

Influenza at the human-animal interface

Summary and assessment as of 26 April 2013

Human infection with avian influenza A(H5N1) viruses and associated animal health events

From 2003 through 26 April 2013, 628 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported to WHO from 15 countries, of which 374 died.

Since the last update on 12 March 2013, 6 new laboratory-confirmed human cases with influenza A(H5N1) virus infection were reported to WHO from Bangladesh (1), Cambodia (1), Egypt (2) and Viet Nam (2). The investigations into these concluded that they were sporadic cases and that the appearance of sporadic cases is expected and will likely occur in the future.

Since the beginning of 2013, Cambodia has reported ten human cases with influenza A(H5N1) virus infection including eight fatal cases. These cases come from five provinces all located in southern Cambodia. These cases do not seem to be linked directly, and most had contact with sick poultry in their villages. The clade 1.1 viruses that have been isolated from cases are very similar to those isolated from poultry in the region. Investigations around these cases did not detect additional cases. This evidence suggests sporadic infections from exposure to infected poultry or contaminated environments, rather than human-to-human transmission. It has been suggested that the A(H5N1) virus is circulating endemically in poultry in Cambodia¹, as such, additional sporadic human cases might be expected.

Table 1: laboratory-confirmed human cases of avian influenza A(H5N1) virus infection (13 Mar – 26 Apr 2013)

Country	Province	Age (y)	Sex	Date of onset	Date of Hospitalisation	Oseltamivir treatment Start date	Date of death	Exposure to
Cambodia	Kampot	5 years	M	27/03/2013	31/03/2013	01/04/2013		unknown
Egypt	Menofia	40 years	F	03/03/2013	08/03/2013	Yes date unclear		Sick and dead poultry
	Elmanzala	26 years	M	30/03/2013	05/04/2013	07/04/2013	08/04/2013	Healthy pigeons, neighbourhood poultry
Viet Nam	Dong Thap	4 years	M	23/03/2013	26/03/2013		04/04/2013	Sick or dead poultry
	Long An	20 years	F	11/04/2013	14/04/2013	Yes date unclear		Dead poultry in neighbourhood
Bangladesh	Chittagong	2 years	M	11/02/2013	12/02/2013			Sick or dead poultry

NA: not applicable or not available

¹ Sorn, S., et al. Dynamic of H5N1 virus in Cambodia and emergence of a novel endemic sub-clade. Infect. Genet. Evol. (2012), <http://dx.doi.org/10.1016/j.meegid.2012.05.013>
<http://www.sciencedirect.com/science/article/pii/S1567134812002158>

Public health risk assessment of avian influenza A(H5N1) viruses: Any time influenza viruses are circulating in poultry, sporadic infections or small clusters of human cases are possible especially in people exposed to infected poultry kept in households or contaminated environments. However, currently, this A(H5N1) virus does not appear to transmit easily among people and therefore the likelihood of community level spread of this virus remains low. Therefore, the public health risk associated with this virus remains unchanged.

Figure 1: Epidemiological curve of avian influenza A(H5N1) cases in humans by country and month of onset

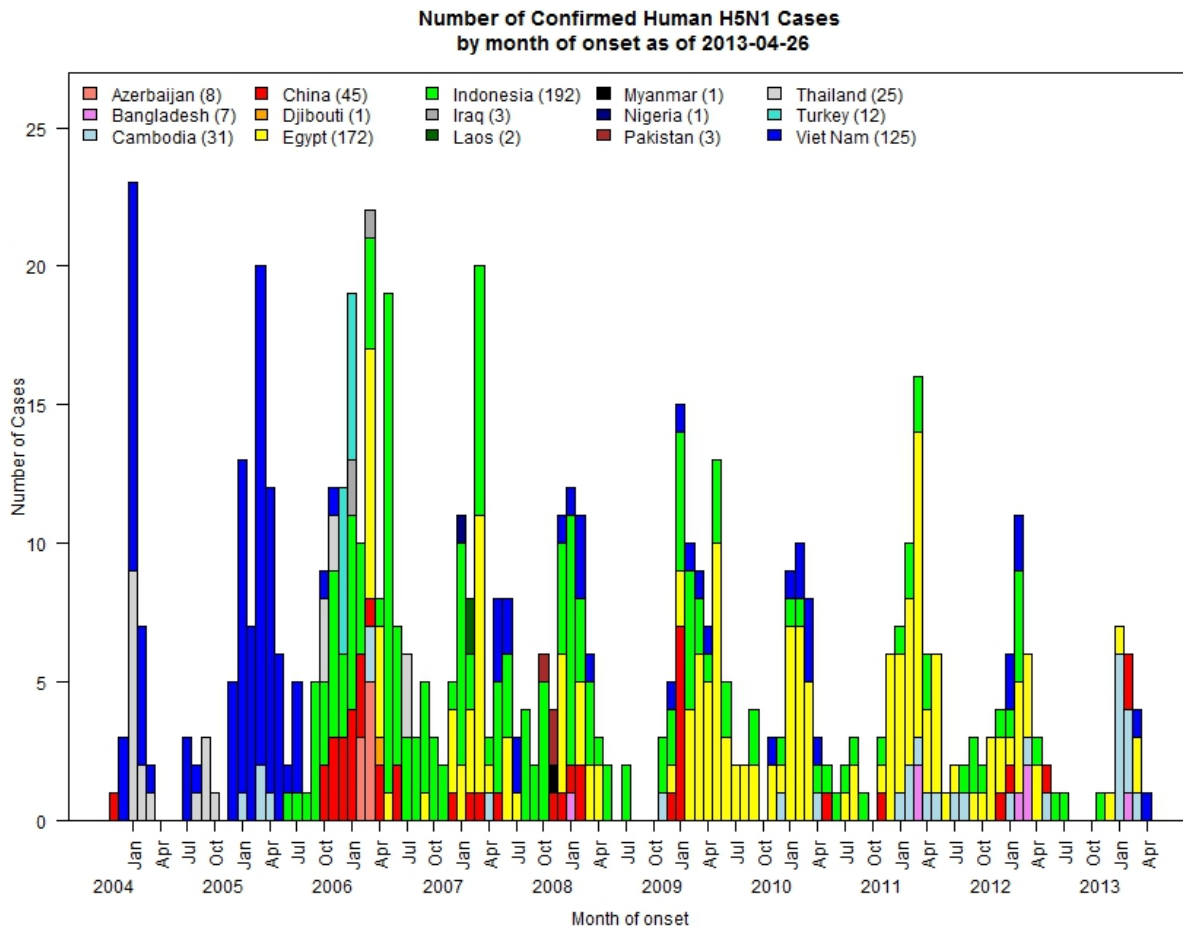
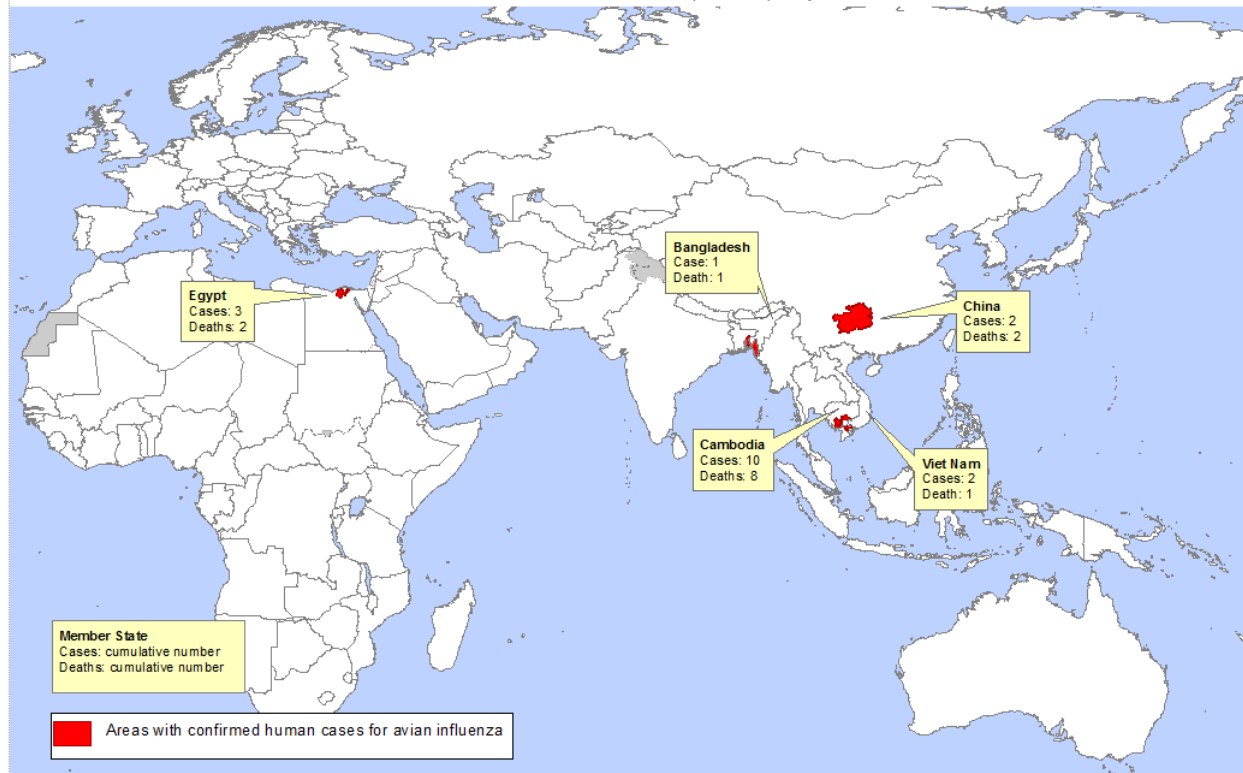


Figure 2: Map of avian influenza A(H5N1) cases in humans in 2013

Areas with confirmed human cases for avian influenza A(H5N1) reported to WHO, 2013- to-date*,



*All dates refer to onset of illness
Data as of 26 April 2013
Source: WHO/GIP

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Human infection with other non-seasonal influenza viruses

Avian influenza A(H7N9)

China has been reporting human cases of infection with avian influenza A(H7N9) viruses since end of March 2013. This event is closely monitored and separate risk assessments are being carried out for this event. Please find updated information

at: http://who.int/influenza/human_animal_interface/influenza_h7n9/en/index.html

Influenza events in animals with potential public health impact

Overall, official reports of influenza outbreaks in birds are at their expected seasonal level (http://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI). With the onset of summer in the northern hemisphere, the number of reports of influenza events in birds is expected to decrease. However, circulation of the influenza A(H7N9) virus in China may not follow the seasonal pattern we expect to see in other Low Pathogenic Avian Influenza H7 viruses in birds.

Due to the constant evolving nature of influenza viruses, WHO continues to stress the importance of global monitoring of influenza viruses in animals and people and recommends all Member States to strengthen routine influenza surveillance. All human infections with non-seasonal influenza viruses are reportable to WHO under IHR (2005).

Relevant Links:

WHO human-animal interface web page

http://www.who.int/influenza/human_animal_interface/en/

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

H5N1 avian influenza: timeline of major

events http://www.who.int/influenza/human_animal_interface/avian_influenza/H5N1_avian_influenza_update.pdf

Avian influenza A(H7N9) information

http://who.int/influenza/human_animal_interface/influenza_h7n9/en/index.html

World Organisation of Animal Health (OIE) web page: Web portal on Avian Influenza

<http://www.oie.int/animal-health-in-the-world/web-portal-on-avian-influenza/>

Food and Agriculture Organization of the UN (FAO) webpage: Avian

Influenza <http://www.fao.org/avianflu/en/index.html>

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<http://www.offlu.net/index.html>