Human infection with avian influenza A(H5) viruses

Human infection with avian influenza A(H5N1) virus
From 17 to 23 February 2017, no new cases of human infection with avian influenza A(H5N1) virus were reported to WHO in the Western Pacific Region.

From January 2003 to 16 February 2017, a total of 238 cases of human infection with avian influenza A(H5N1) virus were reported from four countries within the Western Pacific Region (Table 1). The last case was reported on 14 January 2016. Of these cases, 134 were fatal, resulting in a case fatality rate (CFR) of 56%.

Table 1: Cumulative number laboratory-confirmed human cases (C) and deaths (D) of influenza A(H5N1) virus infection reported to WHO (January 2003 to 03 February 2017), Western Pacific Region.

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<td>Cambodia</td>
<td>10 8</td>
<td>8 8</td>
<td>3 3</td>
<td>26 14</td>
<td>9 4</td>
<td>0 0</td>
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<td>China</td>
<td>40 26</td>
<td>1 1</td>
<td>2 1</td>
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<td>2 2</td>
<td>6 1</td>
<td>0 0</td>
<td>0 0</td>
<td>53 31</td>
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<td>Lao PDR</td>
<td>2 2</td>
<td>0 0</td>
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<td>2 2</td>
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<td>Viet Nam</td>
<td>119 59</td>
<td>0 0</td>
<td>4 2</td>
<td>2 2</td>
<td>1 2</td>
<td>2 0</td>
<td>0 0</td>
<td>0 0</td>
<td>127 64</td>
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<td>Total</td>
<td>171 95</td>
<td>9 9</td>
<td>9 6</td>
<td>30 17</td>
<td>13 6</td>
<td>6 1</td>
<td>0 0</td>
<td>0 0</td>
<td>238 134</td>
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From January 2003 to 16 February 2017, there were 856 cases of human infection with avian influenza A(H5N1) virus reported from 16 countries worldwide. Of these cases, 452 were fatal, resulting in a CFR of 52.8%.

Human infection with avian influenza A(H5N6) virus
From 17 to 23 February 2017, no new cases of human infection with avian influenza A(H5N6) virus were reported to WHO in the Western Pacific Region. The last case was reported on 1 December 2016 (source: http://www.who.int/csr/don/07-december-2016-ah5n6-china/en/). A total of 16 laboratory-confirmed cases of human infection with influenza A(H5N6) virus, including six deaths, have been reported to WHO from China since 2014.

Public health risk assessment for human infection with avian influenza A(H5) viruses
Whenever avian influenza viruses are circulating in poultry, sporadic infections and small clusters of human cases are possible in people exposed to infected poultry or contaminated environments; therefore sporadic human cases are not unexpected.

With the rapid spread and magnitude of avian influenza outbreaks due to existing and new influenza A (H5) viruses in poultry in areas that have not experienced this disease in animals recently, there is a need for increased vigilance in the animal and public health sectors. Community awareness of the potential dangers for human health is essential to prevent infection in humans. Surveillance should be enhanced to detect human infections if they occur and to detect early changes in transmissibility and infectivity of the viruses.

For more information on confirmed cases of human infection with avian influenza A (H5) virus reported to WHO, visit: http://www.who.int/influenza/human_animal_interface/en/
**Human infection with avian influenza A(H7N9) virus in China**

From 17 to 23 February 2017, **305 cases** of human infection with avian influenza A(H7N9) virus were published in Disease Outbreak News. The last case of human infection with avian influenza A(H7N9) virus in the Western Pacific Region published through Disease Outbreak News was notified to WHO 22 February 2017. (Source: [http://www.who.int/csr/don/22-february-2017-ah7n9-china/en/](http://www.who.int/csr/don/22-february-2017-ah7n9-china/en/)). A total of 1,223 laboratory-confirmed human infections with avian influenza A(H7N9) virus were reported to WHO between early 2013 and 22 February 2017.

WHO is continuing to assess the epidemiological situation and will conduct further risk assessments with new information. Overall, the public health risk from avian influenza A(H7N9) viruses has not changed.

Further sporadic human cases of avian influenza A(H7N9) virus infection are expected in affected and possibly neighbouring areas. Should human cases from affected areas travel internationally, their infection may be detected in another country during or after arrival. If this were to occur, community level spread is considered unlikely as the virus does not have the ability to transmit easily among humans.

On 18 February 2017, the National Health and Family Planning Commission of China (NHFPC) reported to WHO the results of genetic sequencing on virus isolates from 2 previously reported cases of human infection with A(H7N9) virus from Guangdong province. Insertions at the cleavage site of the HA gene suggestive of being highly pathogenic to poultry was confirmed by the Chinese National Influenza Centre of the Chinese Centre for Disease Control and Prevention (China CDC).

To date, there has been no evidence of sustained human-to-human transmission of avian influenza A(H7N9) virus. Human infections with the A (H7N9) virus are unusual and need to be monitored closely in order to identify changes in the virus and/or its transmission behaviour to humans as it may have a serious public health impact.

*For more information on human infection with avian influenza A (H7N9) virus reported to WHO:*  

*For more information on risk assessment for avian influenza A(H7N9) virus:*  

**Animal infection with avian influenza virus**

From 17 to 23 February 2017, there were outbreaks of highly pathogenic avian influenza A(H5N1) and A(H5N6) virus reported in poultry in Vietnam. And one identification of highly pathogenic avian influenza A(H7N9) virus was reported in live bird markets in Guangdong, China.

**Highly pathogenic avian influenza (HPAI) A(H5N1) virus in Vietnam**

On 21 February 2017, Vietnam reported to OIE of an update of A(H5N6) event in backyard poultry in, SOC TRANG, DONG NAI and NAM DINH Province.  

**Highly pathogenic avian influenza (HPAI) A(H5N6) virus in Vietnam**

On 20 February 2017, Vietnam reported to OIE of an update of A(H5N6) event in backyard poultry in QUANG NGAI Province.  
Highly pathogenic avian influenza (HPAI) A(H7N9) virus in live bird markets in Guangdong, China.

On 18 February 2017, China reported to OIE of a reoccurrence of A(H7N9) event in live bird markets in Guangdong Province, China.  

For more information on animal infection with avian influenza viruses with potential public health impact, visit:
- World Organization of Animal Health (OIE) web page:  
- Food and Agriculture Organization of the UN (FAO) webpage: Avian Influenza:  
- OFFLU: http://www.offlu.net/

Latest information on human seasonal influenza
For the latest information on the seasonal influenza situation in the Western Pacific Region, visit:  
http://www.wpro.who.int/emerging_diseases/influenza_biweekly_20170207.pdf?ua=1

For latest information on the global seasonal influenza situation, visit:
  Epidemiology:  
  http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance
  Virology:  
  http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport

Other updates

WHO Risk Assessment of human infection with avian influenza A(H7N9) virus  
16 January 2017 posted on WHO website  

Recommended composition of influenza virus vaccines for use in the 2017 southern hemisphere influenza season. 29 September 2017  

Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines—29 September 2016  
http://www.who.int/influenza/vaccines/virus/characteristics_virus_vaccines/en/

H7N9 situation update (FAO) —22 February 2017  