

PREFACE

In the 1950s and 1960s, the spectacular success of the campaigns to eliminate urban yellow fever by eradicating the *Aedes aegypti* mosquito, also put a major dent in the transmission of dengue fever. Unfortunately, that situation has slipped since then.

As *Aedes aegypti* eradication campaigns deteriorated during the 1970s and 1980s, the mosquito proliferated and spread to nearly every corner of the Region. Not surprisingly, dengue activity increased, reaching staggering levels in that last decade.

During the 1980s, Bolivia, Brazil, Ecuador, Paraguay, and Peru, five countries that either had been free of dengue for several decades or had never recorded the disease, suffered explosive outbreaks. Moreover, in 1993, the only tropical Latin American countries that had remained free of dengue—Costa Rica and Panama—reported indigenous transmission of the disease. Millions of persons are estimated to have been infected during the outbreaks in those seven countries alone.

More alarming than the spread of dengue has been the fact that the disease's most severe form, dengue hemorrhagic fever/dengue shock syndrome (DHF/DSS), has gained a foothold in the Americas. In 1981, Cuba succumbed to the most serious DHF/DSS outbreak ever recorded in the Region—344,203 dengue and DHF cases were reported, including 10,312 severely ill patients and 158 deaths. Venezuela suffered the second most serious outbreak in 1989–1990, with 5,990 DHF cases and 70 deaths, and smaller epidemics have been reported in El Salvador in 1987–1988 and in Brazil and Colombia in the 1990s. Excluding the figures from the DHF epidemic in Cuba, about 10,100 DHF cases and 165 deaths had been reported in the Region up to 1992. As DHF/DSS becomes endemic in several countries, the Americas might face a situation similar to Asia's, in which several hundred thousand cases are reported in certain years. In any event, the toll from this disease is already unacceptably high.

Dengue's meteoric rise made it imperative to have guidelines for the disease's prevention and control, especially since previously published guides, manuals, and plans of action were either incomplete or out-of-date. In order to fill this need, at the end of 1991 the Pan American Health Organization gathered experts in various aspects of dengue and DHF/DSS from several of the affected countries, so that they could update existing materials and develop a new set of guidelines. That meeting marked the birth of this book.

These guidelines break new ground by dealing with the vector as much as with the disease itself. In a fundamental departure from previous eradication efforts, this book's approach stresses a comprehensive vector control effort that brings together all possible safe, effective, and economical control methods to keep vector populations at acceptable levels. To that end, the importance of environmental management has been underscored.

Much consideration also has been given to the elements necessary for sustaining effective dengue prevention and control programs. Besides a comprehensive vector control effort, this complex endeavor will require political, financial, and legislative commitments, as well as a well-planned, decentralized program structure and cooperation within and outside the health sector. Last, but far from least, is the essential role to be played by the community and the importance of utilizing health promotion. Because dengue is basically a problem of domestic sanitation, these guidelines highlight the community's active involvement in dengue prevention and control activities.

The Pan American Health Organization has published these guidelines as a contribution to the ongoing battle against dengue, and in the hopes that the Region once again may be poised at the brink of the disease's control and, ultimately, its eradication.

Carlyle Guerra de Macedo
Director