

Pandemic Postings

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Details of recently-reported poultry outbreaks of H5N1 avian influenza

Bangladesh OIE, 20/11/08. Retrospective report. Noagaon district, Rajshahi province (see [map](#)), 24-29/09/08. Outbreak affected 760 birds in a 1100-bird commercial poultry farm.

India OIE, 28/11/08. Kamrup district, Assam state (see [map](#)); start date 21/11/08. Outbreak affected 324 birds in a 391-bird backyard poultry population.

Laos OIE, 10/11/08. Retrospective report. Outbreak #1: Nambak district, Luangprabang province (see [map](#)); 27/08/08. Outbreak affected 247 birds in a 5477-bird backyard poultry population. Outbreak #2: Xay district, Oudomxay province; 01/09/08. Outbreak affected 23 birds in a 1170-bird flock linked to outbreak #1. Outbreak #3: Xayabury district, Xayabury province; 27/10/08. Outbreak affected 11 birds in a 155-bird backyard poultry population.

Thailand OIE, 17/11/08. Outbreak #1: TongSaLeam district, Sukhothai province (see [map](#)); 27/10/08. Outbreak affected 5 birds in a 17-bird flock of native chickens. Outbreak #2: NongChang district, Uthai Thani province; 10/11/08. Outbreak affected 5 birds in a 7-bird flock of native chickens.

Vietnam OIE, 27/11/08. Retrospective report. Outbreak #1: Quynh Luu, Nghe An province (see [map](#)); 24/09/08. Outbreak affected 350 birds in a 960-bird flock of unvaccinated ducks. Outbreak #2: Dien Chau district, Nghe An province; 30/10/08. Outbreak affected 1400 birds in a 1423-bird flock of ducks.

Background

Personal protective equipment in an influenza pandemic: a UK simulation exercise [Phin NF et al. J Hosp Infect 2008 \[Epub ahead of print\]; doi:10.1016/j.jhin.2008.09.005](#). The authors of this paper report the results of a 24h exercise in which all staff on an acute general medical ward wore PPE and adopted the procedures described in the UK pandemic influenza infection control guidance. More gloves and surgical masks were used than expected; many staff lacked confidence in using PPE and following infection control measures despite training; staff found PPE uncomfortable, with even basic tasks taking longer than usual; an additional 570L of clinical waste were generated per day. The authors conclude that healthcare in a pandemic situation is not simply a case of applying pandemic influenza infection control guidance to current practice; hospitals need to consider changing the way care and services are delivered.

Human infection with highly pathogenic avian influenza virus (H5N1) in northern Vietnam, 2004-2005 [Hien ND et al. Emerg Infect Dis. 2009 Jan; \[Epub ahead of print\]](#). The authors of this paper report the results of a case-series of 29 patients with influenza A (H5N1) admitted in Hanoi, Jan 2004 - Jul 2005. Mean age of patients was 35.1 years, 7 (24.1%) had died. Mortality rates were 20% (5/25) and 50% (2/4) among patients treated with or without oseltamivir (p = 0.24), respectively, and were 33.3% (5/15) and 14.2% (2/14) among patients treated with and without methylprednisolone (p = 0.39), respectively. After exact logistic regression analysis was adjusted for variation in severity, no significant effectiveness for survival was observed among patients treated with oseltamivir or methylprednisolone.

Current global avian influenza activity
 Outbreaks of highly-pathogenic avian influenza H5N1 in poultry reported 16 October - 1 December 2008.² No cases of human infection with avian influenza H5N1 have been reported² since 10 September 2008. 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
Bangladesh	-	-	1
India	-	-	1
Laos	-	-	3
Thailand	-	-	2
Vietnam	-	-	2
Total	-	-	9

Notes:

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

Background (contd)

Emerging infections: a perpetual challenge [Morens DM et al. Lancet Infect Dis 2008; 8\(11\): 710-9. doi:10.1016/S1473-3099\(08\)70256-1](#). Article abstract: "Emerging and re-emerging infectious diseases, and their determinants, have recently attracted substantial scientific and popular attention. HIV/AIDS, severe acute respiratory syndrome, H5N1 avian influenza, and many other emerging diseases have either proved fatal or caused international alarm. Common and interactive co-determinants of disease emergence, including population growth, travel, and environmental disruption, have been increasingly documented and studied. Are emerging infections a new phenomenon related to modern life, or do more basic determinants, transcending time, place, and human progress, govern disease generation? By examining a number of historically notable epidemics, we suggest that emerging diseases, similar in their novelty, impact, and elicitation of control responses, have occurred throughout recorded history. Fundamental determinants, typically acting in concert, seem to underlie their emergence, and infections such as these are likely to continue to remain challenges to human survival."

Safety and Immunogenicity of a Pre-pandemic Influenza A (H5N1) Vaccine in Children [Vajo Z et al. Ped Infect Dis J 2008 \[Epub ahead of print, 26/11/08\]](#). The authors of this paper report the results of a clinical trial of an H5N1 vaccine in children. Twelve healthy children (mean age +/- SD: 12.73 +/- 2.77 years) received a single dose of 6 µg of the inactivated whole virus vaccine Fluval. Twenty-one days after vaccination, immunogenicity was assessed by hemagglutination inhibition and microneutralization assays. Safety information was collected for 180 days. No side-effects were observed, and the vaccine fulfilled all applicable U.S. and European immunogenicity criteria for licensure. The post/pre-vaccination geometric mean titre ratio was 16.95, the rate of seroconversion was 75% and the rate of seroprotection was also 75% 21 days after vaccination. The authors conclude that their trial showed that the vaccine showed encouraging safety and immunogenicity properties in children.