

EID Weekly Updates:

Emerging and Reemerging Infectious Diseases, Region of the Americas

Vol. 2, No. 11—18 March 2004 <u>Main Updates index</u>

- Update on Avian Influenza
- Update on Severe Acute Respiratory Syndrome (SARS)
- Update on West Nile Virus in Belize

Update on Avian Influenza

Since our last update of 11 March 2004, one new and fatal human case has been reported, which brings the total to 34 cases and 23 deaths. The number of human cases of avian influenza A (H5N1) reported appears to be stable. Two Asian countries have reported human cases from this subtype: Viet Nam (22 human cases and 15 deaths) and Thailand (12 human cases and 8 deaths). Epizootics have been reported from this subtype among birds in 8 Asian countries. Other countries have reported flu outbreaks in birds, but these do not correspond to highly pathogenic subtype H5N1 (see Table 1 below).

Table 1: Current Situation of Avian Influenza—Human Cases and Epizootics (as of 18 March 2004)						
Country	Epizootics		Virus subtype	Number of confirmed human cases		Comments
	Number of provinces affected	Species of birds affected	identified	Cases	Deaths	Comments
Cambodia	4 out of 19	Chickens: mostly laying/breeder hens	H5N1	0	0	Epizootic out of control, with 3 new outbreaks confirmed.
Canada	1 out of 10	Chickens	H7N3	0	0	Laboratory results show strains of both low and high pathogenicity present in this group of birds.

China	6 out of 31	Ducks, chickens, geese, one peregrine falcon in Hong Kong	H5N1	0	0	Quarantine measures have been lifted in 14 provinces.
Indonesia	12 out of 26	Laying and breeding hens.	H5N1	0	0	Epizootic widespread and out of control, with new affected area in West Kalimantan.
Japan	4 out of 9	Egg-laying poultry	H5N1	0	0	Confirmed outbreaks in Kyoto and Hyogo.
Laos	5 out of 17	Laying hens	H5	0	0	Positive results for Influenza A (H5) in farms from 4 provinces and in Vientinae.
Pakistan	1 out of 7	Egg-laying poultry	H7	0	0	Outbreak confirmed at end of January.
South Korea	6 out of 14	Chickens, ducks	H5N1	0	0	
Thailand	23 out of 76 (localization unavailable for 24 additional outbreaks reported to OIE)	Chickens (broilers/fryers, laying hens), native poultry, ducks, geese, turkeys, ostrich, quail, peacocks	H5N1	12	8	The period from 28 February to 5 March 2004 saw Phase II surveillance completed; no new outbreaks have been detected (OIE, 12 March 2004).
USA	5 out of 50	Chickens	H7N2	0	0	Low pathogenicity; active

surveillance underway;

						results negative for all tests carried out to date.
			H2N2	0	0	Low pathogenicity; active surveillance underway; results negative for all tests carried out to date.
			H5N2	0	0	High pathogenicity; elimination measures underway.
Viet Nam	57 out of 64	Parent stock for broilers/fryers (chickens)	H5N1	22	15	Investigation of family cluster of confirmed cases of subtype H5N1 showed no genetic recombination with human influenza virus.
Total				34	23	

Sources

- <u>Avian Influenza A (H5N1)—Update 33: Situation (human) in Thailand</u> (17 March 2004). Geneva: World Health Organization (WHO).
- <u>Update on Avian Influenza in Animals in Asia</u>. Alerts—Disease Information. Paris: World Organization for Animal Health (OIE). (page routinely updated)
- <u>Information about Influenza A H7 Viruses</u>. Atlanta: Centers for Disease Control and Prevention (CDC).
- <u>Avian Influenza in the United States</u>. Washington, DC: United States
 Department of Agriculture, Animal and Plant Health Inspection Service
 (USDA/APHIS).
- <u>Flu Information: Avian Influenza</u> / <u>Renseignements sur la grippe: La grippe aviaire</u>. Ottawa: Health Canada / Santé Canada.

Information

(WHO).

- World Organization for Animal Health (OIE) (Paris).
- Food and Agriculture Organization of the United Nations (FAO) (Rome).

Upcoming Regional Workshop on Avian Influenza

A Workshop on Integrated Surveillance and Response of Severe Respiratory Diseases of Epidemic Potential, Using the Examples of SARS and Avian Influenza will be held from 13–16 April 2004 in Rio de Janeiro, Brazil. The Workshop will take into account those activities carried out by the WHO Global Outbreak and Response Network (GOARN), PAHO (DPC/CD), and WHO (CSR). The Workshop will involve the participation of experts from the areas of epidemiology, laboratory diagnostics, and clinical management from each of the countries selected for this activity: Argentina, Brazil, CAREC, Chile, Colombia, Cuba, México, Panama and Uruquay.

The *objectives* of the Workshop are threefold:

- 1. To strengthen national capacity for surveillance and response to emergencies caused by severe respiratory diseases of epidemic potential.
- 2. To prepare teams of professionals to collaborate with PAHO/WHO in the formation of teams to support the countries of the Region in the event of an emergency situation.
- 3. To train these professionals to reproduce this Workshop in the other countries of the Region.

The topics dealt with will be useful for developing National Preparedness Plans for an Influenza Pandemic in additional countries.

Update on Severe Acute Respiratory Syndrome (SARS)

Last 8 March 2004, the World Health Organization published the *Report of the First Meeting of the WHO Scientific Research Advisory Committee (SRAC) on Severe Acute Respiratory Syndrome (SARS)* (20 pp, PDF). In this meeting, there was a review of the existing state of knowledge on SARS as a disease and on its etiological agent, the SARS coronavirus (SARS-CoV). Many gaps in this knowledge were discussed, and a priority list of research topics and recommendations were developed to address key global research questions of public-health importance. The report lists these recommendations with the aim of disseminating them on a broad basis to international and national funding bodies to assist them in making decisions on calls for research proposals and in prioritizing research-grant applications.

Source: <u>Severe Acute Respiratory Síndrome (SARS)</u>. Geneva: World Health Organization (WHO).

Update on West Nile Virus (WNV) in Belize

On 4 March 2004, the World Organization for Animal Health (OIE) published a report on

encephalitis caused by West Nile Virus (WNV) being detected in a four-year-old horse from Indian Creek, Orange Walk district, in the northern part of Belize. On 27 October 2003, the affected animal began to develop symptoms of ataxia, hind-limb paresis, pain, and recumbency. Samples were sent to the National Veterinary Services Laboratory (NVSL) in Ames, Iowa, USA, where tests were carried out for detection of IgM antibodies using capture-ELISA techniques and neutralization for the diagnosis. The samples tested positive, with results received on 23 February 2004.

Active surveillance detected a total of 4 suspect cases of equine encephalitis in the following areas: Corozal (1 case in Little Belize), Orange Walk (1 case in Shipyard and 1 in Blue Creek), and Cayo (1 case in Lower Barton Creek). Two cases (the one from Blue Creek and the one from Barton Creek) turned up positive for Venezuelan Equine Encephalitis (VEE). The other horse tested negative for WNV and VEE.

The VNO-infected horse was subsequently euthanized. In Indian Creek, vector-control measures were carried out, as well as serological screening on horses. Materials were also prepared for public awareness of the disease.

The affected area is located in a place where private horse ownership is common. There also exists a history of arbovirus activity being detected (VEE) in 1996. In addition, the area is a major habitat for migratory birds.

There has been active surveillance to detect the spread of WNV in Belize since 2002. That year, 2,000 samples were gathered, mainly from the northern part of the country. In 2003, another 2,000 samples were studied from the southern part of the country. Results were negative in all cases. Given the results obtained in October 2003, new serological tests were carried out on birds in the affected area. Since this incident, no additional suspect cases have been reported in either horses, birds, or humans.

Sources

- Report to PAHO from the Ministry of Agriculture of Belize.
- West Nile Fever in Belize in October 2003 (4 March 2004). Paris: World Organization for Animal Health (OIE).