

EID Weekly Updates:

Emerging and Reemerging Infectious Diseases, Region of the Americas

Vol. 2, No. 8—26 February 2004 <u>Main Updates index</u>

- Update on Avian Influenza
- Outbreak of Diarrheic Disease from Rotavirus in El Salvador

Update on Avian Influenza

Since our last update of 19 February 2004, 1 new human case of avian influenza has been reported, bring the total to 32 cases and 22 deaths. To date, 2 Asian countries have reported cases in humans; and 8, epizootics of influenza A subtype H5N1 in birds. The outbreaks detected in the USA and Canada do not correspond to the highly pathogenic strain of avian flu (H5N1) currently in circulation in the Asian countries.

The following strategies have been implemented to control the epizootics:

- Planning or implementation of mass extermination in Thailand, Viet Nam, Indonesia, Pakistan, China, and Taiwan.
- Vaccination in China (central and southern regions), Taiwan, Hong Kong Special Administrative Region, Indonesia, and Pakistan.

The report issued by the FAO on 23 February 2004 pays special attention to those aspects of zoonotic diseases that exert socioeconomic impact with international repercussions. It also offers <u>recommendations</u> on measures to prevent epizootics of influenza A subtype H5N1 in small and industrial poultry facilities, as well as information on how to send samples to reference laboratories for diagnosis (see annexes from aforementioned document).

Table 1: Current Situation of Avian Influenza—Human Cases and Epizootics(as of 26 February 2004)						
Country	Epizootics		Virus	Number of confirmed human cases		
	Number of provinces affected	Species of birds affected	subtype identified	Cases	Deaths	Comments
Cambodia	1 out of	Chickens:	H5N1	0	0	Several

	19	mostly laying/breeder hens				localized outbreaks around Phom Penh.
Canada		Chickens	H7	0	0	Investigation underway.
China	16 out of 31	Ducks, chickens, geese, one peregrine falcon in Hong Kong	H5N1	0	0	Epizootic out of control (49 confirmed outbreaks).
Indonesia	11 out of 26	Laying and breeding hens.	H5N1	0	0	Epizootic widespread, out of control.
Japan	1 out of 9	Egg-laying poultry	H5N1	0	0	Epizootic under control since January. New minor outbreak in Oita confirmed as H5N1.
Laos	1 out of 17	Laying hens	H5	0	0	Epizootia limited to one area in Vientinae.
Pakistan	1 out of 7	Egg-laying poultry	H7	0	0	Epizootic localized but widespread; etiology as yet unconfirmed.
South Korea	8 out of 14	Chickens, ducks	H5N1	0	0	
Taiwan	1 out of 21	Laying hens, colored- feather native chickens	H5N2	0	0	Epizootic under control since January.
Thailand	29 out of 76	Chickens (broilers/fryers, laying hens), native poultry, ducks, geese, turkeys, ostrich, quail,	H5N1	9	7	Epizootic out of control; bird-human transmission, with 14 new outbreaks reported to

		peacocks				WHO.
USA	4 out of 50	Chickens	H7	0	0	Low pathogeneity, under control, investigation underway.
			H5N2	0	0	Low pathogeneity, investigation underway.
Viet Nam	57 out of 64	Parent stock for broilers/fryers (chickens)	H5N1	23	15	Investigation of family cluster of confirmed cases of subtype H5N1 shows no genetic recombination with human influenza virus.
Total				32	22	
Sources						
 <u>Avian Influenza A (H5N1): Update 29</u> (23 February 2004). Geneva: World Health Organization (WHO). <u>Update on Avian Influenza in Animals in Asia</u>. Paris: World Organization for Animal Health (OIE). (page routinely updated) <u>Bird Flu in Asia: Control Campaigns Need to Continue</u> (25 February 2004). Rome: Food and Agriculture Organization of the United Nations (FAO). 						

For more information, see the WHO page on <u>Avian Influenza</u>, the International Organization on Animal Health (<u>OIE</u>), and the Food and Agriculture Organization of the United Nations (<u>FAO</u>).

Sources (Consult for additional information.)

- <u>Avian Influenza A (H5N1): Update 29</u> (23 February 2004). Geneva: World Health Organization (WHO).
- <u>Update on Avian Influenza in Animals in Asia</u>. Paris: World Organization for Animal Health (OIE). (page routinely updated)
- <u>Bird Flu in Asia: Control Campaigns Need to Continue</u> (25 February 2004). Rome: Food and Agriculture Organization of the United Nations (FAO).

Outbreak of Diarrheic Disease from Rotavirus in El Salvador

According to our review of the information available on acute diarrheic syndrome in El Salvador, the incidence of diarrhea is less than it was in 2002 and 2003. On the other hand, taking into account that the number of samples analyzed by the Central Laboratory has not varied significantly with respect to 2003, we can observe an increase in the percentage of positive results for rotavirus.

Up to Epidemiological Week (EW) 7 (21 February 2004), the Central Laboratory studied 233 samples and obtained positive results for rotavirus in 48.4% of them. During EW 7 alone, 133 samples were analyzed, resulting in 53% of those positive for rotavirus.

A total of 108 confirmed cases have been reported of diarrhea from rotavirus, of which 86% have occurred in children under two years of age. The departments most affected have been Santa Ana (with 58.3% of the cases) and San Salvador (with 20.4%). To date, no deaths have been reported.

To deal with this situation, epidemiological surveillance had been strengthened through the daily monitoring of hospital admissions and deaths from acute diarrhea. Efforts are underway to provide reagents for the diagnosis and identification of the strain currently in circulation.

The primary mode of transmission for rotavirus is fecal-oral. The virus is stable in the environment and can remain viable for an extended period, which favors transmission from contact with contaminated surfaces, water, or food. Any prevention and control measures taken should take these aspects into account.

No specific treatment exists for diarrhea. At present, two vaccines are being investigated (testing currently in Phase III), with preliminary results promising in terms of effectiveness and safety. The main strategy in the event of outbreaks is based on reducing mortality from diarrhea, which is generally caused by the accompanying dehydration. Approximately 1 out of every 40 children with gastroenteritis from rotavirus will require hospitalization for the administration of intravenous fluids. Compliance with norms for oral rehydration, as contained in the tried-and-tested IMCI recommendations, is extremely important.

For more information, see the PAHO directories on <u>IMCI</u> and <u>Diarrheal/Enteric</u> <u>Diseases</u>.

Sources

- <u>Ministerio de Salud Pública y Asistencia Social</u> de El Salvador, Epidemiología, *Consolidado Nacional de Vigilancia Diaria*. (Ministry of Public Health of Social Assistance of El Salvador, Epidemiology, *Consolidated Results for Daily National Surveillance*; site in Spanish).
- Report to PAHO from the Ministry of Public Health of Social Assistance of El Salvador.