



Epidemiological Alert:

Update on Dengue Outbreaks in the Americas

Regional Program on Dengue
(22 April 2010)

The information in this update has been 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 posted on their web pages.

To date, the countries of the Region have reported a total of 344,346 cases of dengue, of which 7,838 are severe dengue. They have reported 144 deaths, with a regional fatality rate of 1.84%.

Table 1: Dengue and severe dengue cases and deaths in the Region of the Americas up to Epidemiological Week (EW) 16, 2010

Subregion	Dengue: Total Number of Cases	Incidence Rate per 100,000 Inhabitants	Number of Cases of Severe Dengue	Number of Deaths from Dengue	Fatality Rate (%)
Central America and Mexico	27,407	18.65	1,477	8	0.54
Andean Region	70,952	69.26	5,564	48	0.86
Southern Cone	231,070	95.29	408	70	17.16
Hispanic Caribbean	4,747	20.03	319	18	5.64
Non-Hispanic Caribbean	10,170	128.15	70	0	0
Total	344,346	65.78	7,838	144	1.84

Central America and Mexico

Costa Rica

Summary: Up to Epidemiological Week (EW) 13, 2010, the Ministry of Health of Costa Rica reported 3,311 cases of dengue. The national endemic channel from EW 1 through 13, 2010, continues in the area of the epidemic, although with a diminishing trend.

Severity: Four cases of severe dengue have been confirmed; no deaths have been reported.

Affected Areas: There are outbreaks in the regions of Chorotega (Cañas, Carrillo, Abangares y Santa Cruz), Pacífico Central (Península, Cantón de Puntarenas y Rural), Central Norte (Alajuela), and Brunca, with 87.5% of the total cumulative incidence. The national incidence rate for confirmed cases is 55.6 per 100,000 inhabitants.

El Salvador

Summary: Up to EW 15, 2010, the Ministry of Health of El Salvador reported 8,876 cases of dengue, compared to the 1,265 cases reported in 2009. Of these cases, 3,885 have been laboratory confirmed.

Severity: Sixty-seven cases of severe dengue have been reported, with no deaths.

Serotypes in Circulation: DEN-1, 2.

Affected Areas: The national incidence rate for the confirmed cases is 55.6 per 100,000 inhabitants. The highest incidence rates for confirmed cases per 100,000 inhabitants are found in Oriente in San Salvador (136.9), Santa Ana (112.8), and Cuscatlán (109.6).

Actions Taken: The Ministry of Health continues to carry out control activities in the areas of greatest transmission.

Honduras

Summary: Up to EW 14, 2010, the Secretariat of Health of Honduras reported 4,922 cases of dengue, compared to 1,681 cases reported in 2009.

Severity: A total of 216 cases of severe dengue have been confirmed, along with 4 deaths.

Serotypes in Circulation: DEN-1, 2.

Affected Areas: Distrito Central and San Pedro Sula.

Actions Taken: The country requested PAHO/WHO technical support in epidemiology and in clinical, laboratory, and managerial areas. Given the parallel occurrence of a few influenza cases, the necessary investigation was carried out to shed light on the predominance of the circulating virus, arriving at the conclusion that it was dengue, for which reason the necessary measures were taken for vector control.

Andean Subregion

Colombia

Summary: Up to EW 14, 2010, 49,122 probable cases of dengue have been reported to the National Surveillance System (*Sistema de Vigilancia Nacional / SIVIGILA*), of which 20,534 cases have been laboratory confirmed.

Severity: A total of 3,916 cases of severe dengue have been reported, with 45 deaths.

Serotypes in Circulation: All four serotypes are circulating.

Affected Areas: A significant increase has been observed compared to previous years in the departments of Antioquia, Arauca, Atlántico, Bolívar, Boyacá, Caldas, Caquetá, Cartagena, Cesar, Huila, Magdalena, Norte de Santander, Putumayo, Quindío, Risaralda, Santander, Santa Marta, Sucre, and Valle

Actions Taken: The country is in a state of epidemiological alert for dengue, for which epidemiological, entomological, and virological surveillance and vector control activities have been intensified and contingency plans have been implemented.

Peru

Summary: The Ministry of Health of Peru has reported a dengue outbreak in the districts of Piura and Castilla, located in the province of Piura. The outbreak began the first week of January 2010. Between 1 January and 12 April, some 1,158 cases have been reported, out of which 1,153 are classic dengue; of these, 590 have been confirmed.

Severity: Some 5 cases of dengue hemorrhagic have been reported, with 2 deaths (both females, aged 45 and 42 years, in the districts of Piura and Castilla). The age group most affected is 24–45-year-olds, with 54% of the cases concentrated among males.

Serotypes in Circulation: DEN-1, 4.

Actions Taken: The Ministry of Health reports that it is carrying out house-to-house entomological evaluation in localities under the jurisdiction of Piura; along with fumigation and treatment with abate in affected areas and active case-finding by searching for febrile cases. It is important to highlight the participation of the local governments.

Southern Cone

Argentina

Summary: Up to EW 15, 2010, the Ministry of Health of the Nation of Argentina reported 842 cases of dengue, with no reports of severe dengue cases or deaths.

Serotypes in Circulation: DEN- 1, 2, and 4. Regarding DEN-4, a single case has been reported in Rosario, Santa Fe.

Affected Areas: The provinces of Misiones, in the localities of Puerto Iguazú and El Dorado; and the province of Chaco, in the localities of Corzuela, Salta (San Ramón de la Nueva Orán) and Santiago del Estero (Clodomira).

Actions Taken: In the outbreak zones where dengue cases have been diagnosed, response activities continue to be carried out by strengthening and reorganizing the health service networks as well as carrying out control activities under the supervision of technical teams and healthcare personnel from the affected municipalities, the provinces, and the Ministry of Health of the Nation.

Caribbean

Puerto Rico

Summary: Up to EW 12, 2010, the Secretariat of Health of Puerto Rico reported 2,273 cases of dengue, of which 1,016 have been laboratory confirmed.

Severity: Some 13 cases of severe dengue have been confirmed, with 2 deaths.

Serotypes in Circulation: DEN-1, 2, 4.

Actions Taken: The Secretary of Health declared a state of epidemic emergency on 26 February, alerting the population on preventive measures and increasing vector control measures.

Dominican Republic

Summary: Up to EW 13, 2010, the Ministry of Health of the Dominican Republic reported 2,273 cases of dengue, of which 1,016 have been laboratory confirmed. The age groups most affected are infants under 1 year, with a cumulative rate of 16.6 cases per 100,000 inhabitants, followed by children ages 5–9 and then by children 10–14, with rates of 13 and 12.8 cases per 100,000 inhabitants, respectively.

Severity: Some 13 cases of severe dengue have been confirmed, with 2 deaths.

Serotypes in Circulation: DEN-1, 2, 4.

Actions Taken: Supervisions were carried out in the provinces, with the objective of identifying critical aspects of the epidemiological situation, as well as types of strategies implemented and their effectiveness. In addition, there was an intensification of measures to eliminate breeding sites and to fumigate for adult vector control. In those municipalities where deaths from dengue were reported, local-level discussions were held with the objective of identifying and correcting problems related to quality of care.

French Territories

Summary: In its epidemiological bulletin, the Inter-Regional Epidemiology Cells of the Antilles (*Cellules interrégionales d'épidémiologie Antilles / CIRE*) reported the occurrence of dengue outbreaks in French Guiana, Guadeloupe, and Saint Martin.

- In **French Guiana**, some 4,350 suspected cases of dengue were reported up to EW 14, of which 1,300 were laboratory confirmed. Of the total number of cases, 58 were hospitalized and 1 death was reported.
- In **Guadeloupe**, some 3,955 dengue cases were reported, 888 of which were confirmed. The number of cases requiring hospitalization was 82. To date, no deaths have been reported.
- In **Saint Martin**, 1,660 suspected cases of dengue were reported; 322 were laboratory confirmed; 16 required hospitalization; and there were no deaths.

Serotypes in Circulation: In all the territories, DEN-1, 2, and 4 are circulating.

General Recommendations

- The countries should intensify their prevention and control measures through the implementation of their national strategies for integrated management of dengue prevention and control (EGI-Dengue).
- Plans prepared by each country for responding to dengue outbreaks must be carried out to the fullest extent possible.
- Countries should do their utmost to build support for responding to epidemic outbreaks, through joint coordinated efforts between the countries and with PAHO/WHO.