

ANNEX A

OPERATIONAL DEFINITION OF DENGUE, DENGUE HEMORRHAGIC FEVER, DENGUE SHOCK SYNDROME CASES, AND CASE REPORTING

As previously stated, it is important to standardize case reporting in the Region. By doing so, all Member States will be able to be maintained informed of the situation of the disease at all times.

To achieve this goal, there should be agreement for definitions as well as what should be reported and when it should be reported. Definitions as published in the *Epidemiological Bulletin* Vol. 21, No. 2, 2000 are as follows:

Clinical Case of Dengue Fever

A clinical case of dengue fever is defined as being an acute febrile illness of 2-7 day duration with two or more of the following signs or symptoms:

- Headache
- Retro-orbital pain
- Myalgia
- Arthralgia
- Rash
- Hemorrhagic manifestations, and
- Leucopenia.

Laboratory Criteria for Diagnosis

Laboratory criteria for diagnosis is defined as one or more of the following:

- Isolation of the dengue virus from serum, plasma, leukocytes, or autopsy samples.
- Demonstration of a four-fold or greater change in reciprocal IgG or IgM antibody titers to one: or more dengue virus antigens in paired serum samples.
- Demonstration of dengue virus antigen in autopsy tissue by immunochemistry or immunofluorescence or in serum samples by EIA.
- Detection of viral genomic sequences in autopsy tissue, serum, or CSF samples by polymerase chain reaction (PCR).

Case Classification

Suspected case:

Any case compatible with the clinical description.

Probable case:

A case compatible with the clinical description with one or more of the following:

- Supportive serology (reciprocal hemagglutination-inhibition antibody titer greater than 1280, comparable IgG EIA titer or positive IgM antibody test in late acute or convalescent-phase serum specimen).
- Occurrence at same location and time as other confirmed cases of dengue fever.

Confirmed case:

A case compatible with the clinical description, laboratory-confirmed.

Criteria for Dengue Hemorrhagic Fever/Dengue Shock Syndrome

Dengue hemorrhagic fever is defined as a probable or confirmed case of dengue and hemorrhagic tendencies evidenced by one or more of the following:

- Positive tourniquet test
- Petechiae, ecchymoses, or purpura
- Bleeding: mucosa, gastrointestinal tract, injection sites, or other
- Haematemesis or melaena AND thrombocytopenia (<100,000 platelets per mm³) AND evidence of plasma leakage due to increased vascular permeability, manifested by one or more of the following:
 - More than 20% rise in average hematocrit for age and sex;
 - More than 20% drop in hematocrit following volume replacement treatment compared to baseline;
 - Signs of plasma leakage (pleural effusion, ascites, hypoproteinemia).

Dengue Shock Syndrome

This is defined as having all the above criteria, plus evidence of circulatory failure manifested by rapid and weak pulse, and narrow pulse pressure (less than 20 mm Hg) or hypotension for age; cold, clammy skin; and altered mental status.

ANNEX B

PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION

128.th SESSION OF THE EXECUTIVE COMMITTEE

Washington, D. C., 25-29 June 2001

RESOLUTION

CE128.R13

DENGUE AND DENGUE HEMORRHAGIC FEVER

THE 128.th SESSION OF THE EXECUTIVE COMMITTEE,

Having considered the alarming situation of dengue, the eminent threat of an increase in dengue hemorrhagic fever (DHF), and the reappearance of urban yellow fever in the Americas (Document CE128/15); and

Expressing concern that there is a similar trend in the Region of the Americas to that seen in South East Asia where hundred of thousands of DHF cases occur each year,

RESOLVES:

To recommend to the Directing Council the adoption of a resolution along the following lines:

THE 43.rd DIRECTING COUNCIL,

Having considered the report on dengue and dengue hemorrhagic fever in the Americas (Document CD43/_);

Recognizing the trend of increasing numbers of cases of dengue and dengue hemorrhagic fever in the Americas, as well as the potential reurbanization of yellow fever in the Region; and

Considering Resolutions CD38.R12, CD39.R11, and CD40.R15,

RESOLVES:

1. To urge Member States to:

- a) promote intersectoral coordination, develop partnerships, and support networks to strengthen dengue prevention control programs;
- b) stimulate sustainable environmental actions in the areas of urban planning and services such as local water supply, wastewater disposal, solid waste management, and used tire disposal;
- c) incorporate community participation, health education, and social communication strategies to promote behavioral change into dengue prevention and control programs;
- d) implement appropriate patient care within and outside the formal health sector, including disease recognition, diagnosis, and proper response (including initial care in the home and knowledge of basic treatment measures);
- e) standardize dengue case reporting throughout the Region to improve informationsharing that allows all countries to be knowledgeable about the dengue situation as well as the nature of the circulating viruses, with case reporting to include clinical cases (probable cases), laboratory-confirmed cases, cases of dengue hemorrhagic fever, deaths due to dengue hemorrhagic fever/dengue shock syndrome and serotypes identified;
- f) implement emergency modes of action and preparedness for outbreaks and epidemics;
- g) review the role of insecticides in dengue prevention and control programs, so as to better incorporate them in a comprehensive program.

2. To request the Director to:

- a) continue promoting the incorporation by Member States of social communication and community participation measures that encourage positive behavioral changes into their dengue prevention and control programs;
- b) continue to advocate the need to confront the threat of dengue and dengue hemorrhagic fever in Member States through intersectoral partnerships;
- c) assist Member States to strengthen dengue prevention and control programs by incorporating health education components in formal (basic) education systems;
- d) reinforce multisectoral actions which encourage the development of healthy habits in the community, such as ecoclubs, healthy housing, and other environmentally oriented initiatives;

- e) promote training of health workers at all levels to improve their capacity to address the ever-mounting dengue burden on society.
- f) as resources permit, give due attention and allocate resources within the Secretariat, as well as in the technical cooperation to the countries, in order to meet the great challenge that dengue, dengue hemorrhagic fever, and potential reurbanization of yellow fever pose to the Region.