

Influenza at the human-animal interface

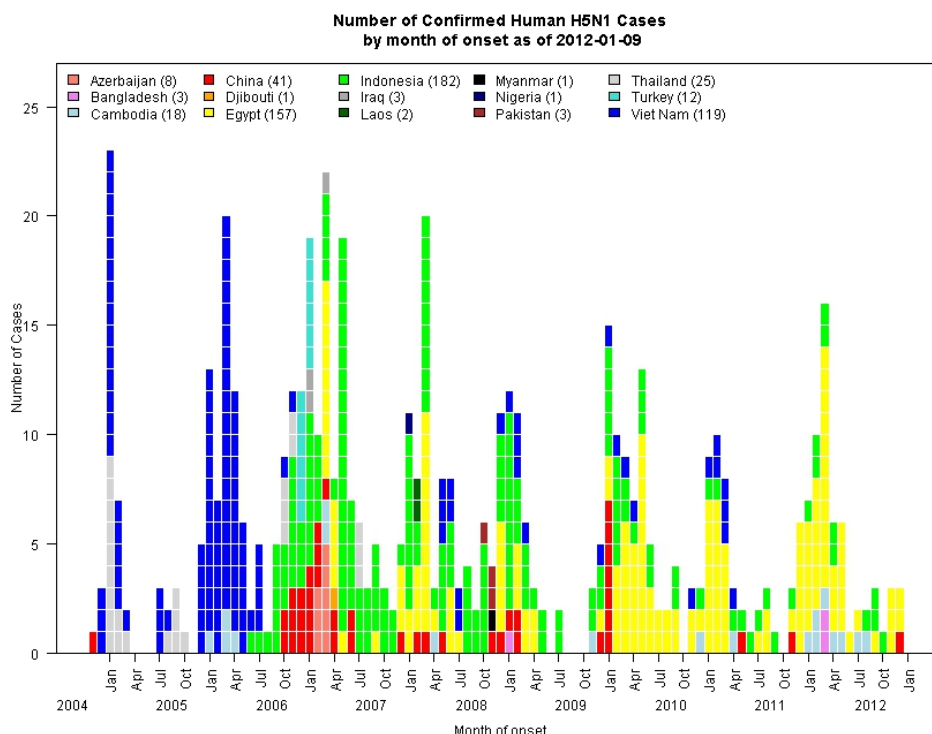
Summary and assessment as of 9 January 2012

Human infections with avian influenza H5N1 virus and associated animal health events

As of 9 January 2012, 576 confirmed human cases of infection with avian influenza H5N1 virus from 15 countries have been reported to WHO (see epidemiological curve, below). Of these, 339 died (CFR: 58.9%). In 2011, 60 human cases have been reported to date from five countries: Bangladesh (2), Cambodia (8), China (1), Egypt (38), and Indonesia (11). Five new cases have been reported since the last summary (5 December, 2011); four in Egypt and one in China.

The four Egyptian cases occurred in a cluster consisting of a pregnant woman, her young child and her 29-year-old brother, all from Dakahlia Governorate, and in a 42 year-old male from Menofia Governorate. All cases were hospitalized and received Oseltamivir 5-7 days after onset and, with the exception of the young child from Dakahlia, all died. For the cluster a common exposure of the cases to backyard poultry or contaminated environments is most likely, although human to human transmission can not be totally ruled out. However no further spread to additional people was reported. The virus continues to circulate in poultry in many governorates in Egypt.

The Chinese case occurred in a 39-year-old male from Guangdong Province, who died. Investigation into the source of infection is currently ongoing. There have been recent reports to the OIE of H5N1 events in wild birds and poultry from China (Hong Kong Special Administrative Region).



Egypt has officially declared the H5N1 virus endemic in poultry¹, and information from FAO suggests the H5N1 virus is also circulating endemically in poultry in China, India, Viet Nam, and Bangladesh². As expected during this period of the year, there were increasing numbers of outbreaks in birds identified globally this month, and a continued upward trend in H5N1 events in both birds and humans is predicted based on the historical seasonal pattern of outbreaks.

It is anticipated that people in countries experiencing outbreaks of H5N1 in poultry will continue to be exposed to the virus through contact with infected poultry or contaminated environments, and therefore sporadic human cases will occur as long as the virus continues to circulate in poultry, especially in household poultry.

Epidemiologic investigations have identified only limited human-to-human transmission of this virus since its emergence in 2003, and no community-level transmission has been noted. Therefore, the sporadic cases and small clusters being reported are not considered unusual and are not thought to indicate any increase in public health risk. As well, recent reported evolution of the H5N1 virus is not thought to indicate any increase in public health risk³.

Human infections with other animal influenza viruses

There have been no new cases of human infection associated with other animal influenza viruses since the last update (5 December 2011), including cases of influenza A(H3N2)v. To date, human-to-human transmission of influenza A(H3N2)v has only occurred with close contact. Overall, young children appear to be the most susceptible and disease associated with the virus does not appear to be more severe than with seasonal influenza viruses.

More information on influenza at the human-animal interface is available from WHO (http://www.who.int/influenza/human_animal_interface/en/); additional information on influenza in animals is available from OIE (www.oie.int/animal-health-in-the-world/web-portal-on-avian-influenza/), FAO (www.fao.org/avianflu/en/index.html), and OFFLU (<http://www.offlu.net/index.html>).

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

WHO Table: H5N1 avian influenza: timeline of major events
http://www.who.int/influenza/human_animal_interface/avian_influenza/H5N1_avian_influenza_update.pdf

WHO Archive: Avian Influenza situation updates:
http://www.who.int/influenza/human_animal_interface/avian_influenza/archive/en/index.html

World Organisation of Animal Health (OIE) webpage: Web portal on Avian Influenza:
www.oie.int/animal-health-in-the-world/web-portal-on-avian-influenza/

Food and Agriculture Organization of the UN (FAO) webpage: Avian Influenza:
www.fao.org/avianflu/en/index.html

¹ OIE WAHID interface. HPAI Summary of Immediate notifications and Follow-ups - 2010. Available online:

http://web.oie.int/wahis/public.php?page=disease_immediate_summary&disease_type=Terrestrial&disease_id=15

² Approaches to Controlling, Preventing and Eliminating H5N1 Highly Pathogenic Avian Influenza in Endemic Countries. Rome, United Nations Food and Agriculture Organization, 2011

³ http://www.who.int/influenza/human_animal_interface/avian_influenza/h5n1-2011_08_30/en/index.html