

Influenza at the human-animal interface

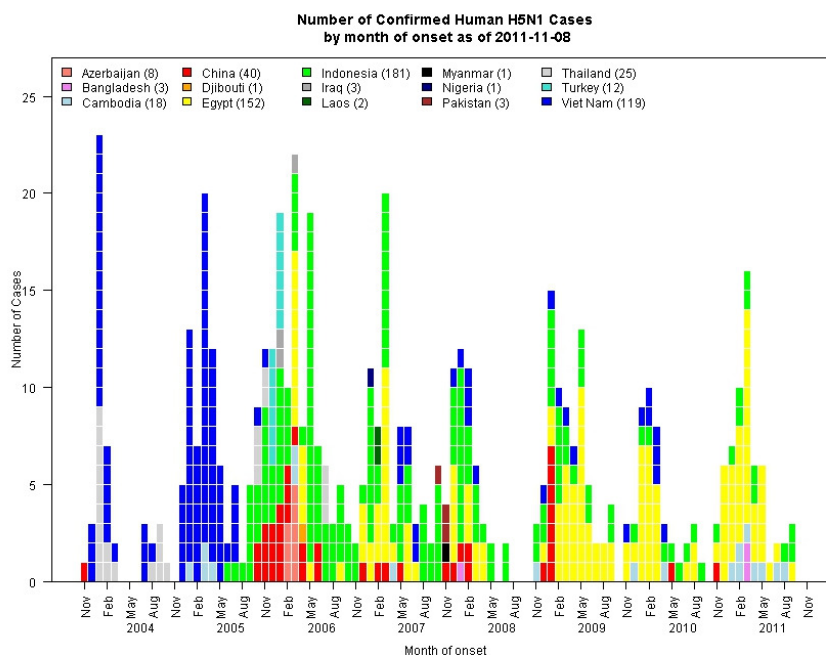
Summary and assessment as of 7 November 2011

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

As of 7 November 2011, 569 confirmed human cases of infection with avian influenza H5N1 virus from 15 countries have been reported to WHO (see epidemiological curve, below). Of these, 334 died (CFR: 58.7%). So far in 2011, 53 human cases have been reported from four countries: Bangladesh (2), Cambodia (8), Egypt (33), and Indonesia (10). Four cases have been reported since the last summary (7 October, 2011); one in Egypt and three in Indonesia.

The Egyptian case occurred in a 1-year-old boy from Gharbia who was hospitalised and recovered. The virus continues to circulate in poultry in many governorates in Egypt, including Gharbia.

The three Indonesian cases occurred in a 1-year old girl from Jakarta, and two siblings from Bali, all of whom had exposure to sick poultry. All three of these cases died. Epidemiologic investigations have identified only limited human-to-human transmission of this virus since its emergence in 2003, and no community-level spread.



Indonesia, as well as 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. Slightly increasing numbers of outbreaks in birds are currently being identified globally as is expected during this period of the year, 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. However, no community-level transmission of this virus has been noted and these sporadic cases and small clusters could not be considered unusual.

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>).

Human infections with other animal influenza viruses

Over the past 3 months, a total of 7 cases of swine-origin Influenza (H3N2) virus infection have been reported from several states in the USA. All have recovered. Although some of the cases have a history of attending the same agricultural events, none of the cases had any known epidemiological connection with each other, and there is no evidence of further human spread. As is customary whenever novel viruses infect humans, the WHO has already identified a vaccine seed virus based on a swine origin H3N2 virus similar to one isolated from one of these patients.

(http://www.who.int/influenza/vaccines/virus/candidates_reagents/a_h3n2_soiv/en/index.html).

More information on influenza at the human-animal interface is available from WHO (http://www.who.int/influenza/human_animal_interface/en/)

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