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)
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National

Ministry of Health sector update #8 MoH, 29/05/06. The most recent MoH bulletin is available online. The bulletin contains updates from the various workstreams: border management, health and disability capability and info-communications.

Pandemic planning information for businesses from the Department of Labour DoL, Jun 06. The Department of Labour has developed practical information for businesses planning for a pandemic. This information ranges from illustrations that visually summarise what a business can do to prepare, to practical scenarios that highlight specific examples that businesses can adopt to minimise the affect of a pandemic on their business

National laboratory guidelines for pandemic influenza MoH, Jun 06. The Ministry of Health and members of the New Zealand Virology Laboratory Network have compiled laboratory guidelines for pandemic influenza. They are intended for use by health professionals and laboratory staff to ensure safe handling and collection of human specimens for diagnosis of influenza with pandemic potential. During a global influenza pandemic alert, and in concert with New Zealand's pandemic response strategy, all health care providers should be alert for patients with respiratory illness that could be pandemic influenza. For all suspected patients, samples for virus detection should be collected. The National Laboratory Guidelines for Pandemic Influenza advise what specimens are preferred and what test should be performed at the different stages of a pandemic.

Arabic, Cook Island and Samoan translations of pandemic information brochures available MoH, Jun 06. Translated versions of the Getting Ready for a Flu Pandemic brochure and Stop the Spread of Flu Germs poster are now available in Arabic, Cook Island and Samoan.

International

Situation in China WHO, 16/06/06. The Ministry of Health in China has confirmed the country's 19th case of human infection with the H5N1 avian influenza virus, in a 31-year-old man employed as a truck driver in Shenzhen City, Guangdong Province, near the border with Hong Kong. He developed symptoms on 3 June and was hospitalized on 9 June. He remains hospitalized, in critical condition, with severe pneumonia. Investigation of his source of infection is under way. No nearby poultry H5N1 infections have been officially reported.

Situation in Indonesia WHO, 15/06/06. The Ministry of Health in Indonesia has confirmed the country's 50th case of human infection with the H5N1 avian influenza virus. The case, which was fatal, occurred in a 7-year-old girl from Tangerang district, Banten Province. She developed symptoms on 26 May, was hospitalized on 30 May, and died on 1 June. Her 10-year-old brother died of respiratory disease on 29 May, but no specimens were taken for testing and the cause of his death cannot be determined. A history of chicken deaths in the area had occurred prior to symptom onset. Tests of family members of close contacts have not identified further cases. The WHO also notes (WHO, 06/06/06) that the H5N1 virus is considered firmly entrenched in poultry throughout much of Indonesia. Unless this situation is urgently and comprehensively addressed, sporadic human cases will continue to occur.

Current global avian influenza activity

Newly-confirmed human cases of avian influenza A/(H5N1), 30 May – 16 Jun 2006,[1] and outbreaks of highly-pathogenic avian influenza H5N1 in poultry, 1 Jun – 7 Jun 2006,[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
China	1	-	-
India	-	-	5
Indonesia	1	1	-
Niger	-	-	1
Romania	-	-	57
TOTAL	2	1	64

Notes:
1 As reported to World Health Organization
2 As reported to World Organisation for Animal Health (OIE)

Background

New evidence of cytokine storm in avian influenza cases J Infect Dis 2006;194:61-70 (Zhou et al). Researchers have compared the chemokine responses between adult and neonatal monocyte-derived macrophages (MDMs) infected with different influenza viruses: a 1997 strain of the H5N1 avian influenza virus the 1997 precursor H9N2, and human influenza virus H1N1. According to the authors, the chemokines and chemokine-receptor responses of MDMs to avian influenza viruses were much stronger than those to human virus, which may account for the high pathogenicity of avian viruses. In addition, the H5N1 strain caused immune cells from adults to produce higher levels of certain cytokines than similar cells from newborn babies did, which, the authors say, may help explain why Hong Kong's human H5N1 outbreak in 1997 killed 5 of 9 infected adults (older than 12) but only 1 of 9 infected children. That sharp difference in adult and child mortality rates has not been seen in the current wave of H5N1 cases dating to late 2003.

Scientists have suggested that intense cytokine release (the so-called 'cytokine storm') played a role in the high death rate in the 1918 Spanish flu pandemic and is playing a similar role in human cases of H5N1 infection today, where autopsies of H5N1 avian flu victims in Vietnam and elsewhere have revealed lungs choked with debris from excessive inflammation triggered by the virus. Similar severe lung damage was frequently reported in victims of the 1918 pandemic, which disproportionately killed people with the strongest immune systems—young, healthy adults. (Additional material from CIDRAP, 14/06/06).

Delay in reporting avian influenza emergence in Denmark Eurosurveillance 2006;11(6):E060615.3 (Mølbak et al). An account of the public health response to the outbreak of H5N1 avian influenza in poultry in Denmark mentions that a two-week delay occurred between the onset of the outbreak and the date of report to a district veterinary officer. During this interval, visitors to the affected farm had been exposed to sick poultry.

Updated CDC guidance for laboratory testing of persons with suspected avian influenza CDC, 07/06/06. The US Centers for Disease Control have updated their guidance for laboratory testing for avian influenza in humans.