



Update:

Situation of Yellow Fever in the Americas

(30 January 2009)

1. Situation of Yellow Fever in the Region

Argentina and Brazil

As previously reported, since October 2008 monkey deaths (epizootics) have been observed in southern Brazil; and starting in November of that 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 22 January 2009, the state of Rio Grande do Sul has reported 307 monkey deaths in 87 municipalities. Of these municipalities, 17 experienced laboratory-confirmed yellow fever epizootics; and 50 municipalities, a yellow fever epizootic confirmed through epidemiological links. Some of these epizootics were registered in municipalities located outside of the area previously considered at risk.

Argentina has updated PAHO on the number of monkey deaths registered in the country since October 2008. To date, 25 monkey deaths have been registered, 19 in the province of Misiones and six in the province of Corrientes, with yellow fever confirmed in 12 of the events in Misiones and one in Corrientes.

Regarding human cases, five cases of jungle yellow fever have been reported, all resulting in death: three laboratory-confirmed cases in Rio Grande do Sul, with the probable site of infection in Pirapo and in Santo Angelo; in the latter confirmed case, the date of onset of symptoms was 2 January 2009. In Argentina, the number of two reported cases has remained stable, one of them laboratory confirmed and the other with a compatible clinical profile and epidemiological link—both of them with the probable site of infection in the locality of Fachinal, province of Misiones.

The latest outbreaks of jungle yellow fever reported in both Rio Grande do Sul and in Corrientes occurred in 1966.

Trinidad and Tobago

No new epizootics have been reported. As previously reported, on 16 January the reference laboratory confirmed two yellow fever epizootics in the districts of Mayaro and Nariva, respectively located in the southern and southeastern part of Trinidad. No new cases have been reported. There have been no registered epizootics in Trinidad and Tobago since 1995.

Venezuela

During Epidemiological Week (EW) 1, 2009, one event involving monkey deaths was registered in the state of Guarico. As part of the investigation, samples were taken from nine monkeys and from four patients in whom fever was detected. Laboratory results are pending.

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

Colombia

Two new cases have been reported in Epidemiological Week 3, bringing the total number of yellow fever cases in 2009 to three (with two deaths), all in the department of Meta and all with no previous history of yellow fever vaccination and no epidemiological link. The cases were registered in an area recognized as endemic, with the number of cases considered as falling within the pattern of expected cases in the country.

2. Response

The countries are maintaining activities to prevent the occurrence of more human cases, strengthening epidemiological surveillance, which includes active case-finding of febrile, jaundiced (icteric), and ictero-hemorrhagic cases. Investigation of any rumors of monkey deaths has also been intensified. At the same time, in the affected areas, vaccination coverage is being increased among the resident population. Furthermore, the indication to vaccinate has been strengthened for travelers to these areas. In addition, for the purpose of preventing urban transmission by *Aedes aegypti*, vector control activities have been strengthened.

3. Recommendations

Yellow Fever Vaccination

One of the most important mechanisms for preventing yellow fever is vaccination. However, the priority of its use, its indications, and counter-indications should all be considered when applying it. PAHO recommends a rational use of vaccines, prioritizing the population residing in a risk area as well as travelers going to or through these areas. Special attention should be paid to vaccinating people who live in risk areas (where epizootics or cases have been identified), and those who, though residing in low-risk areas (where vaccination coverage is generally low), work or participate in recreational activities inside risk areas. Furthermore, it is to be reiterated that the yellow fever vaccine should not be administered to people with acute febrile diseases, to those with hypersensitivity to eggs and their derivatives, and to those who have diseases or who receive treatment that produces any depression of the immune system.

Epidemiological Surveillance

Timely detection of outbreaks allows for the effective implementation of control measures. To this end, the need to use all yellow fever surveillance mechanisms in both humans and primates should be emphasized: monitoring compatible clinical cases; surveillance of febrile icteric syndromes; epizootic surveillance; intensified monitoring of *A. aegypti* infestation indices in urban areas close to the disease focus; monitoring vaccination coverage; and monitoring post-vaccination events supposedly attributable to vaccination against yellow fever in affected and bordering areas.

Vector Control

Yellow fever transmission in the Americas continues to be of the jungle cycle. However, in order to avoid the reurbanization of this disease—of which there already was an outbreak, confirmed at the beginning of 2008 and successfully controlled—the importance of *A. aegypti* control measures is emphasized, mainly in cities and in localities bordering affected areas. These measures also allow for the prevention of dengue outbreaks.

Risk Communication

In light of the intense circulation of the yellow fever virus observed in the Region, countries should include in their communication activities clear and educational directives on the rational use of the vaccine, on the population to be vaccinated, on personal protective measures, avoiding activities taking place in jungle areas, and on vector control measures.

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

See next page. The map shows the states, provinces, or departments where the affected areas are located. The entire territory of the state, province, or department is not 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, January 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
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