Human infection with avian influenza A(H5) viruses

Human infection with avian influenza A(H5N1) virus
From 25 December 2015 to 7 January 2016, no new cases of human infection with avian influenza A(H5N1) virus were reported to WHO in the Western Pacific Region.

From February 2003 to 7 January 2016, 237 cases of human infection with avian influenza A(H5N1) virus were reported from four countries within the Western Pacific Region (Table 1). Of these cases, 134 were fatal, resulting in a case fatality rate (CFR) of 57%.

Table 1: Cumulative number laboratory-confirmed human cases (C) and deaths (D) of influenza A(H5N1) virus infection reported to WHO (January 2003 to 14 December 2015), Western Pacific Region.

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From February 2003 to 7 January 2016, there have been 844 cases of human infection with avian influenza A(H5N1) virus reported from 16 countries worldwide. Of these cases, 449 were fatal, resulting in a CFR of 53%.

Human infection with avian influenza A (H5N6) virus
From 25 December 2015 to 7 January 2016, two new cases of human infection with avian influenza A(H5N6) virus were reported to WHO in the Western Pacific Region. Since May 2014, six human cases of influenza A(H5N6) have been reported. All six cases were reported from China.

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 would not be 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:


Human infection with avian influenza A (H7N9) virus in China
From 25 December 2015 to 7 January 2016, no new cases of human infection with avian influenza A (H7N9) virus were reported to WHO in the Western Pacific Region. The last case was reported on 11 December 2015.


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) 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) viruses**
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.

*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**
From 25 December 2015 to 7 January 2016, eleven new animal outbreaks with avian influenza virus were reported in the Western Pacific Region; ten in Taiwan, China (7 HPAI H5N2 and 3 HPAI H5N8), and one in Hong Kong.

**HPAI H5N2 outbreak in poultry, Taiwan, China**
Seven new outbreaks of HPAI H5N2 infection in poultry were reported in Yunlin county (3), Changhua county (2), Pingtung county (1), and Taipei city (1). The first outbreak started on 7 December 2015 and the last one on 21 December 2015. In total, 6,050 birds died due to infection and 32,249 were destroyed.

**HPAI H5N8 outbreak in poultry, Taiwan, China**
Three new outbreaks of HPAI H5N8 infection in poultry were reported in Pingtung county, Chiayi county, and Kaohsiung. The first outbreak started on 7 December 2015 and the last one on 24 December 2015. In total, 1,608 birds died due to infection and 9,783 were destroyed.

**HPAI H5N6 infection in a wild bird, Hong Kong**
Infection with HPAI H5N6 was confirmed in a single dead great egret found in Diamond Hill. The H5N6 infected wild bird was detected as part of a wild bird surveillance program. No spread of disease was evident. The end date of the outbreak was the same as the date the bird was found (31 December 2015). An intensive surveillance system is in place for all poultry farms, poultry markets and pet bird shops in Hong Kong.
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/

- EMPRES:

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 14 December 2015
http://www.who.int/influenza/human_animal_interface/Influenza_Summary IRA_HA_interface_14_Dec_2015.pdf?ua=1

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

WHO Recommended composition of influenza virus vaccines for use in the 2016 southern hemisphere influenza season—24 September 2015

Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines—24 September 2015
http://www.who.int/influenza/vaccines/virus/characteristics_virus_vaccines/en/

H7N9 situation update (FAO) —5 January 2016