Auckland Regional Public Health Service
Rātonga Hauora ā Iwi o Tamaki Makaurau

Working with the people of Auckland, Counties Manukau and Waitemata

Pandemic Postings

Current Alert Level: WHITE (definition)
Update number: 45
Date: 22 August 2007
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Website: www.arphs.govt.nz (+ follow link)

International situation

Indonesia WHO, 14/08/07; WHO, 16/08/07. Two further cases of human H5N1 avian influenza have been reported in Indonesia by WHO. The first case was a 29-year-old woman who developed symptoms on 3 August and died 12 August. The woman was from Jembrana regency, western Bali (see map); further located by the Indonesian avian influenza website Komnas FBPI as Tukad village (Dangin Tukad Aya). Investigations into the woman's source of infection indicated exposure to sick and dead poultry. The woman's 5-year-old daughter had earlier become sick with a respiratory illness on 26 August and died on 3 August without suspicion of H5N1 avian influenza infection.

The second case was a 17-year-old girl from Tangerang District, Banten Province (see map), who developed symptoms on 9 August and died on 14 August. The source of infection is reported by WHO to be under investigation.

Vietnam CIDRAP, 08/08/07. CIDRAP have reported the death due to H5N1 avian influenza of a 15-year-old boy in Vietnam on 3 August. The boy was from the northern Thanh Hoa province and had had contact with ducklings at the local market. This case has not been reported by WHO so does not appear in the surveillance table opposite.

Avian outbreaks:

- **Vietnam** CIDRAP, 15/08/07. News sources report that Vietnam's Agriculture Ministry has announced a new poultry outbreak in the province of Cao Bang, near the Chinese border, involving 89 chickens and ducks**.** This outbreak has not yet been reported by OIE.
- **France** CIDRAP, 15/08/07. CIDRAP also reports an outbreak in the Moselle region in the eastern part of France where four dead wild ducks found on 8 August have tested positive for avian influenza.

Background

Potential protection from live attenuated intranasal influenza vaccine Piedra PA et al. Pediatrics; doi:10.1542/peds.2006-2836. Published online 13/08/07. Article reporting results of research into the efficacy of a live attenuated intranasal influenza vaccine among children during an H3N2 influenza outbreak. The authors report that live attenuate vaccine provided significant protection against influenza-like illness (37.3%) and pneumonia and influenza events (50%). Administration of a comparison trivalent inactivated vaccine did not provide protection.

Preparing to care for children in severe influenza pandemics Giacomet V et al. Eurosurveillance Monthly Release 2007 July/Aug. This article reports results of a survey of paediatric hospital units in Italy. The authors suggest that few would be appropriately prepared to face severe influenza pandemics. Those conducting the survey suggest that children would be particularly vulnerable during an influenza pandemic and specific measures are needed to face the threat to them effectively. The authors recommend structural improvement of paediatric units and the use of specific procedures to effectively care for children hospitalised because of contagious diseases.

Current global avian influenza activity

Confirmed human cases of avian influenza A/(H5N1), 26 July – 16 August 2007,[1] and outbreaks of highly-pathogenic avian influenza H5N1 in poultry 3 – 6 August 2007,[2] by country. The complete list of human cases and poultry outbreaks to date can be found on the ARPHS website.

	Human[1]		Poultry[2]
	cases	deaths	outbreaks
Indonesia	2	2	-
TOTAL	**2**	**2**	**-**

Notes:
1 As reported by World Health Organization
2 As reported by the World Organisation for Animal Health (OIE).

Background (contd)

Clinical management of human infection with avian influenza A (H5N1) virus WHO, 15/08/07. WHO has released guidelines for the clinical management of sporadic human avian influenza, replacing the earlier Interim Guidelines published in March 2004. Summary points are as follows:

- Oseltamivir remains the primary recommended antiviral treatment. Observational data suggest oseltamivir treatment in the early stages of disease is useful in reducing mortality. Furthermore, evidence that A(H5N1) virus continues to replicate for a prolonged period indicates that treatment with oseltamivir is also warranted when the patient presents to clinical care at a later stage of illness.
- Modified regimens of oseltamivir treatment, including two-fold higher dosage, longer duration and possibly combination therapy with amantadine or rimantadine (in countries where A(H5N1) viruses are likely to be susceptible to adamantanes) may be considered on a case by case basis, especially in patients with pneumonia or progressive disease. Ideally this should be done in the context of prospective data collection.
- Corticosteroids should not be used routinely, but may be considered for septic shock with suspected adrenal insufficiency requiring vasopressors. Prolonged or high dose corticosteroids can result in serious adverse events in A(H5N1)-infected patients.
- Antibiotic chemoprophylaxis should not be used. However, when pneumonia is present, antibiotic treatment is appropriate initially for community-acquired pneumonia according to published evidence-based guidelines. When available, the results of microbiologic studies should be used to guide antibiotic usage for suspected bacterial co-infection in patients with A(H5N1) virus infection.
- Monitoring of oxygen saturation should be performed whenever possible at presentation and routinely during subsequent care (e.g. pulse oximetry, arterial blood gases), and supplemental oxygen should be provided to correct hypoxemia.
- Therapy for A(H5N1) virus-associated ARDS should be based upon published evidence-based guidelines for sepsis-associated ARDS, specifically including lung protective mechanical ventilation strategies.

Virtual game worlds may shed light on real world epidemics Lofgren ET, Feffermann NH. Lancet Infect Dis 2007; 7:625-629. The authors of this opinion piece discuss the opportunities raised by a recent epidemic-like event in an online gaming world (*World of Warcraft*) in assisting applied simulation modelling in infectious disease research.

Ministry of Health advice line: **0800 AVN FLU (286 358)** MAF Hotline (for suspect animal cases): **0800 809 966**