

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, 11/07/07](#). The Ministry of Health in Indonesia has announced a new human case of influenza A(H5N1) virus infection. A 6-year-old girl from Banten Province (see [map](#)) developed symptoms 23 June and died 8 July. The source of exposure is considered likely to have been an outbreak in chickens near the school that the girl attended.

Egypt [CIDRAP, 23/07/07](#). CIDRAP report that WHO has stated tests on a 25-year-old woman from Damietta province were positive for H5N1 avian influenza. The patient became unwell 20 July following contact with dead household poultry, however is in good condition following oseltamivir treatment. This case has not yet been formally reported by WHO, so has not been included in the surveillance table opposite.

Poultry outbreaks:

- Bangladesh** [OIE, 08/07/07](#). Five poultry outbreaks of H5N1 avian influenza have been reported from Bangladesh. The outbreaks date from between 4 - 21 May 2007; 4 were in Rajshahi province and 1 in Dhaka province (see [map](#)). The four Rajshahi outbreaks have all involved backyard poultry farms (ranging in size from 458 to 3840 susceptible birds); the Dhaka outbreak involved a commercial layer farm with 5855 susceptible birds.
- Czech Republic** [OIE](#) reports on the two new Czech Republic outbreaks of H5N1 in poultry are not available. However, a report in the Australian [Herald Sun \(12/07/07\)](#) newspaper suggests that the two outbreaks were in a chicken farm and a turkey farm, totalling 70,000 birds, within the 3km exclusion zone around the previous outbreaks at the end of June (in Norin, Pardubický province (see [map](#))).
- Germany** [OIE, 07/07/07](#). A poultry outbreak of H5N1 has been reported from the Saalfeld-Rudolstadt district in Thuringia state in Germany (see [map](#)). The outbreak dates from 6 June 2007, and has involved a farm with geese and ducks, with 10 susceptible birds in total.
- Viet Nam** [OIE, 05/07/07](#). The epizootic of H5N1 among poultry in Viet Nam continues, with 9 new outbreaks reported dating from between 6 - 26 June 2007. 6 of these outbreaks are in Northern area (Mien Bac) provinces and 3 in provinces in the northern half of the Central area (Mien Trung), see [map](#). The outbreaks involved farms ranging in size from 152 to 2500 susceptible birds.

Background

Handling mass death by integrating the management of disasters and pandemics [Scanlon J et al, J Contingency Crisis Manage 2007;15:80-94](#). The authors of this paper suggest that while there are significant differences between mass deaths due to disasters and mass deaths from pandemics, there are also similarities. Despite the similarities, planning for the first tends to be done by emergency agencies, particularly the police; planning for the second tends to be by health agencies. The authors of this paper suggest that it would make sense to take an all-hazards approach to planning for dealing with mass death. [edited from abstract only: full paper not reviewed]

Pandemic Postings

Current global avian influenza activity
Confirmed human cases of avian influenza A/(H5N1), 30 June - 23 July 2007,¹ and outbreaks of highly-pathogenic avian influenza H5N1 in poultry, 6 - 16 July 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	1	1	-
Bangladesh	-	-	5
Czech Republic	-	-	2
Germany	-	-	1
Viet Nam	-	-	9
TOTAL	-	-	18

Notes:

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

Background (contd)

Precautionary behaviour in response to perceived threat of pandemic influenza [Sadique MZ et al, Emerg Infect Dis. 2007 Sep; \[Epub ahead of print\]](#). Report of a population-based survey of precautionary actions in response to a hypothetical influenza pandemic. The survey was undertaken in 3 Asian regions that had been affected by SARS, and 5 European countries in which no SARS cases had occurred. The study had 3436 participants in total, and regional response rates ranged from 21% to 81%. The authors report that the pattern of reported precautionary action was broadly similar across the regions; ~75% of respondents reported that they would avoid public transportation and 20%-30% would try to stay indoors. Europeans were more likely than Asians to avoid places of entertainment, and Asians were more likely to avoid seeing physicians.

Study suggests cytokine inhibition does not protect against death from H5N1 avian influenza [Salomon et al, Proc Natl Acad Sci USA 2007; \[Epub ahead of print\]](#). Proinflammatory cytokines are markedly elevated during H5N1 influenza virus infection, leading some to suggest a "cytokine storm" is responsible for the main cause of mortality. This paper reports a study in which whether inhibition of the cytokine response is sufficient to protect against death caused by H5N1 virus in mice. The authors report that mice deficient in the hallmark inflammatory cytokines or treated with glucocorticoids to suppress cytokines succumbed to infection with A/Vietnam/1203/04 (H5N1) virus. Because cytokine inhibition did not protect against death in this study, the authors suggest therapies that target the virus rather than cytokines may be preferable.

Note that other scientists (quoted in [CIDRAP 16/07/07](#)) have questioned the conclusions of the study, citing the different pathological cause of death from H5N1 infection in mice than in humans (neuroinvasion rather than respiratory pathology), and the limitation of the study to only a small part of the potential wide cytokine response.

Options for avian influenza H5N1 control in Nigeria. [Fasina FO et al, Zoonoses Public Health 2007; 54:173-176](#). Highly pathogenic avian influenza was first recorded in Nigeria in January 2006. The authors of this paper report a cost benefit analysis of vaccination-based control policy added to other measures to restrict HPAI H5N1 virus infections, and suggest that halting the continued spread of the virus through effective control measure would be 52 times better than taking no action. [edited from abstract only: full paper not reviewed]

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.