

## Influenza at the human-animal interface

### Summary and assessment as of 5 March 2012

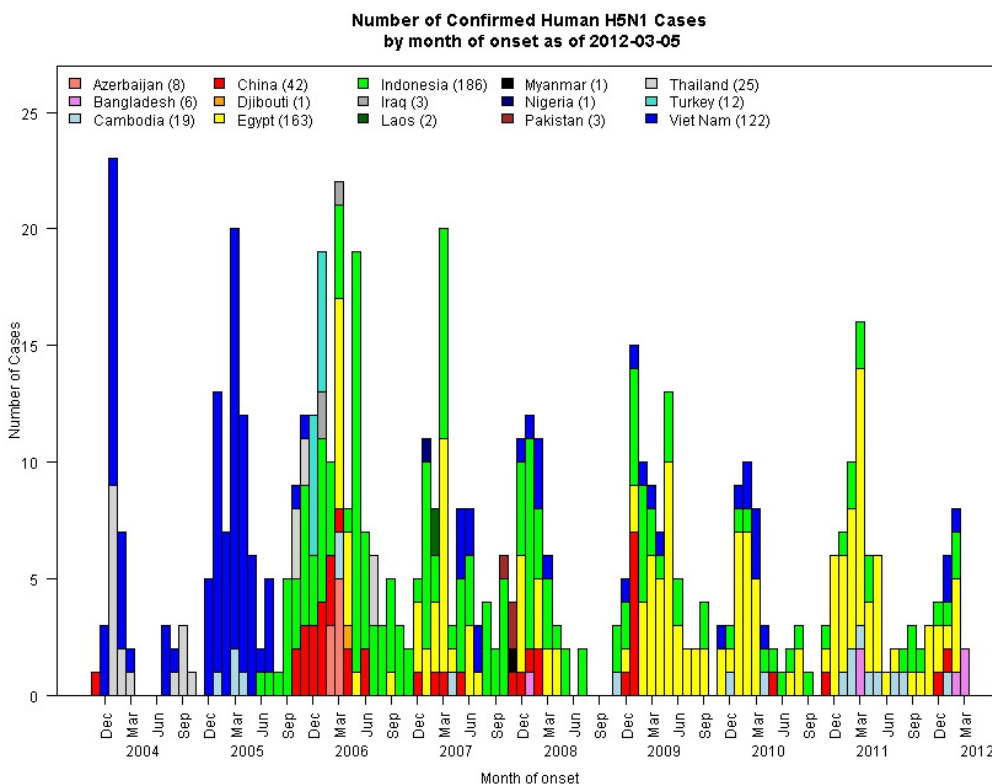
#### Human infections with avian influenza H5N1 and associated animal health events

From 2003 through 05 March 2012, 594 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported to WHO, of which 349 died, from 15 countries. Since January 2012, 16 H5N1 human cases of infection have been reported to the WHO.

Between 6 February 2012 and 5 March, 10 new human cases have been reported from Indonesia (2), Egypt (4), Vietnam (1) and Bangladesh (3).

According to FAO, H5N1 viruses are thought to be circulating endemically in poultry in China, Egypt, Indonesia, Viet Nam, Bangladesh and India. In Cambodia, sporadic reintroduction into poultry populations is thought to occur<sup>1</sup>. The epidemiologic curve of recent human cases (Figure 1) follows the same pattern seen in previous years, with larger numbers of cases in the winter months, decreasing towards summer in the northern hemisphere. This curve follows the seasonal curve of outbreaks in birds.

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



<sup>1</sup> Approaches to Controlling, Preventing and Eliminating H5N1 Highly Pathogenic Avian Influenza in Endemic Countries. Rome, United Nations Food and Agriculture Organization, 2011

With the exception of the cases from Bangladesh, all other cases were sporadic cases. The three cases from Bangladesh were picked up through an ongoing surveillance project in live bird markets, all had mild symptoms and recovered fully. They all had contact with poultry. Further investigation is ongoing to understand the implications for public health.

**Table 1: laboratory-confirmed human cases of avian influenza A(H5N1) virus infection (6 Feb -5 March 2012)**

| Country    | Province             | Age (y) | Sex | Date of onset/<br>detection* | Date of Hospitalisation | Start date<br>Oseltamivir treatment | Date of death | Exposure to                |
|------------|----------------------|---------|-----|------------------------------|-------------------------|-------------------------------------|---------------|----------------------------|
| Bangladesh | Dhaka City           | 40      | M   | 26/02/2012*                  | NA                      | NA                                  | NA            | live bird market           |
|            | Dhaka City           | 26      | M   | 04/03/2012*                  | NA                      | NA                                  | NA            | live bird market           |
|            | Dhaka City           | 18      | M   | 04/03/2012*                  | NA                      | NA                                  | NA            | live bird market           |
| Egypt      | Menoufiya            | 45      | F   | 10/02/2012                   | NA                      | 17/02/2012                          | NA            | backyard poultry           |
|            | Gharbia              | 1       | F   | 14/02/2012                   | 15/02/2012              | 15/02/2012                          | NA            | backyard poultry           |
|            | Beheira              | 32      | M   | 16/02/2012                   | 21/02/2012              | 21/02/2012                          | 28/02/2012    | sick/dead backyard poultry |
|            | Kafr el Sheikh       | 37      | F   | 18/02/2012                   | 23/02/2012              | 23/02/2012                          | 26/02/2012    | sick/dead backyard poultry |
| Indonesia  | Banten               | 19      | F   | 08/02/2012                   | 12/02/2012              | NA                                  | 13/02/2012    | NA                         |
|            | Badung Bsli          | 12      | M   | 11/02/2012                   | 16/02/2012              | NA                                  | 21/02/2012    | poultry                    |
| Vietnam    | Thanh Hoa/Binh Duong | 22      | M   | 17/02/2012                   | 21/02/2012              | 23/02/2012                          | NA            | slaughter of ducks         |

NA: not applicable or not available

**Overall public health risk assessment: an increase in poultry outbreaks and sporadic human cases and small clusters would be expected at this time of year. Further investigations around the mild cases detected in Bangladesh are awaited to define public health risk.**

## 2. Human infections with other animal influenza viruses

More information on influenza at the human-animal interface is available from WHO ([http://www.who.int/influenza/human\\_animal\\_interface/en/](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/](http://www.oie.int/animal-health-in-the-world/web-portal-on-avian-influenza/)), FAO ([www.fao.org/avianflu/en/index.html](http://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](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](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](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/](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: [www.fao.org/avianflu/en/index.html](http://www.fao.org/avianflu/en/index.html)