



World Health Organization (WHO)

Measures to combat the rising threat of neglected tropical diseases
(NTDs) in LEDC's

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Forum: World Health Organization (WHO)

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Introduction:

Neglected tropical diseases (NTDs) are a diverse group of conditions mainly prevalent in tropical areas, where they thrive among people living in impoverished communities. They are caused by a variety of pathogens, including viruses, bacteria, parasites, fungi, and toxins, and they are responsible for devastating health, social, and economic consequences.

NTDs are largely common among impoverished communities in tropical areas, although some have a much larger geographical distribution. It is estimated that NTDs affect more than 1 billion people, while the number of people requiring NTD interventions (both preventive and curative) is 1.5 billion. The epidemiology of NTDs is complex and often related to environmental conditions. Many of them are vector-borne, have animal reservoirs, and are associated with complex life cycles. All these factors make their public health control challenging.

Definition of key terms:

DALY's

Disability adjusted life years are a universal measurement that researchers and policymakers use to calculate how diseases and medical conditions affect the length and quality of life for a given population.

LEDC's

Less economically developed country: they are defined by having less GDP and are more susceptible to environmental and economic damage.

PLoS Neglected Tropical Diseases

A peer-reviewed open access scientific journal devoted to the study of neglected tropical diseases. Opened in 2007, published by the Public Library of Science.



SDG1

Sustainable Development Goal 1, focusing on no poverty, on global scale. Aiming to end poverty in all its forms everywhere.

SDG3

Sustainable development goal 3, focusing on good health and wellbeing. Aiming to ensure good health and wellbeing for all at all ages.

General Overview

Neglected tropical diseases, take a tremendous toll on global health. The World Health Organization estimates that more than one billion people — approximately one-sixth of the world's population — suffer from at least one NTD. While NTD's rarely lead to death, they can cause significant disability that persists for a lifetime, including fatigue, blindness, and disfigurement. Sufferers miss school, which lead to a lack of education, are unable to work, or are too embarrassed to seek medical care. By diminishing quality of life and opportunities to succeed, NTD's can reinforce the cycle of poverty among the world's disadvantaged populations.

A few examples of NTD's that create a threat towards society:

Ascariasis: caused by a parasitic roundworm called *Ascaris lumbricoides*, ascariasis is common in areas where sanitation and hygiene are poor. The disease often causes only mild symptoms (or no symptoms at all), but in cases of high worm infestation, ascariasis can lead to severe abdominal pain, vomiting, restlessness, and sometimes death.

Buruli ulcer: caused by *Mycobacterium ulcerans*, an organism from the same family of bacteria that causes tuberculosis and leprosy, Buruli ulcer can lead to massive skin ulceration, usually on the legs or arms. If untreated, the disease can spread to the bones and cause long-term disability.

Hookworm: A common parasitic roundworm infection, hookworm disease can be contracted by walking barefoot on soil contaminated by feces. Symptoms of the disease include diarrhea, abdominal pain, and nausea. Chronic, or long-lasting, hookworm infections can cause severe blood loss and anemia.

Awareness and neglect

They are 'neglected' because they are almost absent from the global health agenda. Even today, when the focus is on universal health coverage, NTD's have very limited resources and are



almost ignored by global funding agencies. NTD's tend to thrive in developing regions of the world, where water quality, sanitation, and access to health care are substandard. However, some of these diseases also are found in areas of the United States with high rates of poverty; in addition, they are associated with stigma and social exclusion.

To spread awareness of the danger and rising threat of NTD's, the World Health Organization recognized 30 January as World Neglected Tropical Disease (NTD) Day. This decision formalized that specific date as a day to create better awareness on the devastating impact of NTD's on the poorest populations around the world. The day is also an opportunity to call on everyone to support the growing momentum for the control, elimination and eradication of these diseases.

In addition to significant mortality and morbidity - approximately 120,000 deaths and 14.1 million disability adjusted life years (DALYs) lost annually, NTD's cost developing communities the equivalent of billions of United States dollars each year in direct health costs, loss of productivity and reduced socioeconomic and educational attainment. They are also responsible for other consequences such as disability, stigmatization, social exclusion and discrimination and place considerable financial strain on patients and their families.

In spite of this, NTD's have historically ranked very low and almost absent from the global health policy agenda – only to gain recognition in 2015 with the Sustainable Development Goals (SDG). SDG3 (focusing on good health and wellbeing) can therefore be achieved only if the NTD goals are met but, because interventions to tackle NTD's are widely cross-sectoral, increasing their global prioritization can in fact catalyze progress to achieve all SDGs.

COVID-19

The COVID-19 Pandemic caused a lot of health programmes to be held back. The most frequently and severely affected by the pandemic across health systems are the NTD programmes. Many countries had to delay community-based interventions such as preventive chemotherapy or active case-finding, while access to health-facility services dropped because of movement restrictions for both health staff and patients. For example, in 2020, the number of people reached by mass treatment interventions dropped to 762 million from 1.164 billion in 2019. Although a resumption of activities has occurred from 2021 onwards, the observed recovery is still partial and far from pre-COVID-19 levels. In 2023, people treated were 857 million.



In 2020–2022, the need to address the COVID-19 emergency determined a reprioritization of resources to other areas, in cash and kind. Production and supply lines for medicines and diagnostics were repurposed to support the need for products in high demand during the pandemic, and shipment of commodities to countries was severely disrupted. Financial support to NTD programmes was also affected at all levels, from global to local, jeopardizing job security and activities. While it would have been expected that the progressive decrease of the public health relevance of the COVID-19 pandemic would witness a return to normality, this has not been the case.

Key Events Timeline

1976,	Establishment of the World Health Organization (WHO) Special Programme for Research and Training in Tropical Diseases (TDR)
2007,	Establishment of the PLoS Neglected Tropical Diseases
30 Jan. 2012,	The formalization of World NTD Day
2012,	Creation of the WHO roadmap to eliminate NTD's globally
27 sept. 2015,	Adoption of the Sustainable Development Goals
2021,	Adoption of the longer term roadmap by the WHO
2020-2022,	COVID-19 Pandemic

Principal Stakeholders

China

Since the founding of the People's Republic of China in 1949, considerable progress has been made in the control and elimination of the country's initial set of 11 neglected tropical diseases. Indeed, elimination as a public health problem has been declared for lymphatic filariasis in 2007 and for trachoma in 2015. Sustained social and economic development, going hand-in-hand with improvement of water, sanitation, and hygiene provide the foundation for continued progress, while rigorous surveillance and specific public health responses will consolidate achievements and shape the elimination agenda. Targets for poverty elimination and strategic plans and



intervention packages post-2020 are important opportunities for further control and elimination, when remaining challenges call for sustainable efforts.

A recent Global Burden of Disease analysis for China found that the NTD's are responsible for 3.7 million disability adjusted life years (DALYs) lost annually, more than the DALY's lost from HIV/AIDS and tuberculosis.

Nigeria

Nigeria is also known as 'ground zero', when spoken about NTD's. It ranks first in SSA in terms of the number of cases of all three intestinal helminth infections, schistosomiasis, LF, and onchocerciasis. Following publication of this information, the government of Nigeria redoubled efforts to expand NTD control and elimination efforts.

South-East Asia

While progress is promising, major challenges remain. One of the most pressing is the need to develop a new generation of public health leaders across South-east Asia – people who can lead research and development, champion vaccine production and help shape policy based on local needs. These leaders will be essential for ensuring that South-east Asia becomes not just a regional health player, but also a global one. Another key challenge is regulatory. In a diverse region like South-east Asia, varying national policies can slow innovation and emergency responses. Streamlining and harmonising these systems is essential for responding quickly and effectively during future outbreaks or pandemics.

South-east Asia has the potential to become a global hub for vaccine manufacturing. The region benefits from growing scientific and industrial capacity, relative political stability and a shared interest in tackling shared health threats. It also has a strong case to lead the fight against NTDs, which continue to disproportionately affect its populations. South-east Asia stands at a critical juncture. With strategic investment, regional leadership and cross-border collaboration, the region can protect its people, drive innovation and shape the future of global health.

United States of America

Over the past nearly twenty years, U.S. attention to and funding for NTD's have increased markedly. Historically, the U.S. government's response to NTD's was relatively limited, focusing largely on research and surveillance conducted by the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and the Department of Defense (DoD). In 2006, Congress first appropriated funds to the U.S. Agency for International Development (USAID) for integrated NTD control, after which the agency launched its NTD Program. In 2008, the U.S. announced expanded NTD efforts, building on USAID's NTD



Program. In 2012, the U.S. signed onto the London Declaration, and shortly afterward, the U.S. adopted a longer term global health goal of protecting communities from infectious diseases and highlighted the important role of NTD efforts in achieving this goal.

Potential Avenues for Resolution

The London Declaration on NTD's 2012:

The London Declaration on NTD's resulted from a summit held in 2012 by Uniting to Combat NTD's. It is a pledge made by governments, donor agencies, pharmaceutical companies, research institutions, non-governmental organisations, and other stakeholders in the international health community to collaborate in their efforts stop NTD's. The Declaration defined a number of goals and deliverables which were set to be achieved by the year 2020.

The London Declaration marked a pivotal moment in the fight against NTD's, as it created awareness of these previously neglected diseases and momentum for control programmes. The Declaration catalysed a significant increase in funding, advocacy, and expertise dedicated to NTD control.

The expanded version of the roadmap by the WHO:

The London Declaration from 2012 did not meet success, thus the World Health Organization expanded the roadmap to 2030. Hoping to meet success along the way, as the world is reaching the future. The ambitious roadmap is planning to eliminate NTD's in 100 nations, and to achieve SDG3, focusing on good health and wellbeing, as well as SDG1, focusing on no poverty.

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