

Policy brief

# Neglected tropical diseases

Sightsavers

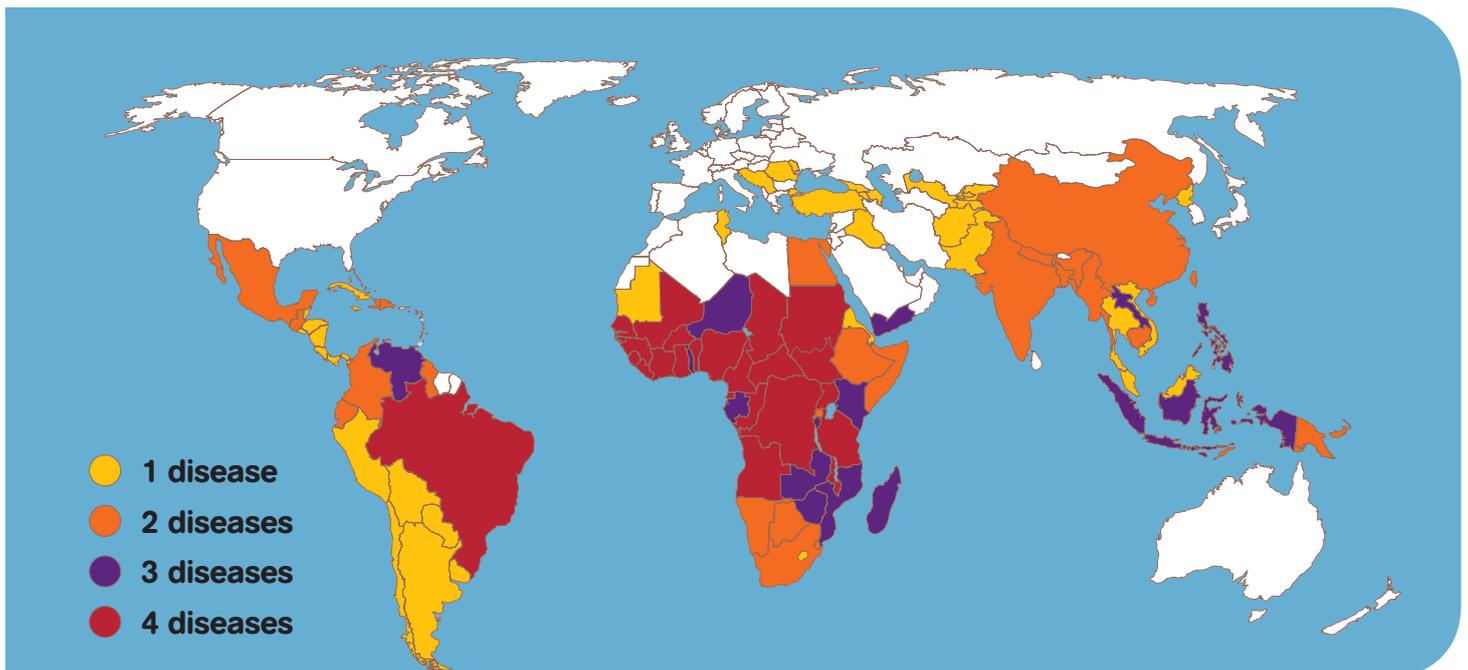
September 2013

Neglected tropical diseases (NTDs)<sup>1</sup> are a group of 17 parasitic and bacterial infections that affect over 1.4 billion of the world's poorest people<sup>2</sup>. Together, these diseases represent the fourth largest disease burden of all communicable diseases globally<sup>3</sup>. NTDs are most prevalent in remote rural areas, urban slums and in conflict zones. Some NTDs kill and others cause severe and often lifelong physical impairment, particularly affecting women and children.

## NTDs contribute to a cycle of poverty

NTDs are diseases that primarily affect people living in poverty. They reduce economic productivity, by preventing individuals from being able to work or care for themselves or their families<sup>4</sup>. NTDs prevent children from growing and learning and can limit access to education. For example the risk of children dropping out of school is doubled if the head of household is infected with onchocerciasis (also known as river blindness)<sup>5</sup>. There is increasing evidence that demonstrates that control and elimination of these diseases will significantly reduce illness, social exclusion and mortality<sup>6</sup>.

## Geographic overlap of the neglected tropical diseases



Taken from 2011 WHO NTD report

## Putting communities at the centre

To ensure the preventive chemotherapy (PCT) treatments for NTDs reach remote communities, Sightsavers and other partners pioneered the community-based treatment approach for administering Ivermectin, which then evolved into community directed treatment with Ivermectin (CDTI). This approach is used to treat onchocerciasis (river blindness) and has been expanded to other diseases targeted for elimination such as lymphatic filariasis. CDTI relies on mass drug administration and an extensive network of volunteer community drug distributors (CDDs) to reach marginalised communities. In Africa the CDTI approach has resulted in reductions in blindness as high as 77 per cent of pre-CDTI levels<sup>7</sup>, all of which has helped to significantly advance the process of disease elimination for onchocerciasis. To date, this approach has resulted in more than 800 million doses of Ivermectin, an extension of treatment to over 90 million people<sup>8</sup>.

## An integrated approach

Many NTDs are co-endemic and around one out of every six people in the world is infected with one or more NTDs<sup>9</sup>. This overlap offers an opportunity for integrated PCT treatment. These safe and effective strategies can be scaled up by disease-endemic countries with limited technical and financial inputs from donors. These efforts can be delivered through similar platforms at the national level through an “integrated approach”. Some treatments offer protection against more than one of the diseases. It has been estimated that an integrated mass drug administration approach, which typically uses a combination of four medicines to prevent or treat the seven most prevalent NTDs, cost as little as \$0.50 per treatments<sup>10</sup>.

NTD treatment represents one of the ‘best buys’ in public health<sup>11</sup>; NTD programs have had remarkable successes at very low costs. Moreover the return on investment is impressive; it has been estimated that integrating treatment of NTDs can produce an economic rate of return of 15 to 30 per cent, depending on the program<sup>12</sup>.

## The route to elimination

The launch of the WHO roadmap provided clear targets and strong incentives to increase investment to generate further progress in the control, elimination and eradication of NTDs<sup>13</sup>. The strength of control strategies for NTDs and support from endemic countries and partners have led to fast-track actions and initiatives to eliminate and eradicate these diseases by scaling up both curative and preventive strategies.

The elimination of NTDs is dependent on all partners taking action to tackle the underlying conditions that allow these diseases to flourish<sup>14</sup>. Water, sanitation and hygiene (WASH) services are a major defence against many NTDs but their importance is undervalued<sup>15,16</sup>. Similarly the importance of stronger health systems to deliver essential interventions is underplayed. There must be increased commitment to addressing NTDs, both by addressing their root causes and also within a package of essential health interventions, underpinned by robust and resilient health systems, which are able to respond to citizen-led health priorities.

**“We are moving ahead towards achieving universal health coverage with essential health interventions for neglected tropical diseases, the ultimate expression of fairness.”**

Margaret Chan, Director General, World Health Organization, January 2013 Geneva

## Public-private partnerships

No other public health initiative benefits from the availability of donated drugs to such an extent as NTDs. Public-private partnerships have leveraged unprecedented investment in the drive to end the devastation caused by these diseases. The landmark London NTD Declaration represents the single largest global public-private partnership to date; continuing a legacy that has underpinned the success of many of the NTD control strategies.

# The Global Trachoma Mapping project

**Globally, 1.2 billion people live in trachoma-endemic areas primarily in the poorest communities in the world. Blindness from trachoma is entirely needless, yet it is the world's leading causes of preventable blindness.**

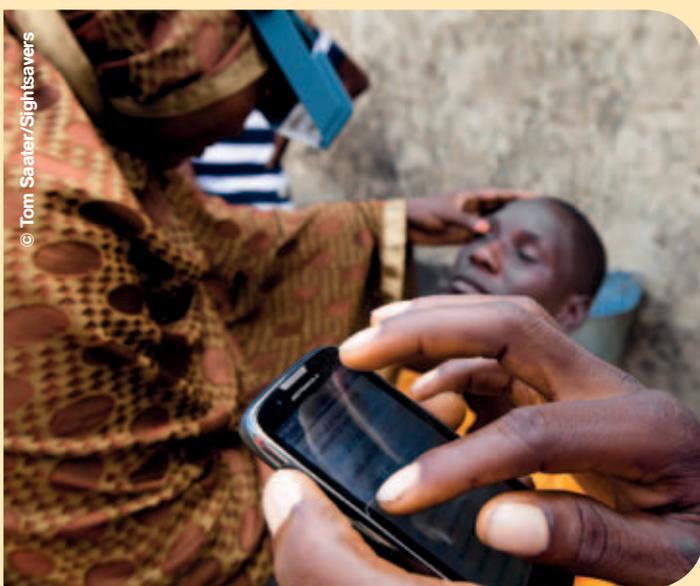
The WHO roadmap has set ambitious targets for the elimination of blinding trachoma by 2020, but poor data on the spread and reach of trachoma has hindered elimination efforts. In the last 12 years just 1,115 districts have been mapped for trachoma. The Global Trachoma Mapping Project, a Sightsavers-led consortium funded by the UK Government, will work to complete the global mapping of trachoma in over 30 countries by mapping the estimated remaining 1,238 districts by early 2015.

The GTMP is the first global health survey of this scale: targeting expert resources to support suspected endemic countries to quickly scale



up their trachoma mapping plans. The mapping will deliver valuable data on both trachoma prevalence and availability of WASH facilities – providing the evidence base for the targeted interventions required for the elimination of this blinding disease by 2020. This information will enable the ministries of health and partners to plan drug distributions, and ensure collaboration across vital sectors such as water and sanitation and health.

By early 2015, the scale of trachoma and where people are at risk of blindness from trachoma will be known, ensuring that resources mobilised to support implementation of trachoma elimination programmes are correctly targeted.



Public-private partnerships for NTDs have driven scale, speed and innovation within the sector. For example, innovations such as the Global Trachoma Mapping Project smart phone app enable real-time electronic data capture, transfer and management, providing the evidence base for the targeted interventions required for the elimination of trachoma by 2020. As the drive for elimination continues the strong public private partnerships that have contributed the delivery of

curative measures, will also be needed to support the delivery of preventive measures such as WASH to interrupt transmission of NTDs.

## Neglected no more

NTDs have risen up the development agenda as recognition of their impact on global health has expanded. The 2012 London NTD Declaration<sup>17</sup> and the WHO roadmap<sup>18</sup> marked an unprecedented level of support for NTDs

from all partners and in May 2013, the WHO resolution<sup>19</sup> recognised the 17 NTDs together as a group for the first time. The ambitious goals of the WHO roadmap will only be achieved if endemic countries are supported to implement NTD programmes in an integrated, community-led way, targeting the poorest and most marginalised populations and delivering sustainable change.

To alleviate poverty for over 1 billion of the world's poorest people, urgent action must be taken towards NTD control and elimination. Many NTDs are entirely preventable, but the poor economic and political position of those who are affected means that NTD programmes are not recognised as a development priority either at national level or on the global stage<sup>20</sup>.

NTDs must receive explicit attention within poverty reduction frameworks, particularly the successor

framework to the Millennium Development Goals (MDGs). Universal health coverage offers a mechanism to advocate at national level on the inclusion of NTDs in a post-2015 development agenda, with NTDs incorporated into a basic package of care in response to the country level burden of disease<sup>21</sup>. Moreover, NTD efforts must contribute to action to address the root causes of these devastating diseases, through addressing the social determinants of health, such as water and sanitation provision, hygiene behaviour, overcrowded living conditions and education.

NTDs significantly impact on poverty reduction and development efforts. Beyond their impact on health, NTDs contribute to a cycle of poverty stigma that leaves people unable to work, go to school or participate in their communities.

**To deliver sustainable and highly cost-effective programmes in partnership with endemic communities, international agencies, donors and government partners must:**

- commit to supporting the achievement of the WHO roadmap on NTDs;
- support the scale up of NTD elimination and control programmes;
- explicitly target preventive and curative elements of NTD programming towards the poorest and most marginalised populations;
- promote and support WASH as part of a cross-sectoral commitment to reach the WHO 2020 NTD targets;
- support efforts to strengthen health systems to deliver essential NTD interventions;
- ensure funding and other resource commitments are sustained and reinforce a cross-sectoral approach to achieving the WHO NTD roadmap targets;
- ensure the inclusion of NTDs within a health goal in the MDG successor framework.

## Contact us

For further information on the issues addressed in this briefing, the references list, or any aspect of our work, please contact Sightsavers' Policy Team.

**Email:** [policy@sightsavers.org](mailto:policy@sightsavers.org)

**Web:** [www.sightsavers.org](http://www.sightsavers.org)

**Twitter:** [@sightsavers\\_pol](https://twitter.com/sightsavers_pol)

**Tel:** +44 (0) 1444 446600

Sightsavers works in developing countries to combat avoidable blindness and promote equal opportunities for disabled people.

## References

- 1 The 17 parasitic and bacterial infections known as the neglected tropical diseases included Buruli ulcer disease (*Mycobacterium ulcerans* infection), Chagas disease (American trypanosomiasis), cysticercosis, dengue, dracunculiasis (guinea-worm disease), echinococcosis, endemic treponematoses, foodborne trematode infections, human African trypanosomiasis (sleeping sickness), leishmaniasis, leprosy, lymphatic filariasis (elephantiasis), onchocerciasis (river blindness), rabies, schistosomiasis (bilharziasis), trachoma and soil-transmitted helminthiases.
- 2,9,21 *Sustaining the drive to overcome the global impact of neglected tropical diseases Second WHO report on neglected tropical diseases* WHO 2013
- 3,11 *Social and Economic Impact Review on Neglected Tropical Diseases*, Norris J Adelman C, Spantcha Y, Marano K, November 2012, Centre for Science in Public Policy in conjunction with The Global Network for Neglected Tropical Diseases an initiative of the Sabin Vaccine Institute
- 4,13,18 *Accelerating work to overcome the global impact of neglected tropical diseases. A roadmap to elimination*. World Health Organization 2012
- 5 UNDP/ World Bank/ WHO TDR, *Tropical Disease Research Programme 1997-98, Fourteenth Programme Report*, WHO 1999, p29
- 6 [http://www.who.int/neglected\\_diseases/NTD\\_RoadMap\\_2012\\_Fullversion.pdf](http://www.who.int/neglected_diseases/NTD_RoadMap_2012_Fullversion.pdf)
- 7 *A rapid health impact assessment of APOC*, Commissioned and financed by APOC, D Habbema, W Stolk, L Veerman, S de Vlas, 2006, p5
- 8 *In our hands: the power of community management in health programmes*, Sightsavers, 2012
- 10,12 *"Rapid-impact interventions": how a policy of integrated control for Africa's neglected tropical diseases could benefit the poor*, Molyneux DH, Hotez PJ, Fenwick A PLoS Med. 2005 Nov;2(11):e336.
- 14,20 *Inequity and Social Determinants of Neglected Tropical Diseases*, Aagaard-Hansen J and Chaignat C, Chapter 8, in *Equity, social determinants and public health programmes*, Edited by Erik Blas and Kurup A, World Health Organization, 2010,
- 15 WaterAid and Neglected Tropical Disease Non-Government Development Organisation Network (NNN) *WASH: The silent weapon against NTDs: Working together to achieve prevention, control and elimination* Available at [http://www.wateraid.org/~!media/Publications/wash\\_the\\_silent\\_weapon\\_against\\_ntds.ashx](http://www.wateraid.org/~!media/Publications/wash_the_silent_weapon_against_ntds.ashx)
- 16 *WASHing away blinding trachoma* Helen Hamilton, Sightsavers, Yael Velleman, WaterAid April 2013
- 17 [http://www.who.int/neglected\\_diseases/London\\_Declaration\\_NTDs.pdf](http://www.who.int/neglected_diseases/London_Declaration_NTDs.pdf)
- 19 *Sixty-sixth World Health Assembly WHA66.12 Agenda item 16.2 27 May 2013 Neglected tropical diseases* [http://www.who.int/neglected\\_diseases/mediacentre/WHA\\_66.12\\_Eng.pdf](http://www.who.int/neglected_diseases/mediacentre/WHA_66.12_Eng.pdf)