

Pandemic Postings

Current Alert Level: WHITE ([definition](#))
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National

Exercise Cruickshank coordinating instruction [MoH, 27/02/07](#). The second version of the Exercise Coordinating Instruction "to assist participating organisations and agencies with their planning for Exercise Cruickshank" has been released by the Ministry of Health.

Report on Exercise Makgill [MoH, 21/02/07](#). The Ministry of Health has released a report identifying 16 key findings from Exercise Makgill that relate to the Ministry of Health, District Health Boards, ESR, and other health sector participants. Findings with a 'high' risk rating were the following: need for clearer policies, procedures, protocols and guidance; need for improvements in communication systems; in some areas staff training was inadequate; staff training needs in the CIMS framework; training needs for facilitators and evaluators; pre-exercise communications need to be more comprehensive and amendments need to be communicated clearly.

International situation

China [WHO, 01/03/07](#). WHO has reported a confirmed case of H5N1 avian influenza in China. The case is a 44-year-old female from Jian'ou county, Fujian province, who became unwell 18 January and remains hospitalised. Information provided to WHO indicates she is a farmer who kept backyard poultry and was possibly exposed to sick birds.

Egypt [WHO, 15/02/07](#); [WHO, 19/02/07](#); [WHO, 01/03/07](#). Four further confirmed cases of H5N1 avian influenza in Egypt have been reported by WHO: one of these was described in the last Pandemic Postings but not included within the summary table until now. The three additional cases were from Al Fayyum (37-year-old female), Ash Sharqiyah (5-year-old boy) and Ad Daqahliyah (4-year-old girl) governorates (see [map](#)). All had a history of exposure to sick poultry.

Laos [WHO, 27/02/07](#). The first confirmed human case of H5N1 avian influenza in the Lao People's Democratic Republic has been reported by WHO. The case is a 15-year-old female from Vientiane who developed influenza-like symptoms on 10 February. Poultry deaths had occurred in the girl's village earlier.

Poultry outbreaks in other regions [OIE](#). Poultry outbreaks of H5N1 have been reported in multiple regions in Asia and Europe: in Afghanistan, Hungary, Korea, Kuwait, Laos, Myanmar, Pakistan, Russia, Turkey and Vietnam: see next page for further details.

Background

Effectiveness of interventions to reduce contact rates in an influenza pandemic [Haber, et al. Emerg Infect Dis \[serial on the Internet\]. 2007 Apr \[cited 06/03/07\]](#). Paper reporting results of modelling to explore effect of measures to increase personal distance in a pandemic. The authors report their results suggest school closures by themselves would not have a substantial effect on outcomes, however if symptomatic persons and their household contacts were encouraged to stay home, then rates of illness and death might be reduced by ~50%. By restricting contacts by ill long-term care facility residents, illness and deaths in this vulnerable population might be reduced by ~60%.

Current global avian influenza activity
 Confirmed human cases of avian influenza A/(H5N1), 04 Feb - 01 Mar 2007,¹ and outbreaks of highly-pathogenic avian influenza H5N1 in poultry, 10 Feb - 02 Mar 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
Afghanistan	-	-	2
China	1	-	-
Egypt	4	2	-
Hungary	-	-	1
Korea (South)	-	-	1
Kuwait	-	-	6
Laos	1	-	4
Myanmar	-	-	1
Pakistan	-	-	2
Russia	-	-	10
Turkey	-	-	16
Vietnam	-	-	1
TOTAL	6	2	44

Notes:

1 As reported by [World Health Organization](#)

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

Background (contd)

Influenza pandemic could choke the internet [Computerworld, 12/02/07](#). This news item suggests internet access may be compromised in an influenza pandemic, due to an expected surge in teleworking arrangements for business continuity, unless actions are taken to restrict high-bandwidth traffic.

Rationing of vaccine during an influenza pandemic [Zimmerman, Vaccine 2007; 11:2019-26](#). Paper presenting an ethical analysis of vaccine rationing during a pandemic. The author states that "utilitarian principles of choosing based on social worth or those in whom vaccination is most likely to medically succeed raise substantial justice issues. Egalitarian principles of medical neediness and random chance avoid justice concerns and are proposed."

Cross-reactive neuraminidase antibodies and H5N1 protection [Sandbulte, et al. PLoS Med 2007; 4\(2\): e59](#). This paper reports results of studies in mice vaccinated against the neuraminidase component of human H5N1 virus strain and then exposed to H5N1 virus. The authors report that cross-protective immune responses can be demonstrated, and "that immunisation with existing N1-containing seasonal influenza virus vaccine may have potential to provide partial protection against the current H5N1 avian virus."

Transmission of influenza A in humans [Brankston et al, Lancet Infect Dis \[online publication\] 20 Feb 07 \[cited 05/03/07\]](#). A forthcoming paper in Lancet Infectious Diseases reports a review of experimental and epidemiological English-language literature on influenza transmission. The authors conclude that, although existing data are limited, "transmission occurs at close range rather than over long distances, suggesting that airborne transmission, as traditionally defined, is unlikely to be of significance in most clinical settings." [abstract published online ahead-of-print; full text not available]

H5N1 viruses and vaccines [Subbarao & Luke. PLoS Pathog 2007; 3\(3\): e40](#). Paper summarising progress to date and forthcoming challenges in human H5N1 vaccine development.

Details of regions with recently-reported poultry outbreaks

Afghanistan [OIE, 22/02/07](#). Two confirmed H5N1 avian influenza outbreaks reported in Afghanistan: in Nangarhar province (backyard poultry, 187 susceptibles) and in Konar province (turkeys, 15 susceptibles). Both provinces share a common border and are adjacent to the Pakistan border (see [map](#)).

Hungary [OIE, 12/02/07](#). One further confirmed H5N1 avian influenza outbreak since last Pandemic Postings, also in the Csongrád county, southern Hungary (see [map](#)). Outbreak reported in a geese flock with 9386 susceptible birds.

Korea (South) [OIE, 11/02/07](#). One further confirmed H5N1 avian influenza outbreak since last Pandemic Postings. Outbreak identified in Gyeonggi-do province, in the north-western part of the South Korea and surrounding Seoul (see [map](#)), and reported in a pullet/layer farm with 133,000 susceptible birds.

Kuwait [OIE, 26/02/07](#). Six confirmed H5N1 avian influenza outbreaks reported in Kuwait. These are the first H5N1 outbreaks reported from this country. Outbreaks reported from the following governorates (see [map](#)): Al Farwaniyah (one outbreak, described as occurring in a zoo; 100 susceptible birds); Al Ahmadi (five outbreaks involving mixed backyard poultry, farms ranging in size from 15 to 1805 susceptible birds).

Lao People's Democratic Republic [OIE, 25/02/07](#). Four further H5N1 avian influenza outbreaks reported since last Pandemic Postings. All outbreaks reported from Vientiane, and occurred in layer duck and backyard poultry farms ranging in size from 54 to 1380 susceptible birds.

Myanmar [OIE, 28/02/07](#). One outbreak reported from Yangon (Rangoon) province (see [map](#)). Outbreak involved a layer duck, chicken and pullet farm with 1360 susceptible birds.

Pakistan [OIE, 22/02/07](#). Two further outbreaks reported since last Pandemic Postings. Both outbreaks occurred in Islamabad: an outbreak involving geese and turkeys in a zoo (40 susceptibles), and an outbreak involving mixed backyard poultry (20 susceptibles).

Russia [OIE, 26/02/07](#). Ten H5N1 avian influenza outbreaks reported from Russia. One outbreak from Kaluzhskaya (Kaluga) Oblast involving backyard poultry (17 susceptibles); all remaining outbreaks in the adjacent Moskovskaya (Moscow) Oblast, involving backyard poultry farms ranging in size from 12 to 177 susceptible birds (see [map](#)).

Turkey [OIE, 01/03/07](#). Sixteen further H5N1 avian influenza outbreaks reported from Turkey since last Pandemic Postings. Outbreaks reported from Diyarbakir Province (6 outbreaks, backyard poultry, 207-730 susceptibles) and the adjacent Batman Province (10 outbreaks, backyard poultry, 2-1917 susceptibles) in eastern Turkey (see [map](#) for province locations).

Vietnam [OIE, 27/02/07](#). One further H5N1 avian influenza outbreak reported from Vietnam since last Pandemic Postings. Outbreak reported from Hai Duong province, in the northern part of the country (close to Hanoi: see [map](#)), involving a broiler chicken farm with 10,500 susceptible birds. Previous outbreaks in Vietnam have been concentrated in the southern Mekong Delta region.