



UNITING TO COMBAT
NEGLECTED TROPICAL DISEASES

Briefing Document on Neglected Tropical Diseases



‘If we are serious about universal health coverage, we must intensify our efforts and our commitment to control, eliminate or eradicate these diseases by 2020’

Dr Tedros Adhanom Ghebreyesus
Director-General, World Health Organization

‘Thanks to this partnership, these neglected diseases are now getting the attention they deserve so fewer people have to suffer from these treatable conditions. There have been many successes in the past 5 years, but the job is not done yet.’

Bill Gates
Bill & Melinda Gates Foundation

‘In 2018 we became the first sub-Saharan African country to eliminate blinding trachoma. A painful and disabling disease. We cannot achieve the SDGs without addressing the needs of the poorest members of our society who are disproportionately affected by neglected tropical diseases. I urge my fellow African leaders to prioritise ending these diseases of poverty on the continent. We have shown that it can be done.’

Nana Akufo-Addo
President of the Republic of Ghana

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1 **Neglected tropical diseases, or NTDs,** are a group of debilitating infectious diseases that affect over 1.6 billion people worldwide. They disable, disfigure and sometimes kill - keeping children out of school, adults out of work and trapping communities in endless cycles of poverty.

2 Whilst NTDs are present in 149 countries, they thrive in areas where access to healthcare, adequate sanitation and clean water is limited, such as in remote and rural areas, informal settlements or conflict zones. They affect some of the world's poorest, most marginalized and remote communities, predominantly in Africa, Asia and the Americas, costing developing economies billions of dollars every year.

3 The World Health Organization (WHO) currently prioritizes 20 NTDs. In 2011, the WHO published its NTD roadmap with bold new targets to eliminate several of these diseases by 2020, including the eradication of Guinea worm disease. The roadmap also set targets for the intensified control of the remaining NTDs.



4 In January 2012, in response to the WHO NTD 2020 Roadmap, a community of partners (Uniting to Combat NTDs) endorsed the London Declaration on Neglected Tropical Diseases. The Declaration brought together international global health and development organizations as well as partners from donor agencies and pharmaceutical companies who committed to work together to control, eliminate or eradicate 10 of the NTDs in the roadmap. These 10 diseases had the necessary ingredients for immediate support to meet the roadmap goals.



5 Through the London Declaration on NTDs the signatories at the meeting committed themselves to (a) sustain, expand and extend programmes that ensure the necessary supply of medicines and other interventions; (b) advance research and development through partnerships and provision of funding to find next-generation treatments and interventions; (c) enhance collaboration and coordination at national and international levels; (d) enable adequate funding with countries endemic for NTDs to implement programmes necessary to achieve these goals, supported by strong and committed health systems at the national level; and (e) provide technical support, tools and resources to countries endemic for these diseases to evaluate and monitor those programmes.

6 Work on the prevention, control, elimination and eradication of these diseases focuses on five public health interventions: preventive chemotherapy;¹ innovative and intensified disease management; vector ecology and management; the provision of safe drinking water, basic sanitation and hygiene; and veterinary public health services.

1. In the context of neglected tropical diseases, preventive chemotherapy is defined as a public health intervention that allows the regular and coordinated administration of quality-assured, safe, single-dose medicines on a large scale for the prevention and control of the diseases.



7 Five NTDs covered by the London Declaration can be controlled through preventive chemotherapy commonly known as mass drug administration (MDA) — that is, large-scale and relatively inexpensive treatment with safe and effective medicines to all the people living in high-risk areas. Diseases amenable to MDA include elephantiasis (lymphatic filariasis), river blindness (onchocerciasis), bilharzia (schistosomiasis), intestinal worms (soil-transmitted helminths) and blinding trachoma.

8 The remaining five NTDs covered by the London Declaration can be controlled by what is known as innovative and intensified disease management. This involves individual diagnosis and treatment (including surgery where needed), care and rehabilitation of infected individuals. These include Chagas disease, Guinea worm disease, sleeping sickness (human African trypanosomiasis), leprosy and Kala-azar (visceral leishmaniasis).

9 Tremendous progress is being made as evidenced by WHO data for 2016 and 2017, which shows that more than one billion people have benefited from large-scale treatment of at least one NTD each year – **this is one of the largest public health interventions in history.**

10 Both the WHO roadmap and the London Declaration make clear that prevention and control of NTDs form an integral part of universal health coverage (UHC), one of the founding principles of the Sustainable Development Goals (SDGs). To achieve universal coverage against NTDs, the public health needs of poor people need to be prioritized through the delivery of interventions at sustainable cost.

11 As part of their commitment to the London Declaration, pharmaceutical companies have increased donation of medicines, making it one of the largest public-private partnerships on a global scale. In 2017 alone, 1.7 billion treatments were donated, enabling over one billion people to receive treatment for at least one NTD. In the same year, this incredible NTD drug donation programme was recognized with a Guinness World Record.

12 Universal coverage for prevention and control interventions against NTDs depends critically on stronger, more efficient health systems, access to essential medicines of assured quality at affordable prices, and a well-trained and motivated work force, as well as the involvement of other sectors including finance, education, agriculture and livestock, water supply, environment and management.



13 To foster such conditions, the 66th World Health Assembly adopted resolution WHA66.12 in May 2013. The resolution calls on Member States to intensify and integrate measures and plan investments to improve the health and social well-being of affected populations. WHO, with the support of an array of partners, is working with Member States to ensure the implementation of WHA66.12.

14 In December 2014, health ministers from 27 countries pledged to end NTDs in their countries by signing the Addis Ababa Commitment on Neglected Tropical Diseases. Five other countries have since joined, taking the total to 32.

15 The Group of Seven (G7) industrialized nations prioritized NTDs as one of three health topics during their summit in 2015. The Leaders' Declaration included clear commitments to 'invest in the prevention and control of NTDs in order to achieve 2020 elimination goals' through research and development, disease mapping, and community-based health systems strengthening.²

2. Leaders' Declaration G7 Summit (2015) The Federal Government of Germany. Retrieved from https://www.g7germany.de/Content/EN/_Anlagen/G7/2015-06-08-g7-abschluss-eng_en__blob=publicationFile&v=3.pdf



16 In September 2015, 193 world leaders agreed to the 17 Sustainable Development Goals (SDGs) aimed at ending all forms of poverty, fighting inequalities and tackling climate change, while ensuring that ‘no one is left behind.’

17 Sustainable Development Goal 3: Good Health & Well-Being (SDG3)³ seeks to ensure healthy lives and promote well-being for all at all ages. It includes 13 related health targets. A concerted effort by partners led to a specific target for NTDs added to SDG3, providing due recognition to NTDs erstwhile referred as ‘other diseases’ in the Millennium Development Goals (MDG6).

18 SDG target 3.3 states: ‘By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases’.

19 Moving forward, collaboration opportunities will continue to exist among the SDGs and NTDs, including efforts to fight hunger (SDG2), address inequality (SDG5), advance water and sanitation programmes (SDG6) and expand the effectiveness of existing global NTD partnerships (SDG17).

20 In 2016, Uniting to Combat NTDs welcomed the Expanded Special Project for Elimination of NTDs (ESPEN). The aim of ESPEN is to broaden the strategy against multiple NTDs in Africa, which carries 40% of the world’s NTD burden, by offering technical and financial assistance to countries, to ensure they reach every community and individual in need.

21 In April 2017, Uniting to Combat NTDs in association with the WHO celebrated the five year anniversary of the London Declaration. During the celebration, additional commitments were welcomed from new and existing partners.

22 In January 2018, an NTD indicator was added to the African Leaders’ Malaria Alliance Scorecard for Accountability and Action, which is reviewed every year at the African Union (AU) Summit. Through the indicator, African leaders made a public commitment to hold themselves accountable for progress on NTDs, alongside malaria and other health issues. Progress was reviewed again at the AU in 2019.

23 In December 2018, NTDs shared the stage with global stars and world leaders during the Global Citizen Mandela 100 concert in Johannesburg. 64,000 people attended, with millions more watching at home. Government and philanthropic commitments of US\$150 million were made to tackle NTDs in Africa.

24 The momentum behind the NTD movement is at a critical juncture. As 2020 approaches, the WHO is revising its NTD Roadmap to align with the SDGs. Despite the tremendous progress made since 2012, there is considerable work left to do. With increased investment and political commitments, the world really can beat NTDs.

3. United Nations Sustainable Development Goals. The Sustainable Development Agenda. Retrieved from <http://www.un.org/sustainabledevelopment/development-agenda/>

Five NTDs amenable to mass drug administration



ELEPHANTIASIS (lymphatic filariasis)

Treated with: Albendazole, ivermectin & DEC

Drugs donated by: GSK, MSD & Eisai

- Elephantiasis is a mosquito-transmitted disease that attacks the blood circulation system. It causes fever and, in time, severe swelling of the lower limbs and, in men, swelling of the scrotum
- The disease is painful, disfiguring and can lead to stigma. It is one of the world's leading causes of disability
- In 2017, 481m people were treated for the disease covering 54% of the population at risk
- Since the beginning of 2016, 14 countries have eliminated lymphatic filariasis as a public health issue – Cambodia, Cook Islands, Egypt, the Maldives, the Marshall Islands, Niue, Sri Lanka, Thailand, Togo, Tonga, Palau, Vanuatu, Vietnam and Wallis & Futuna



RIVER BLINDNESS (onchocerciasis)

Treated with: Ivermectin

Drugs donated by: MSD

- River blindness is a parasitic worm infection spread by blackflies, which are found near fast-flowing rivers and streams.
- Worms produce larvae that move to the skin, eyes and other organs. This can lead to debilitating itching, disfiguring skin conditions and irreversible sight loss
- In 2017, 146m people were treated for the disease covering 71% of the population at risk
- Guatemala (2016), Mexico (2015), Ecuador (2014) and Colombia (2013) have all been declared river blindness-free



BILHARZIA (schistosomiasis)

Treated with: Praziquantel

Drugs donated by: Merck KGaA

- Bilharzia is a parasitic infection spread by freshwater snails. Poor hygiene and swimming make children particularly vulnerable
- The infection causes malnutrition, impaired intellectual development & chronic disease later in life, one of which is female genital schistosomiasis that can triple the risk of HIV
- In 2017, 85m school-aged children were treated for the disease covering 71% of the children at risk



INTESTINAL WORMS (soil-transmitted helminths)

Treated with: Albendazole & mebendazole

Drugs donated by: GSK & J&J

- Intestinal worms are a group of disease causing parasites that multiply inside the intestines – including roundworm, whipworm and hookworm
- The worms cause anaemia, malnutrition and stunted growth. Intestinal worms are spread by poor sanitary conditions and are transmitted by contaminated soil and water
- In 2017, 604m children were treated for the disease covering 69% of children at risk



BLINDING TRACHOMA

Treated with: Azithromycin

Drugs donated by: Pfizer

- Blinding trachoma is an eye disease caused by bacteria. Repeated infection forces the eyelashes to grow inwards, causing painful scratching and ultimately blindness
- Infection spreads through personal contact (via hands, clothes or bedding) and by flies that have been in contact with discharge from the eyes or nose of an infected person. It is the world's leading cause of infectious blindness
- In 2017, 84m people were treated for the disease covering 51% of the population at risk
- Oman (2012), Morocco (2016), Mexico (2017), Cambodia (2017), Lao People's Democratic Republic (2017), Nepal, Ghana and Iran (2018) have eliminated trachoma as a public health issue

Five innovative & intensified disease management NTDs



CHAGAS DISEASE

Treated with: Nifurtimox

Drugs donated by: Bayer

- Chagas disease is a parasitic infection transmitted by blood-sucking insects (called kissing bugs) which infest homes
- It can also be passed on by eating food contaminated by the insects, through blood transfusions, organ transplants and child birth. After a mild illness up to 40% of people eventually develop serious complications, including heart disease.
- It is estimated that 6-7m people are infected and 75m are at risk of the disease



GUINEA WORM DISEASE

No known cure

- Guinea worm, which is on the verge of eradication, is transmitted by contaminated water that contains water fleas infected with Guinea worm larvae
- Over time female worms in the body can grow over a meter long. They then begin to emerge from the skin through very painful blisters on the legs or feet. This is also accompanied by fever, nausea and vomiting.
- Treatment involves extracting adult worms over several weeks, risking secondary infection around the wound
- In 2018 there were only 28 new cases of Guinea worm disease, compared to the mid-1980s when there were an estimated 3.5m cases



SLEEPING SICKNESS (human African trypanosomiasis)

Treated with: Nifurtimox, eflornithine & pentamidine

Drugs donated by: Bayer & Sanofi

- Sleeping sickness is a parasitic disease transmitted to humans through the bites of infected tsetse flies
- In the first stage, the parasites multiply in the body causing fever, headaches, joint pain and itching. In the second stage, the parasites invade the central nervous system and brain, leading to confusion, behaviour changes, poor coordination and sleep disturbances. Without treatment it is fatal.
- In 2017, there were 1,447 recorded cases compared to nearly 40,000 in 1998, a 96% reduction
- In 2019, Fexinidazole was approved as the first all-oral therapy for sleeping sickness, revolutionizing treatment



LEPROSY

Treated with: Multidrug therapy

Drugs donated by: Novartis

- Leprosy is a chronic bacterial infection transmitted through droplets from the nose and mouth of affected people
- The first stage of leprosy leads to loss of sensation and muscle weakness in the face, hands and feet. If the disease is not detected and treated, it progresses to a second stage that causes permanent impairments, such as loss and shortening of fingers and toes, and can cause blindness.
- In 2017, just 210,671 new cases of leprosy were reported globally, however there are likely to be millions more living with undiagnosed leprosy



KALA-AZAR (visceral leishmaniasis)

Treat with: AmBisome

Drugs donated by: Gilead

- Kala-azar, or visceral leishmaniasis, is transmitted by sand flies that breed in and around homes and farms
- The disease attacks the immune system and affects the bone marrow and internal organs causing irregular bouts of fever, substantial weight loss and anaemia. Left untreated it can be fatal
- From 2012 to 2017, the number of visceral leishmaniasis cases more than halved, from approximately 46,000 to 22,000



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Website: www.unitingtocombatntds.org

Email: info@unitingtocombatntds.org

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