Influenza at the human-animal interface

Summary and assessment as of 3 October 2011

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

As of 3 October 2011, 565 confirmed human cases of infection with avian influenza H5N1 virus from 15 countries have been reported to WHO (see figure). Of these, 331 died (CFR: 58.6%). In 2011, human cases have been reported from 4 countries: Bangladesh (2), Cambodia (8), Egypt (32), and Indonesia (7). No cases have been reported since the last summary (5 September, 2011). Epidemiologic investigations have identified only limited human-to-human transmission of this virus since its emergence in 2003, and no community-level spread.

A review of the 49 human cases reported over the past 9 months shows that, overall, younger cases were more likely to survive than older cases, and that the median number of days between onset and hospitalization was 2 days for surviving cases and 6 days for fatal cases. However, it was noted that substantial variation in these parameters exists among countries.

Egypt and Indonesia have officially declared the H5N1 virus endemic in poultry\(^1\), and information from FAO suggests the H5N1 virus is also circulating endemically in poultry in China, India, Viet Nam, and Bangladesh\(^2\).


\(^2\) Approaches to Controlling, Preventing and Eliminating H5N1 Highly Pathogenic Avian Influenza in Endemic Countries. Rome, United Nations Food and Agriculture Organization, 2011
Overall, relatively few outbreaks in birds are currently being reported globally as is expected during this period of the year. However, new outbreaks of HPAI H5N1 in poultry were reported to the OIE from Bangladesh and India during September.

The downward trend in H5N1 events was predicted based on the seasonal pattern of outbreaks seen in previous, and this trend is expected to reverse in the coming months as the weather cools. 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.


**Human infections with other animal influenza viruses**

Since the last summary, two additional cases of swine-origin Influenza A (H3N2) virus infection associated with an agricultural fair in Pennsylvania have been reported from the USA bringing the total to four. The cases had no known epidemiological connection with each other, and there is no evidence of further human spread.

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


