Human infection with avian influenza A(H5) viruses

Human infection with avian influenza A(H5N1) virus
From 13 to 19 January 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 19 January 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%.

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<td>Viet Nam</td>
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<td><strong>Total</strong></td>
<td><strong>171</strong></td>
<td><strong>95</strong></td>
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From January 2003 to 19 December 2016, 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 13 to 19 January 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

Between 13 and 19 January, 109 additional human infections with avian influenza A(H7N9) virus from China, including Hong Kong Special Administrative Region (SAR) and Macao SAR, were published in Disease Outbreak News. (source: http://www.who.int/csr/don/17-january-2017-ah7n9-china/en/, http://www.who.int/csr/don/18-january-2017-ah7n9-china/en/). A total of 918 laboratory-confirmed human infections with avian influenza A(H7N9) virus were reported to WHO between early 2013 and 12 January 2017. Details of cases during this reporting period are described below.

On 5 January 2017, the Department of Health, Hong Kong SAR notified WHO of a case of human infection with avian influenza A(H7N9) virus. The case was a 62-year-old man with underlying illnesses, who travelled to Guangzhou, Guangdong on 15 December 2016. He developed influenza-like symptoms on 1 January 2017 in Guangzhou. He was admitted to a hospital in Dongguan on 2 January, but returned to Hong Kong SAR on 3 January, where he was admitted to hospital on 4 January for further treatment. He died on 6 January. His respiratory samples tested positive for H7N9 virus on 5 January. The patient reported no recent exposure to poultry or live poultry markets.

On 9 January 2017, NHFPC notified WHO of 106 additional laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus. Onset dates ranged from 22 November to 29 December 2016. Of these 106 cases, 36 were female. The median age was 54 years (range 23 to 91 years). The cases were reported from Jiangsu (52), Zhejiang (21), Anhui (14), Guangdong (14), Shanghai (2), Fujian (2) and Hunan (1). At the time of notification, there were 35 deaths and 57 severe cases. Eighty of the cases are reported to have had exposure to poultry or a live poultry market. There were two clusters reported: one family cluster (father and daughter in Jiangsu) and one healthcare facility cluster (two patients in the same ward in Anhui). Human-to-human transmission within the cluster cannot be ruled out.

On 11 January 2017, the Department of Health, Hong Kong SAR reported human infection with avian influenza A(H7N9) virus in a 10-year-old boy. He developed symptoms on 8 January and was admitted to the hospital on 9 January. He was confirmed positive for avian influenza A(H7N9) virus on 11 January. The patient reported indirect exposure to backyard chickens in Guangdong between 31 December 2016 and 3 January 2017.

On 12 January 2017, the Health Bureau, Macao SAR reported a human infection with avian influenza A(H7N9) in a 72-year-old female. The case resides in Zhongshan, Guangdong, a city close to Macao SAR. She had exposure live poultry. On 8 January 2017, she developed symptoms and was admitted to a hospital in Zhongshan. She left the hospital in Zhongshan on 9 January and travelled to Macao SAR where she was admitted to the government hospital on 10 January with the diagnosis of pneumonia. Specimens collected on 10 January tested positive for avian influenza A(H7N9) on 12 January.

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.

Public health risk assessment for avian influenza A(H7N9) virus

On 23 February 2015, WHO conducted a public health risk assessment for avian influenza A(H7N9). This assessment found the overall public health risk from avian influenza A(H7N9) viruses has not changed since the previous assessment, published on 2 October 2014. 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 13 to 19 January 2017, Highly pathogenic avian influenza (HPAI) H5N8 and H5N2 among poultry were reported in Taiwan, China. During the same reporting period HPAI H5N6 outbreaks in poultry were reported in China and Japan, and HPAI H5N8 virus was detected among wild birds in China.

Highly pathogenic avian influenza (HPAI) H5N8 and H5N2 outbreaks in poultry, Taiwan China
A new outbreak of HPAI H5N8 infection in poultry was reported in Yunlin County in Taipei city, Taiwan China. The outbreak started on 1 January 2017. In total, 258 birds died due to infection and 23,863 birds were destroyed.

Two outbreaks of HPAI H5N2 infection in poultry was reported in Yunlin County in Taipei city, Taiwan China. The first outbreak started on 29 December 2016 and the other started on 5 January 2017. A total of 1,066 birds died due to infection and 5,353 birds were destroyed.

Highly pathogenic avian influenza (HPAI) H5N6 outbreaks in poultry and HPAI H5N8 confirmed in wild birds, China
A new outbreak of HPAI H5N6 infection in poultry was reported in Hunan province in China. The outbreak started on 11 January 2017 and. In total, 1,054 birds died due to infection and 2,067 birds were destroyed.

On 9 January 2017, HPAI H5N8 virus was detected in wild birds (black swan, Cygnus atratus) in Hubei province, China. The number of cases was 99.
http://empres-i.fao.org/eipws3g/

Highly pathogenic avian influenza (HPAI) H5N6 outbreak in poultry, Japan
A new outbreak of HPAI H5N6 infection in poultry was reported in Gifu prefecture in Japan. The outbreak started on 14 January 2017 and in total, 100 birds died due to infection and 78,084 birds were destroyed.
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/en/index.html

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

Influenza at the human-animal interface — Summary and assessment as of 21 November 2016

WHO Risk Assessment of human infection with avian influenza A(H7N9) virus
23 February 2015 posted on WHO website
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/RiskAssessment_H7N9_23Feb2015.pdf?ua=1


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) —30 November 2016