Sustaining the drive to overcome the global impact of neglected tropical diseases: second WHO report on neglected tropical diseases


Summary
In January 2012, the World Health Organization (WHO) published a roadmap setting targets for the prevention, control, elimination and eradication of 17 neglected tropical diseases (NTDs) or conditions: Buruli ulcer, Chagas disease, taeniasis/cysticercosis, dengue, dracunculiasis, echinococcosis/hydantosisis, endemic treponematoses, foodborne trematodiases, human African trypanosomiasis, the Leishmaniases, leprosy, lymphatic filariasis, onchocerciasis, rabies, schistosomiasis, trachoma and soil-transmitted helminthiases. The roadmap marked a major strategic advance since the publication in 2010 of WHO’s first report on NTDs, which set targets for the eradication of dracunculiasis (2015) and yaws (2020). Furthermore, 6 targets were set for the elimination of 5 NTDs by 2015, and a further 10 elimination targets were set for 2020, either globally or in selected geographical areas, for 9 NTDs. The roadmap also set out targets for intensified control of dengue, Buruli ulcer, cutaneous Leishmaniasis, selected zoonoses and helminthiases. The roadmap inspired the *London declaration on neglected tropical diseases*, endorsed by partners and stakeholders in January 2012 who pledged to sustain, expand and extend control, elimination and eradication programmes to ensure the necessary supply of medicines and other interventions. The impact and wide dissemination of the London declaration demonstrate that the global public-health agenda now embraces NTDs.

This second report further elaborates concepts discussed in the roadmap, describes the need for sustainable progress, and examines the challenges in implementation encountered by Member States, WHO and their partners, with the following highlights:

· Since 2012, a significant increase in donated medicines has allowed WHO to scale up the delivery of preventive chemotherapy. As of 2012, 700 million tablets of albendazole or mebendazole have been delivered annually to treat school-aged children. Programmes in countries where soil-transmitted helminthiases are endemic have already requested an additional 150 million tablets – a figure indicative of the significant increase in treatment coverage. For schistosomiasis, it is expected that improved access to praziquantel will enable an estimated 235 million people to be treated by 2018.

· Impressive progress is being made towards eradicating dracunculiasis; it is estimated that eradication of the disease will yield a 29% increase in economic returns for the agricultural sector of countries where the disease is no longer endemic. Heightened community-based surveillance activities, used together with national programmes of integrated disease surveillance and response, are expected to intensify case detection and the subsequent containment of cases, and further reduce transmission in the drive towards eradication. Despite achievements and successes, operational challenges remain in Chad, Ethiopia, Mali and South Sudan.

· WHO’s new Morges strategy aims at eradicating yaws by 2020 using a new treatment policy designed to replace those developed in the 1950s, which mainly centred on delivering injections of
benzathine benzylpenicillin. Published in January 2012, the findings of a study in Papua New Guinea show that a single dose of oral azithromycin is as effective as intramuscular benzathine benzylpenicillin in treating yaws, thus revitalizing prospects for eradication through the delivery of mass treatment to infected and at-risk populations in the estimated 14 endemic countries. This new strategy of treating the entire community overcomes the eliminations of penicillin in injections, which require trained health-care personnel to deliver case by case treatment.

The report analyzes the opportunities to provide public health interventions globally after the decisive technical briefing on NTDs chaired by the President of the Sixty-fifth World Health Assembly, Her Excellency Professor Thérèse Aya N’dri-Yoman, the Minister of Health of Côte d’Ivoire, in May 2012. Convened at the behest of countries where these diseases are endemic, the meeting noted the “unprecedented force” characterizing the global effort against NTDs, and encouraged Member States to increase cooperation with one another and strengthen their political commitment in order to sustain the goals and meet the targets of WHO’s roadmap. This report emphasizes the need for national programmes to continue developing a culture of integrated and coordinated planning and programme management to enable programmes to scale up effectively and encourage commitment from governments.

The work of overcoming NTDs builds on five public health strategies: (i) preventive chemotherapy; (ii) innovative and intensified disease management; (ii) vector control and pesticide management; (iv) safe drinking water, basic sanitation and hygiene services, and education; and (v) veterinary public-health services. Although one approach may predominate for the control of a specific disease or group of diseases, evidence suggests more effective control results when several approaches are combined and delivered locally.

In order to measure progress towards the roadmap’s targets, this report defines the concepts of elimination and eradication for some NTDs and expands that of universal health coverage as it applies to NTDs. Universal coverage of prevention and control interventions for NTDs depends critically on strong and efficient health systems, access to essential medicines of assured quality at affordable prices, a well-trained and motivated work force, as well as the involvement of sectors other than health, including finance, education, agriculture and veterinary public health, water and sanitation, and environmental management.

This report discussed the phase implementation of the roadmap, identifies associated challenges, and proposes plans to mitigate some of the challenges. Obstacles and risks to implementation are as diverse as the diseases themselves, and are invariably linked: some include the effects of natural disasters and human conflicts that result in the displacement of millions of people, and disrupt public-health interventions and disease surveillance.

The transmission and persistence of pathogens responsible for NTDs depend on vectors or intermediate hosts. Thus, there is the risk that sufficient access to medicines alone will not enable targets to be achieved if measures to control vectors or their intermediate hosts and species are inadequate. In 2012, dengue ranks as the most important mosquito-borne viral disease with an epidemic potential in the world. There has been a 30-fold increase in the global incidence of dengue during the past 50 years, and its human and economic costs are staggering. The world needs to change its reactive approach and instead implement sustainable preventive measures that are guided by entomological and epidemiological surveillance.
· Innovative and intensified management for treating diseases that are difficult to diagnose and that cause severe complications requires specific approaches tailored to the features of each disease; to the various forms of infections; to available tools, medicines and technical abilities; and the mobility and readiness of decentralized medical teams to detect patients and manage individual cases. For dengue, Chagas disease, lymphatic filariasis, the Leishmaniases and onchocerciasis – the vector-borne diseases that account for an estimated 16% of the burden of infectious diseases – vector control remains key to reducing transmission.

· Sufficient human-resources capacity (both technical and managerial) is required to support the scaling up of interventions at all levels of national health-care systems as well as to mobilize resources. WHO’s new Working Group on Capacity Strengthening has been active since December 2012.

· Notwithstanding global economic constraints, support from Member States and their partners must be expanded to ensure that new products are developed for preventing, diagnosing and controlling these diseases; that services continue to expand; and that much-needed improvements to health systems are made. Expertise in preventing and controlling some NTDs, and managing their vectors, will have to be enhanced if the targets set by the World Health Assembly in many resolutions over the years are to be met.

**Recommended readings:**

1 Accelerating work to overcome the global impact of neglected tropical diseases: a roadmap for implementation. Geneva, World Health Organization, 2012 (WHO/HTM/NTD/2012.1)

“NTD News for Africa” is a monthly electronic newsletter whose aim is to disseminate state-of-the-art research and policy papers to scientists, program planners, policy makers, and opinion leaders working in the field of NTD control in Africa. It is a joint initiative by Liverpool School of Tropical Medicine, Centre for Neglected Tropical Diseases, Sightsavers and Helen Keller International, Regional Office for Africa. We encourage members of this network to suggest possible documents of interest and to provide feedback on the articles selected. “NTD News for Africa” is published in English, French and Portuguese.

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