Influenza at the human-animal interface

Summary and assessment as of 17 June 2011

Human infections with avian influenza H5N1 virus

As of 17 June, 561 confirmed human cases of infection with avian influenza H5N1 virus from 15 countries were reported to WHO. Of these, 328 died (CFR: 58.4%). Epidemiologic investigations have identified only limited human to human transmission of this virus since its emergence in 2003, with no community-level spread.

Eight human cases that were not included in the previous summary have been reported from 3 countries: Cambodia (1), Egypt (6), and Indonesia (1) with onset dates in April and May. All of these human cases reported contact with poultry. Egypt and Indonesia have officially declared the 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]. In Cambodia, sporadic reintroduction into poultry populations is thought to occur.

In Egypt, human cases of avian influenza H5N1 virus infection continue to be regularly reported from several governorates, reflecting a functioning national disease surveillance and reporting structure as well as widespread virus circulation in poultry. Because survival rates in affected children are better than for affected adults in Egypt, the increase in case fatality rate in 2011 reflects the increased number of cases in adults, but still remains lower than average at 34.7%. The overall number of reported human cases has somewhat decreased over the past weeks, following the expected seasonal pattern in the country. However, poultry outbreaks continue to be reported and it is anticipated that people in Egypt 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. The animal health and public health sectors in Egypt continue to work closely together to reduce risks from H5N1 at the human-animal interface.

In Cambodia, the case fatality rate (87.5%) remains higher than average. There were reports of poultry die-offs in the case's village in Prey Veng province, although no poultry outbreaks have been officially reported since February 2011 (then in Kandal province).

The trend continues towards a decrease in the number of non-endemic countries reporting H5N1 in poultry or wild birds and in the number of outbreaks reported from these countries, which was predicted based on the onset of warmer weather. However, human cases are possible whenever the virus is circulating in birds. More information on animal influenza 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

There were no human infections with other animal influenza viruses reported to WHO during May, 2011.

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[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

Other animal influenza

During the month of May, there continued to be outbreaks of H5N1 in poultry and wild birds in several countries in Asia. However, the number of outbreaks and countries reporting outbreaks continues to decline, as is seasonally expected. In South Africa, there were reported outbreaks of highly pathogenic H5N2 in ostriches. This strain of H5N2 has never been reported to cause clinical illness in humans.

Low pathogenicity H7 viruses are also currently circulating in poultry in Europe and China. These viruses likely do not pose a significant risk to public health currently, but warrant consistent monitoring and control in animal populations.

Relevant Links:

WHO Table: Cumulative Number of Confirmed Human Cases of Avian Influenza A/(H5N1) Reported to WHO
www.who.int/csr/disease/avian_influenza/country/cases_table_2011_02_09/en/index.html

WHO Table: H5N1 avian influenza: timeline of major events
www.who.int/csr/disease/avian_influenza/ai_timeline/en/index.html

WHO Archive: Avian Influenza situation updates
www.who.int/csr/disease/avian_influenza/updates/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

Government of Egypt website: "Strengthening Avian Influenza Detection and Response" (SAIDR) website:
www.saidr.org/index.php