Human infection with avian influenza A(H5N1) viruses

From 2003 through 5 May 2014, 665 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been officially reported to WHO from 15 countries. Of these cases, 392 have died.

Since the last WHO Influenza at the Human-Animal Interface update on 24 March 2014, one new laboratory-confirmed human case of influenza A(H5N1) virus infection was reported to WHO from Indonesia in a 2-y-old boy from Central Java. In the weeks before disease onset of the child some backyard chickens died around the house. Although this is the first human case of H5N1 reported in 2014 from Indonesia, it is not unexpected as influenza A(H5N1) virus is known to be still circulating in poultry.

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 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.

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 (25 Feb 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>Indonesia</td>
<td>Central Java</td>
<td>2 years</td>
<td>M</td>
<td>10 April 2014</td>
<td>13 April 2014</td>
<td>NA</td>
<td>20 April 2014</td>
<td>Sick and dead backyard poultry</td>
</tr>
</tbody>
</table>

NA: not applicable or not available

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 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 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 influenza viruses will be detected in humans and animals 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 to circulating influenza viruses that may affect human (or animal) health. To be able to detect these 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), and 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

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

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http://www.offlu.net/index.html