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: 31
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International situation

Egypt WHO, 22/01/07. WHO have reported a confirmed case of H5N1 avian influenza in Egypt. The case was a 27-year-old woman from Bani Suwayf Governorate (see map), who became unwell on 9 January and died 19 January. Investigations have indicated that sick and dead poultry were present at the woman's residence in the days prior to her illness.

Indonesia WHO, 29/01/07; WHO, 22/01/07; WHO, 15/01/07. Since the last Pandemic Postings, WHO has reported four confirmed cases of H5N1 avian influenza in Indonesia. The cases are a 22-year-old woman from Tangerang City, Banten Province; the 18-year-old son of a previously reported case, also from Tangerang City; a 32-year-old woman from West Java province; and a 6-year-old girl from Magelang District in Central Java province (see map). All cases died due to their illness, and all had a history of exposure to sick or dead poultry.

Hungary CIDRAP, 24/01/07. CIDRAP report that Hungary has announced an H5N1 avian influenza outbreak on a goose farm in Csongrad County in the southeastern part of the country. This is the first appearance of H5N1 in Europe this winter in the Northern Hemisphere. A surveillance zone has been set up around the farm, which is in an isolated location.

Japan OIE, 26/01/07. Two outbreaks of avian influenza in poultry farms in Miyazaki prefecture, southwestern Japan (map), have been confirmed due to H5N1.

South Korea OIE, 21/01/07. A further poultry outbreak of H5N1 avian influenza has been confirmed in the Chungcheongnam-do Province of South Korea (map). The outbreak was in a chicken egg-laying farm.

Thailand OIE, 24/01/07; OIE, 25/01/07. Two outbreaks of H5N1 avian influenza in poultry have been reported by Thailand. The outbreaks are in the provinces of Nong Khai (a chicken egg-laying farm) and Phitsanulok (a duck egg-laying farm), both in northern Thailand (see map). CIDRAP have reported (courtesy of other news sites) that multiple people with flulike symptoms after contact with dead poultry are being monitored, although none have been confirmed with H5N1 infection.

Vietnam OIE, 19/01/07. 19 further poultry outbreaks of H5N1 avian influenza have been reported to OIE by Vietnam. All have occurred in the Mekong Delta provinces of Soc Trang, Kien Giang, Ca Mau and Bac Lieu, at the southern tip of the country (see map). CIDRAP report that health officials are blaming local animal-health officials and farmers for not maintaining poultry vaccination programs and farmers for hatching poultry illegally.

Other regions (CIDRAP, 25/01/07) CIDRAP have reported that health officials in Nigeria are investigating two suspected human H5N1 cases from Lagos on the country's southwest border. Both cases, a mother and daughter, died within 2 weeks of eating chicken bought from a live-chicken market during the holidays. WHO is aware of the cases and is awaiting test results.

Background

Bird flu in Asia: coming home to roost? Economist, 25/01/07. Article in the Economist summarising the recent H5N1 outbreaks in Asia; contains graphic showing affected areas.

Current global avian influenza activity

Confirmed human cases of avian influenza A/(H5N1), 13 – 29 Jan 2007,[1] and outbreaks of highly-pathogenic avian influenza H5N1 in poultry, 13 – 26 Jan 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
Egypt	1	1	-
Hungary	-	-	1
Indonesia	4	4	-
Japan	-	-	2
Korea (South)	-	-	1
Thailand	-	-	2
Vietnam	-	-	19
TOTAL	5	5	25

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

Background (contd)

"Moderately" oseltamivir-resistant H5N1 strain in Egypt WHO, 18/01/07. Virus isolated from two human avian influenza H5N1cases, identified in Egypt in December (reported in Pandemic Postings #30), has been found to have a genetic mutation previously linked with "moderately reduced susceptibility" to oseltamivir (Tamiflu). The two cases were a niece and uncle who lived in the same house in Al Gharbiyah Governorate (map). The WHO report that there is no indication that oseltamivir resistance is widespread in Egpyt or elsewhere; WHO has not made any changes to antiviral treatment recommendations. The mutation was previously identified in Vietnam in one case in 2005, and is not associated with any changes in transmissibility of the virus between humans.

No evidence of H5N1 in returning travellers to US Ortiz JR, et al. Emerg Infect Dis [serial on the Internet]. 2007 Feb [cited 30/01/07]. Brief report of study examining data on 59 patients reported to CDC for suspicion of H5N1 infection, Feb 2003 – May 2006. Fourteen (24%) had severe, acute respiratory illness with recent travel to H5N1-affected country. Overall, 25 (42%) tested positive for influenza A virus, but all with strains concurrently circulating in North America. The authors report that the H5N1 risk to US travellers has been extremely low to date.

Modelling worldwide spread of pandemic influenza Collizza et al, PLoS Med 2007; 4(1): e13. Study incorporating air travel in a mathematical model of pandemic influenza spread. The authors found that antiviral drugs would mitigate pandemics of virus with R_0 up to 1.9 if every country had a stockpile sufficient to treat 5% of its population; worldwide sharing of antivirals would slow down a R_0=1.9 virus by more than a year and would benefit both drug donors and recipients.

Antiviral resistance and pandemic influenza control Lipsitch et al, PLoS Med 2007; 4(1): e15. Study modelling effect of oseltamivir-resistance on pandemic spread. Based on their study, the authors suggest that widespread use of antivirals could quickly lead to the spread of resistant viruses; that even with resistant strains circulating, oseltamivir prophylaxis and treatment would still delay the spread of the pandemic and reduce its total size; and that nondrug interventions (such as social distancing) would further reduce the number of cases, but a higher proportion of cases would be caused by resistant strains if these control measures were used.