

Epidemiological Alert:

Dengue in the Americas

28 October 2011

CURRENT SITUATION

Dengue and severe dengue pose a public health problem in the tropical and subtropical areas of the Region of the Americas. During 2011, Member States reported 979,774 cases of dengue, of which 15,860 presented serious forms requiring hospitalization and 692 deaths. Historical data on the number of cases and deaths registered was surpassed this year with dengue outbreaks in Paraguay, Panama and in the countries and in the non-Hispanic Caribbean, such as Aruba, the Bahamas, and Saint Lucia. The introduction of Dengue 4 was also observed in Panama and in some states of Brazil where it had not previously circulated.

In light of this situation, the Pan American Health Organization/World Health Organization (PAHO/WHO) reminds Member States, especially those located in the southern hemisphere of the recommendations to reduce morbidity, fatality and the social and economic burden generated by dengue outbreaks and epidemics. In this regard, the training of physicians and clinicians who manage cases, both at the primary and other levels of care, is urged to ensure the early detection, treatment and submission of cases to hospital health care services, when necessary.

PAHO/WHO also reiterates the need for implementing strategies of mass communication to promote within the communities, the destruction of the vector's most productive breeding sites.

The vector increase significantly through current conditions of urban development, migration of populations, the lack of basic sanitation services in urban centers, combined with the fact that dengue transmission is not uniform throughout the Region of the Americas. In light of this, PAHO/WHO recommends emphasizing organized and coordinated actions of improving environmental conditions to eliminate potential larval habitats in areas considered endemic for dengue that pose a greater risk of transmission.

The information in this update comes from the data provided by the Member States Ministries of Health through reports sent to PAHO/WHO or updates on their websites. Information on the dengue data per country is available via the following link:

http://new.paho.org/hq/index.php?option=com_content&task=view&id=264&Itemid=363&&lang=en

Table 1. The number of dengue cases and severe dengue cases by sub regions in the Americas as of epidemiological week (EW) 43 of 2011 compared with EW 43 of 2010.

Sub-regions	Dengue 2010*	Dengue 2011*	Severe Dengue 2010**	Severe Dengue 2011**	Deaths 2010	Deaths 2011	Case Fatality Rate (%) 2010	Case Fatality Rate (%) 2011
North America, Central America and Mexico	193, 291	86,410	5,672	3,120	139	33	2.45	1.06
Andean Region	256,158	114,091	17,967	2,471	182	115	1.01	4.65
Southern Cone	957,019	761,497	9,725	10,166	382	530	3.93	5.21
Hispanic Caribbean	27,100	5,119	942	72	76	4	8.07	5.56
Non-Hispanic Caribbean	99,284	12,657	1,049	31	25	10	2.38	32.26
TOTAL	1,532,852	979,774	35,355	15,860	804	692	2.27	4.36

^{*} Total number of dengue cases including severe dengue.

Source: Data from Member State Ministries of Health and website updates.

RECOMMENDATIONS FOR DENGUE PREVENTION AND CONTROL

Patient Care

To prepare for the response to a possible dengue outbreak, training of medical personnel and of clinicians responsible for management decisions of patients in primary and secondary care levels is recommended.

It is also important to strengthen the health education strategies in order to provide patients and family members with the information necessary to identify the disease and its severity, so that they may seek immediate medical attention at the nearest health center.

Social Communication

The following actions are recommended:

- Develop a plan of communication and social mobilization.
- Conducting advocacy activities with policy makers and the community to raise their awareness of the problem.
- Implement dengue prevention and control plans in areas at risk to modify the social determinants that allow dengue to be transmitted.
- Train health workers in health education and communication methodologies.



Warning signs*

- Severe abdominal pain
- Persistent vomiting
- Fluid accumulation
- Mucosal bleeding
- Lethargy, restlessness
- Hepatomegaly >2cm.
- Laboratory: increase of the hematocrit with rapid decrease of platelets

^{**} Includes dengue shock syndrome and/or all forms of severe dengue.

^{*} Requires strict observation and medical intervention

• Environmental Management

PAHO/WHO recommends eliminating the regular larval habitats that occur due to:

- Deficiencies in sanitary infrastructure, for example irregular water distribution, that causes the community to store water in containers;
- Sanitary conditions that permit the accumulation of refuse (i.e. plastic containers and used tires in which rainwater may accumulate).

Suggested actions in the area of entomology:

- Application of measures in the control of larval habitats by physical, biological and chemical methods that actively involve the community, such as having homeowners take 10 minutes once a week to inspect their yards to eliminate containers with water that are sources of mosquitoes.
- Standardization of regulations concerning the importation of used tires and the management of household waste.
- Strengthening of the entomological surveillance system and vector control, in an efficient and opportune manner.

Vector control (using trained personnel to eliminate larvae and adults and elimination of mosquito sources through community actions) will be more effective and efficient when applied early and in the priority locations.

The following documents are available for more information on dengue treatment:

- Care guidelines for patients in the Region of the Americas (in Spanish)
- Guidelines for diagnosis, treatment, prevention and control (in Spanish)