EXECUTIVE SUMMARY

Dengue is a major public-health concern throughout tropical and sub-tropical regions of the world. It is the most rapidly spreading mosquito-borne viral disease, with a 30-fold increase in global incidence over the past 50 years. The World Health Organization (WHO) estimates that 50–100 million dengue infections occur each year and that almost half the world’s population lives in countries where dengue is endemic. While dengue is a global concern, with a steady increase in the number of countries reporting the disease, currently close to 75% of the global population exposed to dengue are in the Asia-Pacific region.

Epidemics of dengue result in human suffering, strained health services and massive economic losses. In some countries, the burden of dengue is comparable to that of tuberculosis and other communicable diseases with high disease burdens; unexpected surges in cases and the challenge to health systems of triaging thousands of cases without knowing which severe cases will require hospital care are additional challenges. There has not, however, been concerted action against dengue, and the 1995 WHO strategy1 warrants revision in the light of new advances. This Global strategy for dengue prevention and control, 2012–2020 aims to address this need.

The goal of the global strategy is to reduce the burden of dengue. The specific objectives are to reduce mortality and morbidity from dengue by 2020 by at least 50% and 25% respectively (using 2010 as the baseline). These objectives can be achieved by applying existing knowledge.

Dengue mortality can be reduced by implementing early case detection and appropriate management of severe cases; reorienting health services to identify early cases and manage dengue outbreaks effectively; and training health personnel, along with appropriate referral systems, at primary health-care levels.

Dengue morbidity can be reduced by implementing improved outbreak prediction and detection through coordinated epidemiological and entomological surveillance; promoting the principles of integrated vector management and deploying locally-adapted vector control measures including effective urban and household water management. Effective communication can achieve behavioural outcomes that augment prevention programmes.

Research will continue to play an important role in reversing the trend in dengue, a neglected tropical disease, by improving methods and systems for surveillance, prevention and control.

Reversing the trend requires commitments and obligations from partners, organizations and countries, as well as leadership by WHO and increased funding. Fund-raising is probably best addressed by a combined effort, with consideration for dengue as a public health problem in countries with substantial local and national funding resources that must be effectively channelled through sound technical support. Dengue prevention and management can now exploit opportunities presented by promising advances in vector control technology interventions, diagnostics, prognostic systems for triage, evidence-based clinical interventions and candidate vaccine developments. In order to realize these opportunities, we need to ensure they are implemented, coordinated and adequately resourced.