

Update on Avian Influenza

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Five years have passed since the avian influenza strain H5N1 started killing poultry and humans in Southeast Asia, but still researchers know little about how influenza viruses emerge and spread from one species to another.

2008 has seen the least number of human avian cases since 2003. During December there were two cases in Indonesia, one in Egypt and one in Cambodia. Total human avian cases in 2008 were 42 with 31 deaths. Cases occurred in Indonesia, Vietnam, China, Cambodia, Bangladesh and Egypt. Re-emergence of Avian influenza outbreaks amongst poultry in December occurred in India, Hong Kong, Cambodia and Egypt.

There are 100 strains of avian influenza but only 4 types H5N1, H7N3, H7N7 and H9N2 are known to cause human infections. Hong Kong had a human case infected with H9N2 in December. To date it has recorded 4 human cases with this virus. H9N2 possesses the same threat to humanity as H5N1.

Seasonal Influenza

There is concern presently that this influenza season might be more

severe than in previous years and in fact may result in an influenza epidemic. Over the Christmas period, a number of Western and Southern European countries like Portugal, Spain, England, Ireland and Bulgaria have seen above-threshold levels of Influenza-like illnesses. It is expected that influenza will continue to spread in central, eastern and northern European countries. A substantial increased rate of acute bronchitis has been noted especially in the over-65 age groups. It is being recommended to vaccinate health care workers, elderly patients and those suffering from chronic diseases who have not as yet taken the seasonal vaccine.

Most of the viruses identified so far are influenza A (H3N1). This subtype was associated with moderately severe epidemics last season (2007/8) in Northern America and in parts of the Southern Hemisphere Winter. According to

European Centre for Disease Prevention and Control experts, the influenza A (H3N1) virus variant represented by the A/Brisbane/10/2007 is a drift variant virus to which most of Europe has not previously been exposed to.

So far specimens obtained from Influenza A H3 subtype were found to be sensitive to both oseltamivir and zanamivir but resistant to amantadine while almost all Influenza A H1 specimens were found to be resistant to oseltamivir but sensitive to zanamivir and amantadine.

Based on the antigenic and genetic characterisation data available so far, the WHO collaborating Centre in Europe considers that 98% of the viruses tested, match the recommended strains in the current influenza vaccine and so immunised subjects would have good protection against the circulating influenza viruses. ☐