

EID Weekly Updates:

Emerging and Reemerging Infectious Diseases, Region of the Americas

Vol. 2, No. 12—25 March 2004 <u>Main Updates index</u>

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Update on Avian Influenza

Since the beginning of December 2003, 8 countries and territories in Asia (Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand, and Viet Nam) have confirmed in their reports to the World Organization for Animal Health (OIE) the existence of outbreaks Avian Influenza A, Subtype H5N1 in different species of birds. Since the beginning of February 2004, no outbreaks have been reported in additional countries, and some countries, e.g. Viet Nam and China, have not reported any new outbreaks since the middle of February. However, 2 Asian countries (Thailand and Viet Nam) have confirmed the occurrence of human cases of Avian Influenza A (H5N1), for a total of 34 human cases and 23 deaths (see Table 1 below). The number of human cases has not changed since our last update of 18 March 2004.

An estimated 100 million birds have either died or been put to death in Asia, in accordance with measures recommended by the OIE for disease elimination. In 2 countries (Indonesia and China), vaccination has been used as an additional disease-control measure. Additionally, in Pakistan, extermination and vaccination measures have been combined to control the current outbreak brought on by Influenza A (H7N3).

Other countries in different regions of the world have detected influenza outbreaks in birds of different subtypes than those currently circulating in Asia. Canada and the United States have intensified surveillance of birds and have adopted massive bird-extermination measures among cases where a highly pathogenic strain is confirmed.

Table 1: Current Situation of Avian Influenza—Human Cases and Epizootics (as of 25 March 2004)						
Country	Epizootics		Virus subtype	Number of confirmed human cases		Comments
	Number of provinces affected	Species of birds affected	identifie d	Case s	Death s	Comments
Cambodi	4 out of 19	Chickens:	H5N1	0	0	Epizootic out of

а		mostly laying/breede r hens				control.
Canada	1 out of 10	Chickens	H7N3	0	0	Laboratory results show strains of both low and high pathogenicity. New outbreaks of Subtype H7 confirmed of unconfirmed pathgenicity. Extermination measures underway in 10 farms.
China	6 out of 31 this week (16 out of 31 during the entire outbreak period)	Ducks, chickens, geese, one peregrine falcon in Hong Kong	H5N1	0	0	Quarantine measures lifted in epizootic areas (communicatio n from Ministry of Agriculture to OIE).
Indonesia	12 out of 26	Laying and breeding hens.	H5N1	0	0	Epizootic widespread and out of control.
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 (localizatio n	Chickens (broilers/fryers, laying hens),	H5N1	12	8	New outbreak of 600 cases confirmed in

	unavailable for 24 additional outbreaks reported to OIE)	native poultry, ducks, geese, turkeys, ostrich, quail, peacocks				province of Chiengrai (OIE, 12 March 2004).
			H7N2	0	0	Low pathogenicity; active surveillance underway; results negative for all tests carried out to date.
USA	5 out of 50	Chickens	H2N2	0	0	Low pathogenicity; active surveillance underway; results negative for all tests carried out to date.
			H5N2	0	0	High pathogenicity; extermination measures underway.
Viet Nam	57 out of 64	Parent stock for broilers/fryers (chickens)	H5N1	22	15	No new poultry outbreaks reported since mid-February.
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).
- Flu Information: Avian Influenza / Renseignements sur la grippe: La grippe aviaire. Ottawa: Health Canada / Santé Canada.
- <u>Avian Influenza—Latest Information</u> / <u>Influenza avaire—situation actualle</u>.

Ottawa: Canadian Food Inspection Agency (CFIA) / Agence canadienne d'inspection des aliments (ACIA).

Additional Information

- <u>Avian Influenza</u>. Geneva: World Health Organization (WHO).
- World Organization for Animal Health (OIE) (Paris).
- Food and Agriculture Organization of the United Nations (FAO) (Rome).

III Joint Meeting of Regional EID Surveillance Networks

Summary

Diseases of rapid dissemination, as is the case with many emerging/reemerging infectious diseases (EIDs), require highly sensitive and timely surveillance systems enabling immediate action to impede the further spread of outbreaks or to control epidemics. In that context, a new paradigm of global collaboration has been established: teamwork through the establishment of surveillance networks.

The Surveillance Network for Emerging and Reemerging Infectious Diseases started in 1996 and has managed to integrate the areas of laboratories and epidemiology. Activities are carried out through networks composed of different technical groups from the participating countries. To date, three networks have been formed whose work is carried out within the different subregional frameworks of a more or less marked political-economic character: the *Amazon Network*, the *Southern Cone Network*, and more recently, the *Central American Network for Emerging and Reemerging Diseases (RECACER)*. In the Caribbean, a network of great fluidity and dynamism has been established for information exchange and discussing troubling situations in its member countries (*CariSurvNet*).

Last February, the III Joint Meeting of Regional Network for Surveillance of Emerging and Reemerging Infectious Diseases took place in Atlanta (USA), attended by representatives from the countries forming the different subregional Networks. It gave professionals directly involved in detecting and responding to emerging diseases a chance to meet and discuss topics of current interest, such the global alert induced by the SARS epidemic and lessons that can be learned from this experience; the risk of the influenza virus emergency of pandemic potential and how the countries of the Southern Cone have begun to prepare for such an event in light of the impending threat, etc. Other topics, such as dengue and the situation of *Plasmodium falciparum* resistance in the Americas, were also addressed: despite their being 'known' threats, they have not ceased to be high-priority concerns for the countries.

Threats both new and known make their presence known in the form of epidemics, arising from weak links in the country's system of early response. In this sense, the different subregions spoke of their respective situations, including the commitment obtained by some countries of the Central American Network (RECACER) to carry out an assessment of their national response capability and identify areas in need of strengthening.

Also included were topics directly related to the tangible commitment of the countries to quality technical and scientific work. Visible efforts have been made in two main areas:

- 1. Quality assurance for diagnostic laboratory results, through performance evaluations by National Reference laboratories.
- 2. Quality assurance for medical care, emphasizing the promotion of the rational use of antibiotics to prevent the development of resistances and the surveillance of hospital infections, as an indicator of quality care in hospitals.

As Dr. Mirta Roses, Director of PAHO, emphasized, among the noteworthy achievements of the networks currently in operation are annual contact allowing for exchanging updated information, strengthening of communications among countries, and generating new information. Additionally noteworthy were the crucial importance of harmonizing standards for network activities, progress made through the use of common guidelines and surveillance protocols for priority diseases in each network, and progress in coordinating border activities. Dr. Roses pointed out the importance of the political commitment obtained the countries and PAHO for continuous improvement in both the technical and scientific quality of research and surveillance on EIDs, as well as the need for the networks to continue to operate under the framework of subregional cooperation agreements aimed at a safer and healthier Region.

Additional information

- Origin and development of EID surveillance networks.
- PAHO <u>Emerging/Reemerging Diseases</u> page, where the proceedings of the meeting will be posted in due course.