

Auckland Regional Public Health Service

Rātonga Hauora ā Iwi o Tamaki Makaurau



Working with the people of Auckland, Counties Manukau and Waitemata

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International situation

Indonesia [WHO, 02/10/07](#); [WHO, 08/10/07](#); [WHO 12/10/07](#).

Three further fatal cases of human infection of H5N1 avian influenza have been confirmed in Indonesia. The first reported was a 21-year-old male from Jakarta Province (see [map](#)) who developed symptoms on 18 September and died on 28 September. Investigation found that the man was an egg seller in a traditional market. All of his contacts remain healthy.

The second case was a 44-year-old woman from Sumatra's Riau province (see [map](#)) who became ill on 27 September, was hospitalised on 2 October and died on 6 October. According to an Indonesian Health Ministry official quoted by [CIDRAP \(08/10/07\)](#), epidemiologic investigation was still continuing as it was unclear how the woman contracted the disease, however she had often visited marketplaces and might have had contact with poultry there. Her contacts are being monitored and remain healthy.

The third case was a 12-year-old boy from the western Tangerang suburb of Jakarta (see [map](#)) who became ill on 30 September 30, was hospitalized on 8 October, and died suddenly on 13 October. Investigators found that he had had contact with a dead infected chicken near his school in the days before his illness.

Of the 109 cases confirmed to date in Indonesia, 89 have been fatal (the WHO surveillance table, and hence the figures presented opposite, has not yet been updated to include the most recent fatality).

Poultry outbreaks

Vietnam [OIE, 11/10/07](#). An outbreak of H5N1 avian influenza has been reported in Vietnam after a 2 month interval since the last outbreak in the country. The outbreak dates from 11 October 2007, and was in the southern coastal Travinh province (see [map](#)). The outbreak involved a farm where unvaccinated ducks had gathered from various places, with 300 susceptible birds.

Background

Treatment with convalescent plasma for influenza A(H5N1) infection [Zhou B, Zhong N, Guan Y. N Engl J Med 2007; 357: 1450-1](#). The authors of this letter report the outcomes following treatment of a 31-year-old patient with H5N1 infection in Shenzhen, China, with transfusions of convalescent plasma from a patient who had recovered from H5N1 infection. Three 200ml transfusions were given; after the first transfusion, the patient's viral load was reduced by a factor of approximately 12 (from 1.68×10^5 to 1.42×10^4 copies per mL) during the first 8 hours and was undetectable within 32 hours. The patient recovered and was discharged from hospital 8 weeks following treatment.

Role of terrestrial wild birds in ecology of influenza A H5N1 virus [Boon ACM et al. Emerg Infect Dis 2007; Nov \[Epub ahead of print\]](#). Paper reporting results of study in which sparrows, starlings and pigeons were inoculated with influenza A (H5N1) viruses and monitored for outcomes and transmission. Sparrows were susceptible to severe infection, with 66-100% of birds died within 4-7 days; no deaths occurred among starlings or pigeons. Intraspecies transmission was very uncommon.

Pandemic Postings

Current global avian influenza activity

Confirmed human cases of avian influenza A/(H5N1), 11 September - 12 October 2007¹, and outbreaks of highly-pathogenic avian influenza H5N1 in poultry 16 September - 11 October 2007. 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	3	2	-
Vietnam	-	-	1
TOTAL	3	2	1

Notes:

1 As reported by [World Health Organization](#)

2 As reported by the [World Organisation for Animal Health \(OIE\)](#).

Background (contd)

H5N1 infection beyond the respiratory tract, including transplacental spread [Gu J et al. Lancet Infect Dis 2007; 370:1137-45](#). This paper reports the results of a study of post mortem tissue samples from two adults who died with influenza A(H5N1) infection, including the fetus carried by one of the adults. Viral genomic sequences and antigens were identified in lung and tracheal epithelial cells, lymph node T cells, neurons of the brain, and Hofbauer cells and cytotrophoblasts of the placenta. Viral genomic sequences (but no viral antigens) were detected in intestinal mucosa. In the fetus, the investigators found viral sequences and antigens in the lungs, circulating mononuclear cells, and macrophages of the liver.

Impact of SARS on avian influenza preparedness in healthcare workers [Tam DKP, Lee S, Lee SS. Infection 2007; 5: 320-5](#). This paper reports the results of a study in which Hong Kong hospital nurses were questioned on their attitudes toward avian influenza; results were analysed in the context of the nurses' previous level of exposure to SARS patients during the 2003 epidemic. Of the 909 respondents, 73% accepted a personal risk of infection in the course of their work and 84% were prepared to take care of patients infected with avian influenza. Nurses with high exposure to SARS in 2003 were less likely to avoid patients, less inclined to change their job if they were required to take care of infected patients, and had therefore a more positive attitude towards an impending avian influenza epidemic.

Preparedness for highly pathogenic avian influenza in Africa. [Breiman RF, et al. Emerg Infect Dis 2007; Oct \[cited 17/10/07\]](#). Perspectives article that reviews current avian influenza situation in Africa, examines possible implications and recommends control strategies.

Hospital infection control for avian influenza in developing countries [Apisarnthanarak A, Warren DK, Fraser VF. Clin Infect Dis 2007; 45 \[Epub ahead of print\]](#). The authors of this opinion piece recommend that pandemic influenza preparedness plans for hospital infection control in developing countries include health care administrative support, mechanisms to rapidly create temporary isolation facilities, systems to restrict access to exposed health care workers, and plans to involve specialists to screen and identify cases early, to provide for continuous monitoring to ensure adherence to optimal infection-control practices, and to provide regular feedback to health care workers.

Ministry of Health advice line: 0800 AVN FLU (286 358)

MAF Hotline (for suspect animal cases): 0800 809 966

Disclaimer: Background material is listed in Pandemic Postings to alert recipients to new publications on highly-pathogenic avian and pandemic influenza topics. While efforts are made to maintain quality by only including material from reputable sources, it is beyond the scope of this bulletin to independently establish the veracity of this material, or to place the material within the local pandemic planning context: such assessments are left to the judgement of the readership. Conclusions made by authors of material cited in this bulletin do not necessarily represent policy or opinions of Auckland Regional Public Health Service, of Waitemata, Auckland or Counties Manukau DHBs, or of the Ministry of Health.