Epidemiological Alert:
Regional Update on Dengue

Regional Program on Dengue
(8 March 2010)

Dengue Outbreaks in the Americas

The information in this update is obtained from data provided by the Ministries of Health of Member States through reports sent to the Pan American Health Organization / World Health Organization (PAHO/WHO) or from updates on their respective web pages.

Up to the date of this report, the countries of the Region reported a total of 146,006 cases of dengue, out of which 2,706 were severe dengue. A total of 79 deaths have been reported, with a Regional fatality rate of 2.9%.

Argentina

Number of Cases: Up to Epidemiological Week (EW) 7/2010, the Ministry of Health of Argentina reported 264 cases of dengue; 250 cases have been confirmed as the result of autochthonous transmission and 14, as the result of travel to endemic areas.

Severity: There have been no reported cases of severe dengue or of deaths from dengue.

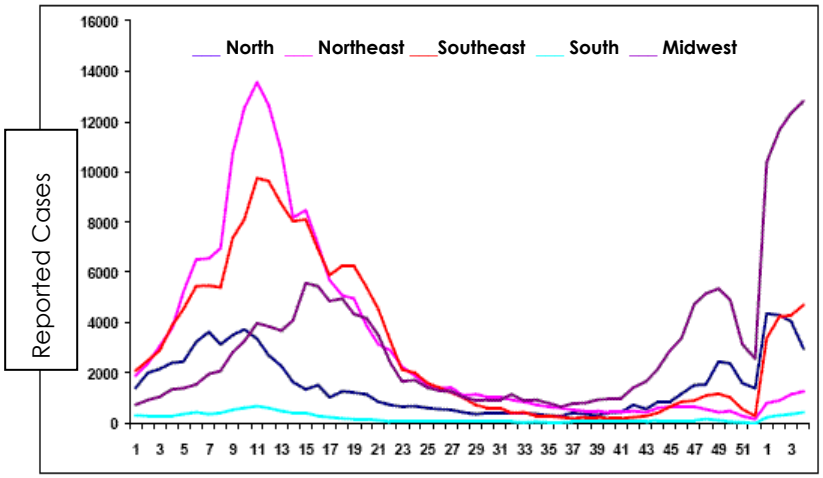
Serotypes in Circulation: DEN-1.

Affected Areas: Misiones (in the localities of Puerto Iguazú and El Dorado), the province of Chaco (in the locality of Corzuela), and Santa Fe (in the city of Rosario).

Measures Taken: There has been a continuation of vector control activities in priority areas.

Brazil

Reported Cases of Dengue by Epidemiological Week and Region, Brazil, 2009–2010.



Source: Ministry of Health of Brazil.

Number of Cases: Up to EW 6, the Secretariat of Health of Brazil reported a cumulative number of 108,640 cases of dengue, out of which 21,646 have been laboratory confirmed.

Severity: A total of 211 cases of severe dengue and 21 deaths from dengue have been reported.

Fatality Rate: 9.9%

Serotypes in Circulation: DEN- 1, 2, and 3.

Affected Areas: The states with the greatest incidence per 100,000 inhabitants are Rondônia (636.7); Mato Grosso do Sul (543.2); Acre (478.6); Mato Grosso (439.0), and Goiás (345.5).

Measures Taken: According to the Secretariat of Health, the current epidemiological scenario in Brazil points to a need to monitor the situation observed in Rondônia, Goiás, Mato Grosso, Mato Grosso do Sul, Acre, and Minas Gerais. Despite the fact that in the Northeast, no increasing trend has been apparent to date, it must be emphasized that the seasonal period of the disease begins in March, which places the entire region on alert due to the potential spread of the DEN-1 serotype in this region. A total of $130 million *reais* have been incorporated into the budget of 633 municipalities at high risk of transmission and to 27 federated units, in addition to $40 million *reais* for publicity campaigns.

El Salvador

Number of Cases: Up to EW 8/2010, the Ministry of Health of El Salvador reported 2,706 dengue cases (546 more cases than the preceding week). A total of 1,737 cases have been laboratory confirmed. The most affected age groups are children and young people from 5–9 and from 10–19.

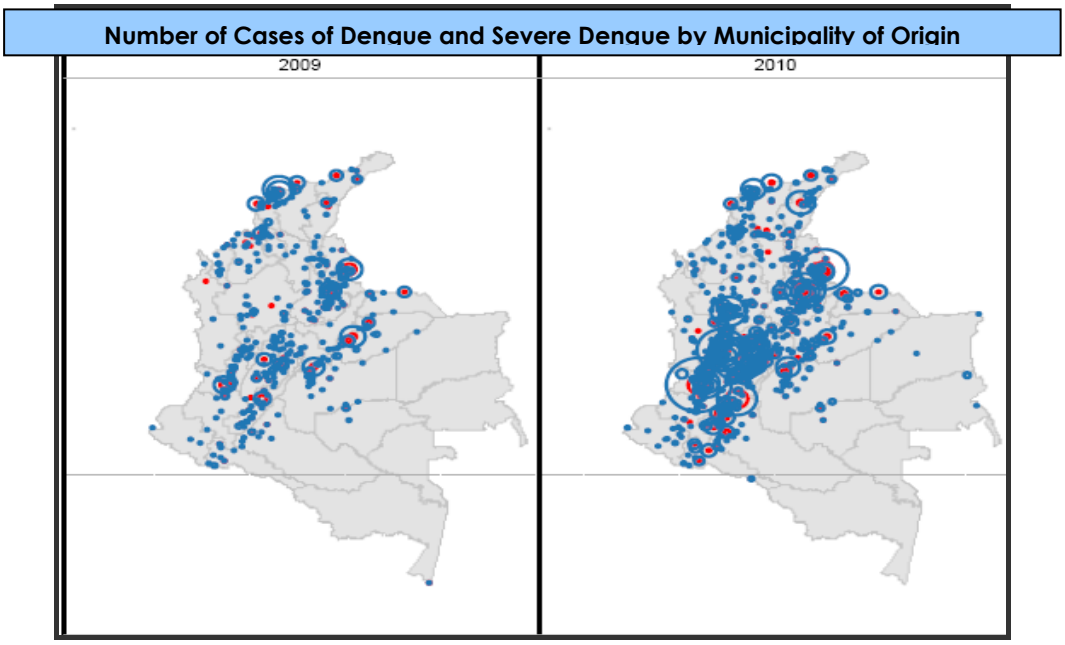
Severity: A total of 41 cases of severe dengue have been reported, but no deaths.

Serotypes in Circulation: DEN-1 and DEN-2.

Affected Areas: The highest rates of incidence per 100,000 inhabitants among the confirmed cases are in Oriente de San Salvador (67.4); Santa Ana (49.7), Sur San Salvador (41.6), La Paz (42.4), Chalatenango (36.7), Morazán (34.6), and La Libertad (29.9). The national incidence rate for confirmed cases is 24.8 per 100,000 inhabitants.

Measures Taken: On 26 February 2010, the Ministry of Health declared a national state of emergency for dengue. PAHO/WHO has made an official offer of support to the country. The Ministry of Health continues to carry out vector control activities in the areas of greatest transmission.

Colombia



Source: Ministry of Health of Colombia.

Number of Cases: Up to EW 8/2010, a total of 19,712 probable cases of dengue have been reported to the National Surveillance System *(Sistema de Vigilancia Nacional* / SIVIGILA), out of which 7,459 cases have been laboratory confirmed.

Severity: A total of 2,001 cases of severe dengue have been reported. There have been 44 deaths reported from dengue, out of which 21 have been laboratory confirmed, 14 are under investigation, and 9 have been ruled out.

Serotypes in Circulation: Currently, in several territorial entities, all four dengue serotypes are in circulation (DEN-1, 2, 3, and 4).

Affected Areas: The departments with the highest number of reported dengue cases for 2010 are: Antioquia, Arauca, Boyacá, Cesar, Huila, Norte de Santander, Quindío, Risaralda, Putumayo, Santander, Santa Marta, and Valle.

Measures Taken: The country is in a state of epidemiological alert for dengue, resulting in intensified activities for epidemiological, entomological, and virological surveillance as well as vector control. In addition, contingency plans have been put into place. PAHO/WHO has provided technical advice for clinical management of patients and has deployed an expert who knows how to handle severe dengue cases and who will provide training to doctors in various of the country's departments.

Honduras

Number of Cases: Up to EW 7/2010, a total of 2,490 cases of classic dengue were reported, which represents a 153% increase over last year (2009).

Severity: There have been 110 confirmed cases of severe dengue and one death.

Fatality Rate: 9.5 %.

Affected Areas: The metropolitian areas of the Central district (Metropolitana del Distrito Central) and of San Pedro Sula, Atlántida, Olancho, and Yoro. Of all reported cases for this week, 82% of them are concentrated in these five regions.

Measures Taken: The Secretariat of Health continues to carry out vector control activities in the areas of greatest transmission.

Paraguay

Number of Cases: Up to EW 9/2010, a total of 655 confirmed dengue cases have been reported in Paraguay.

Severity: Of these cases, 30 required hospitalization, out of which 13 showed alarm signs and 2, severe dengue (0.3%). Two elderly adults died of the disease, a 70-year-old woman and a 76-year-old man, both of whom had debilitating chronic diseases. The Ministry of Public Health of Paraguay issued an alert following what have been the first two deaths from dengue since the beginning of the October 2009 epidemic.

Serotypes in Circulation: A worsening of the situation is foreseen due to the simultaneous circulation of three serotypes of the dengue virus (DEN-1, 2, and 3). A low-magnitude epidemic has been reported with respect to those of previous years, but one more complex due to the simultaneous circulation of three serotypes in the metropolitan area of Asunción, the nation's capital, and the predominance of DEN-2 in the department of Amambay in the northern part of the country.

Puerto Rico

Number of Cases: Up to EW 5/2010, the Secretariat of Health of Puerto Rico has reported 854 cases of dengue, out of which 256 have been laboratory confirmed.

Severity: There have been five confirmed cases of severe dengue and no reports of any deaths.

Serotypes in Circulation: All four serotypes are in circulation on the island (53%, DEN-1; 32%, DEN-2; 12%, DEN-4; and 2%, DEN-3).

Measures Taken: The Secretary of Health issued an epidemic alert on 26 February, alerting the population on preventive measures and implementing vector control activities.

Recommendations for Dengue Prevention and Control

During the first trimester of 2010, there has been a marked increase in the circulation of the dengue virus, with epidemics declared in Central American and Caribbean countries—an unusual situation for this time of year, related to the presence of El Niño, with the phenomenon producing a intense drought that obliges communities to store water in their living areas. Consequently, since this is not done under appropriate conditions, these water storage depositories turn into vector breeding places. South America continues to experience the outbreaks expected at this time of year in endemo-epidemic regions.

In light of this situation, we are calling on all the countries of the region to intensify the activities laid out in their Integrated Management Strategies for Dengue Prevention and Control (EGI-Dengue), involving other governmental, non-governmental, and community actors in the following:

- Carrying out organized, coordinated activities for environmental reorganization aimed at eliminating habitual and potential breeding sites (well known by all) of the vector *Aedes aegypti*.
- Prioritizing resources and reviewing response plans for dengue outbreaks, increasing their response capacity to the maximum level in each territory.
- Maintaining a maximum level of clinical, laboratory, epidemiological, and entomological surveillance of both the disease and the vector, with timely communication of any increase in cases and in the vector indexes, in order to respond effectively in advance.
- For the health sector, reviewing the response capacity of its primary and secondary care services, so as to be able to respond to any possible increase in the severe forms of dengue.
- Maintaining a continuous process of personnel training throughout the healthcare system: this is fundamental to avoid deaths, which is the first priority of the health sector.
- Continuing to strengthen the vector control component in their surveillance and response structure, ensuring proper maintenance of fumigation equipment, stockpiles of insecticides, and—whenever necessary—increasing all of these activities to ensure an intensified response in times of heightened transmission and thus delay and/or interrupt transmission and gain time to consolidate those activities to eliminate breeding sites that have proved to be most effective and sustainable.

International notification of disease and cooperation among all countries are more than a priority; they are a necessity when combating disease and preventing the effects of dengue outbreaks and epidemics. The PAHO/WHO Regional Program on Dengue, the PAHO/WHO Epidemic Alert and Response Team for the International Health Regulations (IHR, 2005), all the Focal Points for Communicable Diseases, and the National Liaison Centers for the IHR, are all working in close collaboration and coordination to maximize their potential for response and control.