

# Pandemic Postings

**Current Alert Level:** [WHITE \(definition\)](#)  
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## International situation

**China** [WHO, 30/05/07](#); [WHO, 04/06/07](#). A new case of human infection with the H5N1 avian influenza virus has been reported in China by the WHO. The case, a 19-year old male soldier serving in Fujian province (see [map](#)), developed fever and pneumonia-like symptoms on 9 May, was hospitalized on 14 May and died 3 June. There is no initial indication to suggest he had contact with sick birds prior to becoming unwell. Close contacts have been placed under medical observation and remain well.

**Indonesia** [WHO, 31/05/07](#); [WHO, 06/05/07](#). Two further cases of human H5N1 avian influenza have been reported in Indonesia by WHO. The first was a 45-year-old male from Grobogan district, Central Java Province (*Provinsi Jawa Tengah*: see [map](#)) who developed symptoms on 17 May and died in hospital on 28 May. The second case was a 16-year-old female from Kendal district, also in Central Java province, who developed symptoms on 21 May and died in hospital on 29 May. Initial investigations into the source of infection for both cases indicate exposure to dead poultry.

### Poultry outbreaks:

- Ghana** [OIE, 02/06/07](#): Two poultry outbreaks of H5N1 avian influenza reported in Ghana, dating from 11 May and 20 May 2007. The outbreaks involved a mixed-poultry commercial layer farm comprising 575 birds in Brong-Ahafo region, and a farm with 8510 birds in Greater Accra region (see [map](#)).
- Myanmar** [OIE, 28/05/07](#). One poultry outbreak of H5N1 avian influenza reported in Myanmar, dating from 22 May 2007. The outbreak involved a layer farm of 866 birds in Yangon Division (see [map](#)).
- Vietnam** [OIE, 07/06/07](#). Twelve new poultry outbreaks of H5N1 avian influenza reported in Vietnam, dating from 14 May to 22 May 2007. The outbreaks were distributed across in 12 provinces, 10 of which were clustered in northern Vietnam (particularly the Red River Delta region), the remaining 2 in central Vietnam (see [map](#)). All the outbreaks were in poultry farms or among poultry in villages; susceptible populations ranged in size from 130 to 7460 birds.

## Background

**Indonesia suspects ominous H5N1 mutations** [CIDRAP, 06/06/07](#). Officials from Indonesia's avian flu commission have said that the H5N1 avian influenza virus may have mutated in a way that makes it more transmissible from birds to humans. A WHO official has said that the WHO has seen no evidence of such a change, however the WHO has received just three Indonesian H5N1 samples, gathered from two patients, this year.

**Paediatric infectious disease physicians' perceptions of pandemic influenza** [Curtis N, Pollard AJ. Arch Dis Child 2007; \[Epub ahead of print\]](#). Letter reporting results of a avian influenza risk perception survey at a Paediatric Infectious Diseases conference in Oxford. Of the 161 attendees, 45% believed that an influenza pandemic in the next few years was "almost inevitable" or "very likely", 45% thought a pandemic was only "possible" and 10% thought it was "unlikely" or "very unlikely".

**Current global avian influenza activity**  
 Confirmed human cases of avian influenza A/(H5N1), 25 May – 6 June 2007,<sup>1</sup> and outbreaks of highly-pathogenic avian influenza H5N1 in poultry, 26 May – 7 June 2007,<sup>2</sup> by country. The complete list of human cases and poultry outbreaks to date can be found on the [ARPHS website](#).

	Human <sup>1</sup>		Poultry <sup>2</sup>
	cases	deaths	outbreaks
China	1	1	-
Ghana	-	-	2
Indonesia	2	2	-
Myanmar	-	-	1
Vietnam	-	-	12
<b>TOTAL</b>	<b>3</b>	<b>3</b>	<b>15</b>

Notes:

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

## Background (contd)

**Prophylactic and therapeutic efficacy of human monoclonal antibodies against H5N1 influenza** [Simmons CP et al, PLoS Med 4\(5\): e178](#). Paper reporting findings of a study analysing therapeutic effect of purified H5N1-neutralising antibody in mice. The researchers isolated immune cells from Vietnamese H5N1 avian influenza survivors and then purified the antibody made by these cells. The authors report that, in mice, the antibodies provided protection from infection with the original virus when given a day before or one to three days after infection, by limiting viral replication, by lessening the deleterious effects of the virus in the lungs, and by stopping viral spread out of the lungs.

**Development of avian influenza A/H5N1 vaccines** [Cinatl J Jr et al, Med Microbiol Immunol. 2007 Jun 1; \[Epub ahead of print\]](#). Fourth in a series of review articles on avian influenza A/H5N1, this article reviews H5N1 vaccine development. The authors comment that several phase 1 clinical studies with H5 vaccines have demonstrated limited efficacy compared to seasonal influenza vaccines, and to induce protective immunity two immunisations with increased amounts of H5N1 vaccine were required [extracted from abstract only: full article not reviewed].

**Little evidence for genetic susceptibility to H5N1 avian influenza** [Pitzer VE et al, Emerg Infect Dis. 2007 Jul; \[Epub ahead of print\]](#). This article reports a modelling study exploring the apparent clustering of avian influenza H5N1 among blood relatives. The authors refute the notion that such clustering indicates genetic susceptibility, suggesting instead that by chance alone a high proportion of clusters would be expected to be limited to blood relatives when infection is a rare event.

**Human avian influenza A/H5N1 cases in urban areas of China** [Yu H et al, Emerg Infect Dis 2007 Jul; \[Epub ahead of print\]](#). Brief paper reporting findings from investigations of 6 confirmed human cases of avian influenza A/H5N1 in 6 cities in China. Only 1 case had direct contact with poultry, however all had visited wet poultry markets prior to disease onset. 640 persons were followed up for medical observation for 2 weeks: 136 close contacts, 389 healthcare workers and 115 workers at poultry markets visited by the cases. Of these, 5 developed febrile respiratory illness; all tested negative for H5N1 and recovered.