Human infection with avian influenza A(H5N1) virus

During the reporting period 28 February to 7 March 2014, there were three new cases of human infection with avian influenza A (H5N1) virus reported in the Western Pacific Region from Cambodia and China. The three cases were from China and Cambodia and have been reported retrospectively as of 24th and 25th February, respectively.

On 24 February 2014, the National Health and Family Planning Commission reported a human case of avian influenza A (H5N1) in Hunan. The patient is a 5-year-old girl, who recovered and has been discharged from hospital. This case was reported as a human case of avian influenza A (H5) in a previous weekly update and since then was confirmed to be a human case of avian influenza A(H5N1).

On 25 February 2014, the Ministry of Health of Cambodia notified the WHO of two new human cases of avian influenza that was confirmed positive with the influenza A(H5N1) virus on 20 February 2014. The first patient was a 10-year-old girl from Rorveang Village, Knor Damboing Commune, Cheung Prey District, Kampong Cham (newly named Tboung Khmun) Province, the onset of illness was on 26 January 2014, and H5N1 was confirmed through fever surveillance on 20 February. She had direct exposure to dead and sick poultry. Sudden deaths of domestic ducks occurred in the patient’s village, around 15 January. The mother of the patient bought sick/dead ducks on 25 January 2014, and were prepared for food with the help of the case. The other patient is an 11-year-old girl from La Ork Village, Krek Commune, Ponhea Krek District, Kampong Cham (Tboung Khmun) Province, The onset of illness was on 9 February and H5N1 was confirmed on 20 February. From 7 to 10 February, all (30) chickens owned by the family died around the house and in close proximity to the case. The national and local rapid response teams conducted outbreak investigation following the national protocol.

Since 2003, 658 cases have been reported from 16 countries worldwide, of which 388 were fatal (CFR 59.0%). Since 2003, 228 cases have been reported from 4 countries in the Western Pacific Region, of which 130 were fatal (CFR 57.0%). Among the countries in the Western Pacific Region with more than 10 reported cases, Cambodia had the highest CFR of 65.4% (34 out of 52).
Table 1: Cumulative Number of Confirmed Human Cases (C) and Deaths (D) of Avian Influenza A(H5N1) virus infection reported to WHO (1 January 2003 to 28 February 2014), Western Pacific Region.

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td></td>
<td>C</td>
<td>D</td>
<td>C</td>
<td>D</td>
<td>C</td>
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<td>C</td>
<td>D</td>
<td>C</td>
<td>D</td>
<td>C</td>
<td>D</td>
<td></td>
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<tr>
<td>Cambodia</td>
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<td>0</td>
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<td>China</td>
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<td>8</td>
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<td>13</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2 47</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0 30</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>3</td>
<td>3</td>
<td>29</td>
<td>20</td>
<td>61</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>127</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>4</td>
<td>29</td>
<td>20</td>
<td>73</td>
<td>28</td>
<td>15</td>
<td>10</td>
<td>16</td>
<td>11</td>
<td>9</td>
<td>9</td>
<td>128</td>
</tr>
</tbody>
</table>

Total number of cases includes number of deaths. WHO reports only laboratory-confirmed cases.

For global cumulative number of confirmed human cases and deaths of Avian Influenza A(H5N1) virus infection reported to WHO, see: http://www.who.int/influenza/human_animal_interface/H5N1_cumulative_table_archives/en/index.html

Human infection with avian influenza A (H7N9) in China

During the reporting period 28 February to 7 March 2014, 12 cases (2 deaths) of human infection with avian influenza A (H7N9) virus were reported from mainland China and Hong Kong SAR, China in the Western Pacific Region. Among the 12 cases, the median age was 40 years, ranging from 2-77 years, with a male to female ratio of 3:1. See the Annex for detailed information of the cases.

Map below shows the total number of cases of human infection with avian influenza A(H7N9) virus by provinces/municipality/SAR in China during the reporting period 28 February to 7 March 2014.
To date, there has been no evidence of sustained human-to-human transmission. It is expected that there may be further sporadic cases of human infection with the virus in affected and possibly neighbouring areas. Affected provinces and municipalities continue to maintain surveillance and response activities.

WHO does not advise special screening at points of entry with regard to this event, nor does it recommend any travel restrictions be applied. WHO continues to work closely with national authorities and technical partners to gain a better understanding of this disease in humans and will continue to provide updated information as the situation evolves.

For more information on human infection with avian influenza A(H7N9) virus, visit:

**Latest information on seasonal influenza**

For latest information on the regional seasonal influenza situation:
For latest information on the global seasonal influenza situation:

- **Epidemiology:**
  - [http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance)
- **Virology:**
  - [http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport](http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport)

### Outbreaks in animals with avian influenza viruses with potential public health impact

#### Avian influenza A(H5N1) virus

**Cambodia**

During the reporting period 28 February to 7 March 2014, FAO Field Officer reported a confirmed highly pathogenic avian influenza (HPAI) H5N1 outbreak in poultry, Phnom Penh. HPAI H5N1 was detected in three carcasses (goose, duck and chicken) submitted for testing on 24 February 2014, from the Cambodian Agriculture Research and Development Institute (CARDI) in a suburb of Phnom Penh City.


**Viet Nam**

During the reporting period 28 February to 7 March 2014, the Department of Animal Health (DAH) and the Ministry of Agriculture and Rural Development (MARD) reported of confirmed HPAI H5N1 outbreaks in poultry Ba Ria-Vung Tau, Binh Duong, Gia Lai, Hung Yen, Ninh Thuan and Soc Trang. As of 4 March 2014, 63 localities in 22 provinces are affected by H5N1 HPAI.


#### Avian influenza A(H7N9) virus

**China**

During the reporting period 28 February to 7 March 2014, national authorities and OIE reported new confirmed H7N9 positive findings in poultry and environmental samples in Guangdong, Hunan, Jilin and Zhejiang provinces in China. H7N9 positive findings in pathological specimens collected from apparently healthy chickens in Chengbei live bird market, Shuangfeng County, Loudi City, and Gelin new city live bird market, Changsha City, Hunan Province, were reported to OIE. In addition, 8 out of 255 serum samples (3.14%) collected from 9 locations in Jilin Province; 1 out of 2,713 serum samples (0.04%) collected from 223 locations in Zhejiang Province; 32 out of 6 191 serum samples (0.52%) and 3 out
of 1820 pathological samples (0.16%, 2 samples from Jinshabeilu farmers market, Liuyang City and 1 sample Chengbei market, Shuangfeng County, Loudi City) collected from 427 locations in Hunan Province; 3 out of 90 virological samples (3.33%) collected from poultry in Baijiaodazhong wholesale market in Doumen District, Zhuhai City, Guangdong Province, tested positive for H7 (serology) and H7N9 (pathology), respectively. The seropositive samples were all from backyard farms, eight locations in total.

Source:

Avian influenza A(H5N8) virus

Republic of Korea

During the reporting period 28 February to 7 March 2014, national authorities reported one new confirmed outbreak of HPAI H5N8 outbreaks in poultry that occurred between 24 February and 4 March 2014. HPAI H5N8 has been detected in a breeding duck farm in Jeollanam-do, making the total number of confirmed outbreaks to 26. Regarding wild birds, a total of 348 samples have been tested so far, and H5N8 was confirmed in 32 samples. A total of 6 985 000 birds have been culled so far; another 165 000 are to be destroyed.

Source:
- http://www.mafra.go.kr/list.jsp?&newsid=155445423&section_id=b_sec_1&pageNo=1&year=2014&listcnt=10&board_kind=C&board_skin_id=C3&depth=1&division=8&group_id=3&menu_id=1125&reference=&parent_code=3&popup_yn=&tab_yn=N

For more information on avian influenza viruses in animals with potential public health impact:
- OFFLU: http://www.offlu.net/
- EMPRES/FAO-GLEWS : http://empres-i.fao.org/empres-i/home
Annex

During the reporting period 28 February to 7 March 2014, 12 cases (2 deaths) of human infection with avian influenza A (H7N9) virus were reported from China in the Western Pacific Region. The table below shows details of the cases by province/municipality/SAR:

<table>
<thead>
<tr>
<th>Province/Municipality/SAR</th>
<th>Age (year)</th>
<th>Sex</th>
<th>Date of onset</th>
<th>Exposure to poultry</th>
<th>Condition at notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guangdong</td>
<td>75</td>
<td>M</td>
<td>19-Feb-14</td>
<td>Yes</td>
<td>Deceased</td>
</tr>
<tr>
<td></td>
<td>59</td>
<td>M</td>
<td>26-Feb-14</td>
<td>Yes</td>
<td>Deceased</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>M</td>
<td>27-Feb-14</td>
<td>Unknown</td>
<td>Severe</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1.5</td>
<td>F</td>
<td>28-Feb-14</td>
<td>Yes</td>
<td>Stable</td>
</tr>
<tr>
<td>Hunan</td>
<td>41</td>
<td>M</td>
<td>17-Feb-14</td>
<td>Unknown</td>
<td>Critical</td>
</tr>
<tr>
<td></td>
<td>77</td>
<td>M</td>
<td>20-Feb-14</td>
<td>Yes</td>
<td>Critical</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>M</td>
<td>20-Feb-14</td>
<td>Yes</td>
<td>Severe</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>42</td>
<td>M</td>
<td>15-Feb-14</td>
<td>Yes</td>
<td>Severe</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>M</td>
<td>28-Feb-14</td>
<td>Yes</td>
<td>Critical</td>
</tr>
<tr>
<td>Shandong</td>
<td>59</td>
<td>M</td>
<td>25-Feb-14</td>
<td>Unknown</td>
<td>Critical</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>7</td>
<td>F</td>
<td>26-Feb-14</td>
<td>Yes</td>
<td>Severe</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>F</td>
<td>26-Feb-14</td>
<td>Yes</td>
<td>Severe</td>
</tr>
</tbody>
</table>

For further information on individual cases, please refer to: [http://www.who.int/csr/don/en/](http://www.who.int/csr/don/en/)

Investigations on exposure history and condition are ongoing for cases with “Unknown” status.