

Guidelines for Prevention & Control of Chikungunya Fever



**World Health
Organization**

Regional Office for South-East Asia

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Preface



Chikungunya is an emerging, epidemic-prone, vector-borne disease of considerable significance and prevalence in Member countries of World Health Organization (WHO) South-East Asia (SEA) Region. The disease has been reported from countries of South and East Africa, South Asia and South-East Asia. In the WHO South-East Asia Region, outbreaks have been reported from India, Indonesia, Myanmar, Sri Lanka, Thailand and Maldives. Massive outbreaks of chikungunya fever (CF) have occurred in recent years in India and in the island countries of the Indian Ocean. Maldives reported outbreaks of chikungunya fever for the first time in December 2006. Although not a killer disease, high morbidity rates and prolonged polyarthritis leading to considerable disability in a section of the affected population due to chikungunya fever can cause substantial socioeconomic impact in affected countries.

Factors held responsible for the recent resurgence of chikungunya fever in and around the Indian subcontinent include viral mutation and emergence of *Aedes albopictus* as a more efficient vector, besides *Aedes aegypti* for the transmission of the disease. The lack of herd immunity and inefficient vector control activities in the affected areas are other important factors.

Socioeconomic factors and inadequacies in public health that facilitated the spread of this infection in the past continue to exist. Environmental factors and community behaviours play a significant role in the outbreak and spread of chikungunya. Heavy rains followed by stagnation of rain water in flower pots, broken and abandoned pots and utensils in and around the houses, abandoned vehicular tyres in the vicinity of human dwellings or workplaces or in any other container that allows accumulation and stagnation of water promote the breeding of mosquitoes of the *Aedes* family. There is an urgent need to strengthen national surveillance and

response capacity by securing multisectoral support and active participation of the communities to prevent and contain this emerging infectious disease.

Specific treatment is not available and there is also no vaccine for the prevention of chikungunya fever. Vector control is the only way to prevent and control the outbreaks. Vector control is not an easy task and the spraying of insecticide is not always effective and desirable. It is necessary to adopt the strategy of integrated vector management to tackle the vector. The emergence of the disease in the SEA Region made us realize for the first time that there is no available expertise or standard guideline for the proper surveillance, clinical case management, and control and prevention of chikungunya fever. In addition, many countries of the Region lack technical and financial resources for case detection, surveillance and management. The socioeconomic burden of the disease can be devastating in the outbreak areas due to very high attack rate affecting a large section of the population, sometimes as high as 45% of all inhabitants. Therefore, outbreaks of chikungunya fever have to be viewed as a political issue requiring administrative intervention. There is a need to understand the epidemiology of the disease in every country of the Region so as to develop and implement a rational policy on its prevention and control. With that objective, the WHO regional office for SE Asia has developed a regional strategy consisting of six key components. The six components of the regional strategy are:

- (1) Strengthening surveillance system for prediction, preparedness, early detection and response to chikungunya outbreaks.
- (2) Improvement in early case detection and case management of chikungunya fever.
- (3) Integrated vector management (IVM).
- (4) Social mobilization and communication.
- (5) Partnerships.
- (6) Operational research.

This guideline for the prevention and control of chikungunya fever (CF) is intended for use by all peripheral health workers in the Region and is based on the strategy outlined above. This document will focus mainly on preventing, predicting and detecting outbreaks, and after detection, investigating and containing them.

There are important gaps in our knowledge base about chikungunya fever and priorities for research have been outlined in a separate SEARO publication. A set of guidelines for the case management of CF, based on our current level of understanding of the disease, has also been proposed recently as a separate publication.

I hope that this guideline will be useful for its intended users and will contribute substantially to strengthening of measures for the prevention and control of chikungunya in the Region and beyond.



Dr Samlee Plianbangchang
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