Update:

Yellow Fever Situation in the Americas

(10 February 2009)

1. Current Status of Yellow Fever (YF) in the Region

Argentina and Brazil

Since October 2008, monkey deaths (epizootics) have been observed in southern Brazil; and starting in November of the same year, in northeastern Argentina. The affected area includes municipalities in the state of Rio Grande do Sul in Brazil, and localities in the provinces of Misiones and Corrientes in Argentina, adjacent to Rio Grande do Sul.

In Brazil, up to 4 February 2009, the state of Rio Grande do Sul has reported 366 monkey deaths in 87 municipalities. Of these, 20 had laboratory-confirmed yellow fever epizootics; and 48, a yellow fever epizootic confirmed by epidemiological link. Some of these epizootics were reported in municipalities located outside of the area previously considered at risk.

In Argentina, no new monkey deaths have been reported since our last update of 30 January 2009. The number of monkey deaths reported since October 2008 continues to stand at 25, with 19 in the province of Misiones and 6 in the province of Corrientes, with yellow fever confirmed in 12 such deaths in Misiones and 1 in Corrientes.

Regarding human cases, one new human case of yellow fever has been reported in Rio Grande do Sul, Brazil. The probable site of infection of this latest case is Bossoroca, located within the area considered to be affected. To date, the total number of cases reported since November 2008 in Rio Grande do Sul has risen to 5 (with 4 deaths), with all cases laboratory confirmed. The date of onset of symptoms of the last reported case was 30 December 2008.

In Argentina, the figure stands at 2 reported case, 1 laboratory confirmed and the other with a compatible clinical profile and epidemiological link—both with the probable site of infection in the vicinity of Fachinal, province of Misiones.

The latest outbreaks of jungle yellow fever (JYF) reported both in Rio Grande do Sul and in Corrientes were in 1966.

Trinidad and Tobago

Since our last update of 30 January, no new yellow fever epizootics have been reported, nor have any human cases. The place where the last reported and confirmed yellow fever epizootic occurred was in the districts of Mayaro and Nariva, respectively located in southern and southeastern Trinidad.

Venezuela

During Epidemiological Week (EW) 1, 2009, monkey deaths were reported in the municipality of Zamora in the state of Aragua and the municipalities of Roscio and Ortiz in the state of Guarico. There are still no laboratory results from the samples taken from 9 monkeys and 4 febrile patients detected as part of the epidemiological investigation carried out.

The last human case reported in the country was in 2005.

Colombia

One new case was reported in Epidemiological Week 3, for a new total of 4 yellow fever cases reported in 2009 (with 2 deaths). The probable site of infection for all of them is the department of Meta, with no previous history of yellow fever vaccination in 3 of the cases and with no epidemiological link among them. For the last case, the date of onset of symptoms was 17 January 2009. The cases were reported in an area recognized as being endemic, and the number of cases observed is considered as falling within the case pattern expected in the country.

Peru

Up to Epidemiological Week 3, 2 suspected cases of jungle yellow fever were reported: 1 in the department of Loreto and the other in the department of San Martín. The latter case has been laboratory confirmed. The 2 cases were reported in an area where cases have been known to occur.

Paraguay

In Epidemiological Week 5, one monkey death was reported in the Limoy Biological Reserve, department of Alto Paraná, which is located in the eastern part of the country (on the Brazilian border). The event is under investigation.

2. Response

The countries are continuing to take action to prevent the occurrence of more human cases by strengthening epidemiological surveillance, which includes active case-finding of febrile, jaundiced, and ictero-hemorrhagic febrile fever cases. In addition, investigation of any rumors of monkey deaths has been intensified. At the same time, vaccination coverage of the population living in affected areas has been increased. The indication to vaccinate travelers to these areas has also been reinforced. Moreover, in order to prevent urban transmission by *Aedes aegypti,* vector control activities have been strengthened.

3. Recommendations: Previous recommendations are being reiterated

Vaccination against Yellow Fever

One of the most important preventive mechanisms for yellow fever is vaccination. However, when applying it, it is important to take into consideration the priority of its use as well as its indications and counter-indications. PAHO recommends the rational use of vaccines, with priority given to the population living in the area at risk and travelers who are going there. Special attention should be paid to vaccinating persons living in at-risk areas (where epizootics or cases have been identified), as well as persons who—though residing in low-risk areas (where vaccination coverage is generally low)—are involved in occupational or recreational activities in risk areas. In addition, it is worth reiterating that vaccination against yellow fever should not be administered to people with acute febrile illness, those with hypersensitivity to eggs and their derivatives, or people who have a disease adversely affecting their immune system or are undergoing treatment for it.

Epidemiological Surveillance

The early detection of outbreaks allows for the effective implementation of control measures. In order to achieve this, it is important to emphasize the utilization of all surveillance mechanisms for yellow fever in both humans and primates: intensifying the surveillance of *A. aegypti* infestation indexes in urban areas near the focus, monitoring vaccination coverage, and surveillance of post-vaccination events supposedly attributable to vaccination against yellow fever in affected or adjacent areas.

Vector Control

Yellow fever transmission in the Americas continues to originate in the jungle. However, in order to avoid the reurbanization of this disease—of which a confirmed outbreak already occurred in early 2008 and was successfully controlled—the importance of *A. aegypti* control measures must be emphasized, mainly in cities and localities adjacent to affected areas. These measures also help prevent dengue outbreaks.

Risk Communication

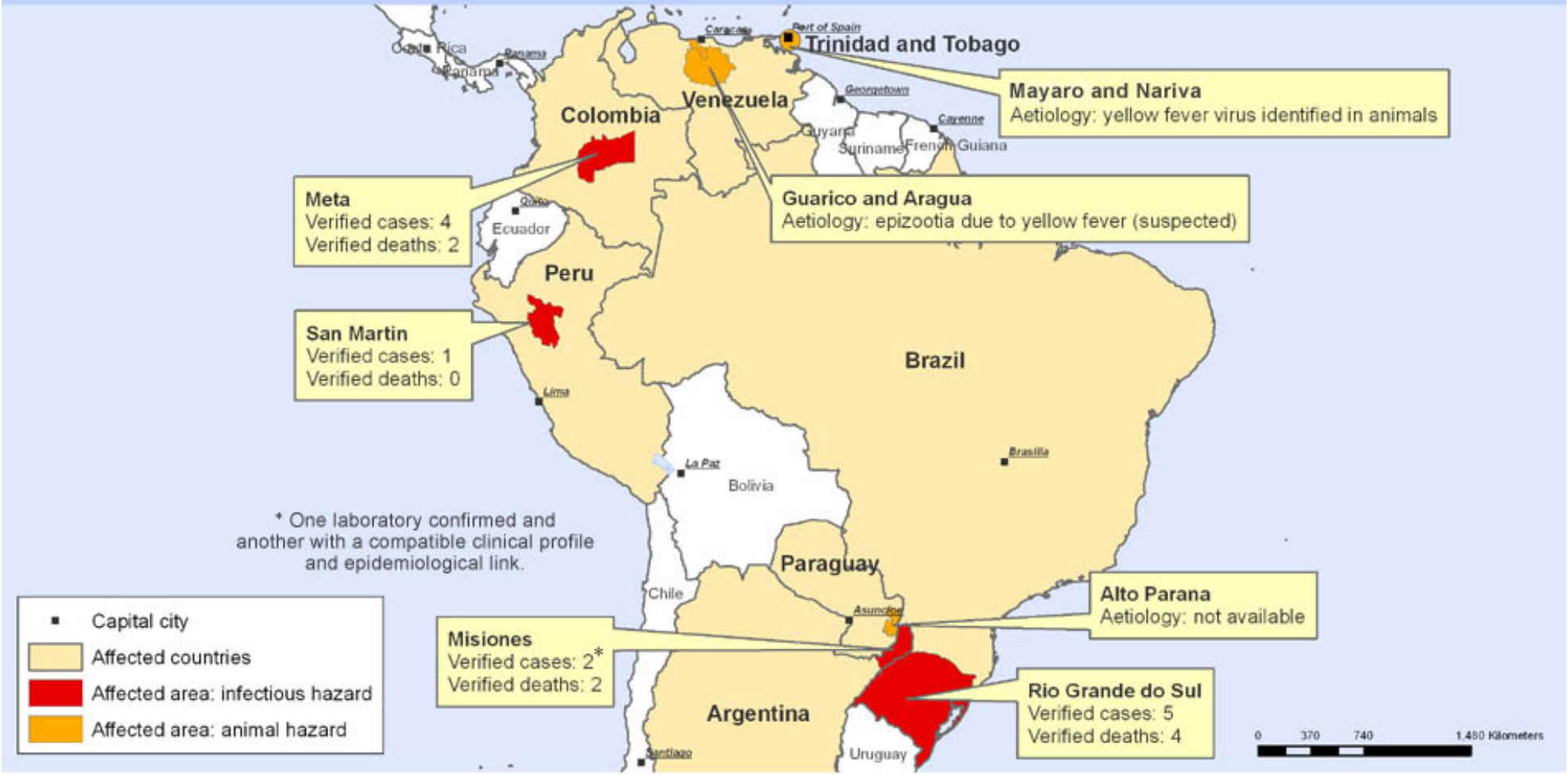
Given the intense Spreads of the yellow fever virus that has been observed in the Region, the countries should include in their activities clear, educational communication guidelines on rational vaccine usage, the population to be vaccinated, personal protective measures, the avoidance of activities in jungle areas, and vector control measures.

4. Map of Yellow Fever Events in South America and the Caribbean, by first administrative level, 10 February 2009

See the WHO map on the next page, which shows the states, provinces, or departments containing affected municipalities. This does not mean that the entire state, province, or department being shown is currently affected.

*For additional technical information on Yellow fever and control activities, see PAHO's practical handbook at www.paho.org/english/ad/fch/im/fieldguide_**yellowfever**.pdf*

Yellow fever events in South America and Caribe, by first administrative level, February 2009



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information and Geographic Information Systems (GIS)
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