# HANDBOOK FOR CLINICAL MANAGEMENT OF DENGUE





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# Handbook for clinical management of dengue

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### Foreword

Since publication of the new edition of *Dengue: Guidelines for diagnosis, treatment, prevention and control* by the World Health Organization (WHO) in 2009<sup>1</sup>, the need to provide more training to health-care workers in this area has become increasingly evident. Existing training materials need to include more detail to help clinicians recognize the evolution of the course of dengue disease in its various forms of severity, and to enable them to apply the knowledge and principles of management accordingly.

With this aim in mind and following previous successful collaborations, the WHO Department of Control of Neglected Tropical Diseases (WHO/NTD) and the Special Programme for Research and Training in Tropical Diseases (WHO/TDR), set out to develop new training materials.

This handbook has been produced to be made widely available to health-care practitioners at all levels. Aspects of managing severe cases of dengue are also described for practitioners at higher levels of health care. Additional and more specific guidance on the various areas related to clinical management of dengue (from other sources in WHO and elsewhere) are cited in the reference sections.

Contributions and reviews, by many experts both within and outside WHO, have facilitated the preparation of this publication through consultative and peer review processes. We are most grateful to all contributors who are listed in the acknowledgements section.

This handbook is not intended to replace national treatment training materials and guidelines but it aims to assist in the development of such materials produced at a local, national or regional level. All information is up-to-date at the time of writing, to the best knowledge of the authors.

<sup>&</sup>lt;sup>1</sup> Available from: <u>http://whqlibdoc.who.int/publications/2009/9789241547871\_eng.pdf</u>, last accessed July 2012.

## Methodology

This handbook was developed as outlined below:

#### Writing team

Each chapter was allocated to one lead writer who received a small fee for their work. Declarations of interest were obtained from all lead writers and no conflicting interests were declared as a result. The lead writers were chosen because of their expertise in the field and their willingness to undertake the work.

#### Peer review

All the chapters were submitted for peer review. The group of peer reviewers was determined by the coordinator and lead writers in consensus, not excluding any potential peer reviewer for a particular view. The peer reviewers were not paid for their work. Declarations of interest were obtained from all peer reviewers and no conflicting interests were declared.

For each chapter, resolution of disputed issues arising from the comments of the peer reviewers was achieved by electronic mail discussion within the group of lead writers.

#### Acknowledgements

Dr Lucy Chai See Lum of the University of Malaya, Kuala Lumpur, Malaysia was the contract holder for the development of the handbook. Funds were made available by the World Health Organization's Department of Control of Neglected Tropical Diseases (WHO/NTD). Dr Lum was responsible for coordinating the lead authors of all chapters.

Dr Silvia Runge-Ranzinger coordinated the finalization of the handbook with the help of Dr Olaf Horstick (WHO/TDR) and Dr Raman Velayudhan (WHO/NTD).

Lead writers for chapters were: Dr Lucy Chai See Lum; Dr Maria Guadalupe Guzmán; Dr Eric Martinéz; Dr Lian Huat Tan; Dr Nguyen Thanh Hung.

The handbook was peer reviewed by the following individuals:

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