

Pandemic Postings

Current Alert Level: **WHITE (definition)**
 Update number: 49
 Date: 14 November 2007
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International situation

Indonesia [WHO 25/10/07](#), [WHO 31/10/07](#), [WHO 05/11/07](#), [WHO 12/11/07](#). Four further cases of human infection with H5N1 avian influenza have been confirmed in Indonesia; three of these were fatal and the remaining patient has fully recovered. Three cases were from Banten Province (see [map](#)): a 5-year-old female who developed symptoms and died 22 October; a 3-year-old male who became ill 14 October and has since recovered; and a 30-year-old woman from Tangerang who became ill on 23 October and died on 3 November. Poultry deaths had occurred in the neighbourhoods of all three cases. The first two cases occurred in the same district but were not linked.

The fourth case was a 31 year old man from Riau province on Sumatra (see [map](#)) who became ill on the 31 October and died on 6 November. The investigation of the source of infection is ongoing and includes investigation of a large swallow farm near the case's home. WHO have also reported the death of a 12-year-old boy from Tangerang: the boy's illness was reported in the last Pandemic Postings.

Poultry outbreaks

Vietnam [OIE, 12/11/07](#). Nine outbreaks of H5N1 avian influenza in poultry have been reported in Vietnam. Two outbreaks occurred in Quang Tri province (see [map](#)), commencing on 23 October (600 susceptible birds) and 2 November (2673 birds). Three outbreaks occurred in Cao Bang province between 25 and 27 October (ranging in size from 300 to 2100 birds). Outbreaks also occurred in Nam Dinh province (30 October, 400 ducks); Tra Binh province (30 October, 60 ducks); Ben Tre province (60 ducks); and Ha Nam province (5 November, 700 ducks).

Myanmar [OIE, 24/10/07](#). One outbreak of H5N1 avian influenza was reported in Myanmar in Bago province (see [map](#)) involving 33859 susceptible birds.

Background

Exercise Cruickshank report available [MoH, 10/07](#). The Ministry of Health has released a report detailing findings and recommendations based on an evaluation of Exercise Cruickshank, May 2007. Groups of recommendations are provided on reporting, public and stakeholder information management, roles and responsibilities, legislation, support for people at home, critical infrastructure and supplies, border management, education, public health interventions, CBACs and recovery.

Public health measures in an influenza pandemic [ECDC, 11/07](#). The European Centers for Disease Control (ECDC) has released a document that outlines measures recommended in order to decrease the impact of pandemic influenza, with consideration given to the controversy about implementation in the context of uncertainty about effectiveness in the face of very real costs and secondary consequences. This consultation document (introduced in a [Eurosurveillance](#) article) addresses 27 different measures, ranging from travel measures to vaccination strategies, and for each attempts to consider the objectives and rationale, evidence for effectiveness, direct costs, secondary effects, likely acceptability (in Europe), practicalities and experience.

Current global avian influenza activity
 Confirmed human cases of avian influenza A/(H5N1), 13 October- 12 November 2007¹, and outbreaks of highly-pathogenic avian influenza H5N1 in poultry 12 October - 12 November 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	4	4	
Myanmar	-	-	1
Vietnam	-	-	9
Total	4	4	10

Notes:

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

Background (contd)

Surveillance in a pandemic - ECDC working paper [ECDC, 11/07](#). A further technical paper has been released by ECDC that looks at the issues around epidemiological and virological surveillance in a pandemic. While Europe-focused, the paper provides a general list of pandemic surveillance objectives, their rationale and possible tools for information gathering.

Avian influenza H5N1 in Africa [Fasina F, et al. Lancet Infect Dis 2007; 7:696-697](#). This brief reflection and reaction article highlights the difficulties of trying to control avian influenza in Africa. When H5N1 hit the African continent in 2006 it was not well contained. The reasons for this included delayed official decisions, inexperience, lack of prompt intervention preparedness, corruption and hesitation by farmers to report outbreaks. Other issues faced in Africa, highlighted in the article, include poor human and animal disease surveillance, poor management of cross border movement and a health care system already overtaxed by AIDS, tuberculosis and malaria.

"Pandemic vaccine puzzle" series [CIDRAP, 10/07](#). A 7-part series is available on the CIDRAP website outlining the prospects for development of vaccines for an influenza pandemic posed by the H5N1 avian influenza virus. The series puts advances in vaccine technology in perspective by illuminating the formidable barriers to producing an effective and widely usable vaccine in a short time frame. The topics covered include the history of influenza vaccine research, vaccine production capacity, immunological challenges posed by H5N1, adjuvants, the role of pre-pandemic vaccination, and novel vaccine technologies.

Diagnosis of H5N1 avian influenza infections in humans [The Global Influenza Programme. Influenza Other Respir Viruses 2007;1:131-138](#). This article reports on the first WHO Consultation on Diagnosis of H5N1 Avian Influenza Infections in Humans. The consultation addressed the 'state of the art' for H5N1 diagnostics in humans, considerations and gaps related to H5N1 diagnostic capacity, collaborative ways forward and the roles of WHO, private industry and other stakeholders. The article summarises the discussions and recommendations generally agreed by the consultation participants.

Transmission of H5N1 in poultry flocks in Thailand, 2004 [Tiensin, T et al. J Infect Dis 2007;196 \(15 December\): Epub ahead of print](#). This article reports on a study using flock-level mortality data to estimate the transmission-rate and basic reproductive number during the 2004 H5N1 epizootic in poultry in Thailand. The authors suggest that for virus elimination 80% of the susceptible poultry in a flock need to be vaccinated.