

Preface



Dengue fever is the fastest emerging arboviral infection spread by *Aedes* mosquitoes with major public health consequences in over 100 tropical and sub-tropical countries in South-East Asia, the Western Pacific and South and Central America. Up to 2.5 billion people globally live under the threat of dengue fever and its severe forms—dengue haemorrhagic fever (DHF) or dengue shock syndrome (DSS). More than 75% of these people, or approximately 1.8 billion, live in the Asia-Pacific Region. As the disease spreads to new geographical areas, the frequency of the outbreaks is increasing along with a changing disease epidemiology. It is estimated that 50 million cases of dengue fever occur worldwide annually and half a million people suffering from DHF require hospitalization each year, a very large proportion of whom (approximately 90%) are children less than five years old. About 2.5% of those affected with dengue die of the disease.

Outbreaks of dengue fever in the 1950s and 1960s in many countries of the Asia-Pacific Region led to the organization of a biregional seminar in 1964 in Bangkok, Thailand, and a biregional meeting in 1974 in Manila, Philippines. Following these meetings, guidelines for the diagnosis, treatment and control of dengue fever were developed by the World Health Organization (WHO) in 1975. WHO has since then provided relentless support to its Member States by way of technical assistance, workshops and meetings, and issuing several publications. These include a set of revised guidelines in 1980, 1986 and 1995 following the research findings on pathophysiology and clinical and laboratory diagnosis. The salient features of the resolution of the Forty-sixth World Health Assembly (WHA) in 1993 urging the strengthening of national and local programmes for the prevention and control of dengue fever, DHF and DSS were also incorporated in these revised guidelines.

A global strategy on dengue fever and DHF was developed in 1995 and its implementation was bolstered in 1999. Subsequently, the awareness of variable responses to the infection presenting a complex epidemiology and demanding specific solutions necessitated the publication of the Comprehensive Guidelines for the Prevention and Control of Dengue/DHF with specific focus on the WHO South-East Asia Region in 1999. This document has served as a roadmap for Member States of the Region and elsewhere by providing guidance on the various challenges posed by dengue fever, DHF and DSS.

The 2002 World Health Assembly Resolution urged greater commitment to dengue from Member States and WHO. The International Health Regulations (2005) required Member States to detect and respond to any disease (including dengue) that demonstrates the ability to cause serious public health impact and spread rapidly globally. An Asia-Pacific Dengue Partnership was established

in 2007 to increase public and political commitment, to more effectively mobilize resources, and implement measures of prevention and control in accordance with the Global Strategy.

In 2008, a biregional (for the WHO South-East Asia and Western Pacific Regions) Asia-Pacific Dengue Strategic Plan (2008–2015) was developed to reverse the rising trend of dengue in the Member States of these regions. A voluminous quantity of research and studies conducted by WHO and other experts have additionally brought to light new developments and strategies in relation to case diagnosis and management of vector control, and emphasized regular sensitization and capacity-building. The publications underscored as well as reinforced the need for multisectoral partnerships in tandem with the revitalization of primary health care and transferring the responsibility, capability, and motivation for dengue control and prevention to the community, backed up by effective communication and social mobilization initiatives, for responsive behaviour en route to a sustainable solution of the dengue/DHF menace. This is important because dengue is primarily a man-made health problem attributed to globalization, rapid unplanned and unregulated development, deficient water supply and solid waste management with consequent water storage, and sanitary conditions that are frequently unsatisfactory leading to increasing breeding habitats of vector mosquitoes. All this, needless to say, necessitates a multidisciplinary approach.

In this edition of the ***Comprehensive Guidelines for the Prevention and Control of Dengue and Dengue Haemorrhagic Fever***, the contents have been extensively revised and expanded with the focus on new/additional topics of current relevance to Member States of the South-East Asia Region. Several case studies have been incorporated to illustrate best practices and innovations related to dengue prevention and control from various regions that should encourage replication subsequent to locale- and context-specific customization. In all, the *Guidelines* have 14 chapters that cover new insights into case diagnosis and management and details of surveillance (epidemiological and entomological), health regulations, vector bioecology, integrated vector management, the primary health care approach, communication for behavioural impact (COMBI), the Asia-Pacific Dengue Strategic Plan, case investigation, and emergency preparedness and outbreak response that has been previously published elsewhere by WHO and others.

This revised and expanded edition of the *Guidelines* is intended to provide guidance to national and local-level programme managers and public health officials as well as other stakeholders – including health practitioners, laboratory personnel and multisectoral partners – on strategic planning, implementation, and monitoring and evaluation towards strengthening the response to dengue prevention and control in Member States. The scientists and researchers involved in vaccine and antiviral drug development will also find crucial baseline information in this document.

It is envisioned that the wealth of information presented in this edition of the *Guidelines* will prove useful to effectively combat dengue fever, DHF and DSS in the WHO South-East Asia Region and elsewhere; and ultimately reduce the risk and burden of the disease.



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