Influenza at the human-animal interface

Summary and assessment as of 2 April 2012

Human infections with avian influenza H5N1 and associated animal health events

From 2003 through 02 April 2012, 600 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported to WHO, of which 353 died, from 15 countries. Since January 2012, 22 H5N1 human cases of infection have been reported to the WHO.

Between 5 March 2012 and 2 April, 6 new human cases have been reported from Indonesia (2), Egypt (3), and Vietnam (1).

According to FAO, H5N1 viruses are thought to be circulating endemically in poultry in China, Egypt, Indonesia, Viet Nam, Bangladesh and India. In Cambodia, sporadic reintroduction into poultry populations is thought to occur\(^1\). The epidemiologic curve of recent human cases (Figure 1) follows the same pattern seen in previous years, with larger numbers of cases in the winter months, decreasing towards summer in the northern hemisphere. This curve follows the seasonal curve of outbreaks in birds.

\(^1\) Approaches to Controlling, Preventing and Eliminating H5N1 Highly Pathogenic Avian Influenza in Endemic Countries. Rome, United Nations Food and Agriculture Organization, 2011

Figure 1: Epidemiological curve of avian influenza H5N1 cases in humans by country and month of onset
All new cases were sporadic cases. No further cases linked to the confirmed cases were reported. All but one have an exposure to sick or dead poultry or contaminated environment reported, all cases are reported from countries where H5N1 is circulating in animals. No virological changes associated with these human cases were reported.

Table 1: laboratory-confirmed human cases of avian influenza A(H5N1) virus infection (5 March -2 April 2012)

<table>
<thead>
<tr>
<th>Country</th>
<th>Province</th>
<th>Age (y)</th>
<th>Sex</th>
<th>Date of onset/detection*</th>
<th>Date of Hospitalisation</th>
<th>Start date Oseltamivir treatment</th>
<th>Date of death</th>
<th>Exposure to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Dakhalia</td>
<td>40</td>
<td>F</td>
<td>06/03/2012</td>
<td>12/03/2012</td>
<td>12/03/2012</td>
<td>15/03/2012</td>
<td>sick poultry</td>
</tr>
<tr>
<td></td>
<td>Demiatta</td>
<td>2</td>
<td>F</td>
<td>19/03/2012</td>
<td>20/03/2012</td>
<td>20/03/2012</td>
<td>NA</td>
<td>dead poultry</td>
</tr>
<tr>
<td></td>
<td>Giza</td>
<td>15</td>
<td>F</td>
<td>25/03/2012</td>
<td>29/03/2012</td>
<td>29/03/2012</td>
<td>31/03/2012</td>
<td>NA</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Bengkulu</td>
<td>24</td>
<td>F</td>
<td>23/02/2012</td>
<td>24/02/2012</td>
<td>NA</td>
<td>01/03/2012</td>
<td>contaminated</td>
</tr>
<tr>
<td></td>
<td>Nusa Tenggara Barat</td>
<td>17</td>
<td>M</td>
<td>28/02/2012</td>
<td>07/03/2012</td>
<td>NA</td>
<td>09/03/2012</td>
<td>poultry in</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Dak Lak</td>
<td>31</td>
<td>M</td>
<td>29/02/2012</td>
<td>04/03/2012</td>
<td>NA</td>
<td>NA</td>
<td>slaughter of sick poultry</td>
</tr>
</tbody>
</table>

NA: not applicable or not available

Overall public health risk assessment: Poultry outbreaks and sporadic human cases and small clusters would be expected at this time of year. These sporadic cases do not appear to have features that would raise concern regarding onward sustained human to human transmission.

2. Human infections with other animal influenza viruses


Relevant Links:

WHO Table: 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


