More than 1 billion people suffer from one or more neglected tropical diseases (NTDs). A group of parasitic and bacterial diseases, NTDs cause death, illness, and severe disability among the world’s poorest—and most neglected—people. Over the past decade, remarkable progress has been made against these diseases, thanks to a coordinated global effort led by the World Health Organization (WHO) and ministries of health, with unprecedented support from pharmaceutical companies and bilateral donors such as the U.S. Agency for International Development (USAID) and the UK Department for International Development. In the last five years, the number of people at risk for NTDs has fallen by 20%. The scale of these efforts is awe-inspiring: In 2015 alone, treatments to prevent NTDs reached nearly one billion people worldwide (Fourth WHO Report on Neglected Tropical Diseases, April 2017).

Since 2006, RTI has headed the implementation of USAID’s flagship NTD projects, working in close partnership with WHO and ministries of health in over 20 countries. RTI has supported the integration and scale up of national programs to control and eliminate seven of the most common NTDs—in part by increasing the reach of mass treatment campaigns to all people at risk. Our NTD programming also focuses on alleviates suffering and disability caused by NTDs, builds the capacity of national NTD programs, and strengthens health systems and processes for NTD innovation and learning.

We contribute to global fora where technical aspects of NTD programming are considered, linking programming to research needs. Our experts are also core members of NTD consultative committees, advising on key issues relevant to the global NTD agenda as well as supporting the development of major program strategies, guidelines, and policies.
Accelerating Towards NTD Elimination

Two NTDs—lymphatic filariasis (LF) and trachoma—can be eliminated as public health problems. In some countries, onchocerciasis also can be eliminated. With consistent, high-coverage mass drug administration (MDA) and complementary efforts addressing disease morbidity, countries are effectively wiping out these diseases. Over the next several years, these efforts will impact the lives of millions of people living in poverty, helping them to be healthier and better able to provide for themselves and their families.

As lead of USAID’s global ENVISION project (2011–2019), RTI works with ministries of health in NTD-endemic communities to implement, monitor, and strengthen several key areas of these NTD elimination programs.

- **Getting donated medicines to people who need them.** RTI has been a critical partner in helping more than 20 countries establish the areas in need of treatment, as well as supporting the distribution of donated medicines, training of community health volunteers and trainers, and monitoring of treatment coverage rates.

- **Determining when MDA can stop.** WHO estimates that more than 2,000 field surveys will need to be conducted before the year 2020 across multiple countries to document the impact of interventions and accurately track progress toward elimination. RTI works with global policy makers to disseminate guidance on survey requirements, and supervises the use of diagnostics and sampling strategies, implementation of survey protocols, and documentation of results. RTI expertise ensures assessments are well-coordinated and of high quality.

- **WHO validation of elimination as a public health problem.** In 2016, six countries—Cambodia, Cook Islands, Maldives, Niue, Sri Lanka, and Vanuatu—eliminated LF as a public health problem, while another 18 countries reduced infection to such low levels that they no longer require MDA (Source: www.who.int/lymphatic_filariasis/global_progress). RTI has worked with Cambodia and Nepal to prepare their elimination dossiers, a necessary step to eventually being certified by WHO as having eliminated LF. RTI is actively working with several other countries to begin preparing for this process, with support for data collection, analysis and investigation of questions to support efficient passage through WHO validation of elimination process.

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**Did you know?**

- **$12.4 billion worth of medicines have been donated to fight NTDs in RTI-supported countries**
- **More than 165 million people are no longer at risk for LF in 19 countries currently supported by RTI**
- **More than 61 million people are no longer at risk for trachoma in 15 countries currently supported by RTI.**

*Numbers as of FY16*
Did you know?

- Accelerating progress against NTDs is critical to improving the health and livelihoods of women and girls, who are disproportionately affected by these diseases
- NTD programs lay the foundations for strong, resilient health systems by reaching people with quality health services, particularly in remote and impoverished communities.

Building Sustainable Control Programs

National deworming initiatives that target school-aged children are critical for controlling NTDs caused by contaminated food and water, such as schistosomiasis and soil-transmitted helminths. These infections pose a serious threat to a child’s health and education, as they can lead to anemia, malnourishment, and impaired mental and physical development.

To date, national NTD programs have benefited by integrating program activities. As LF is eliminated, however, some deworming programs will need to find an alternate operational platform for distributing medicines to school-aged children. RTI is working with NTD-endemic countries and partners to create sustainable NTD control programs for the future through policy planning, domestic resource mobilization and exploration of alternate distribution platforms, many of which can be transitioned to ministries of education and school health programs.

Alleviating Suffering Caused by NTDs

While tremendous progress has been made in preventing NTDs worldwide, it is essential that we work to alleviate the suffering of those who are affected, and help them resume healthy and productive lives. In Mozambique, RTI is restoring the sight of thousands of people with advanced stages of blinding trachoma. With funding from the Queen Elizabeth Diamond Jubilee Trust Trachoma Initiative, we collaborate with local partners, government ophthalmologists, and surgeons to expand access to trichiasis surgery, which corrects in-turned eyelashes and restores vision. This work is strengthened by promoting community health messages on hygiene and sanitation practices and ongoing efforts to improve access to safe water and proper sanitation.

In Ethiopia, RTI is partnering with the Federal Ministry of Health to expand access to care and services for debilitating conditions caused by trachoma and LF. This work is conducted under the USAID-funded Morbidity Management and Disability Prevention Project. In 2016, we provided more than 12,800 people with trichiasis surgery. We also support the Government of Ethiopia’s plan for managing disability from LF by helping to identify cases of lymphedema and hydrocele, two debilitating conditions caused by LF, training health providers to manage care for lymphedema, training surgeons to alleviate hydrocele, and assisting with other capacity-building initiatives.
RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Clients rely on us to answer questions that demand an objective and multidisciplinary approach—one that integrates expertise across the social and laboratory sciences, engineering, and international development. We believe in the promise of science, and we are inspired every day to deliver on that promise for the good of people, communities, and businesses around the world. For more information, visit www.rti.org.

Did you know?

- Improving the health and productivity of poor communities strengthens their political and economic stability, building stronger diplomatic and trade partners
- Every dollar invested in NTD control and elimination produces between $27 and $42 worth of economic benefit.

Strengthening Systems and Processes for Innovation and Learning

**Improving data quality and use for evidence-based decision making.** RTI has helped USAID shape its NTD monitoring and evaluation system, designing the data collection systems used by all USAID-supported countries. Our team also has worked with WHO to pioneer a data quality assessment approach that evaluates the quality of reported data and data management systems at multiple health system levels. We provide recommendations to national NTD programs on data flow, use, and information systems architecture.

**Pioneering innovative technologies and tools.** Our experts ensure that technologies—such as smartphones and open-source software—serve transformational purposes, including improving data reporting, and ensuring data is used for decision making. RTI is proud to be a lead organization for Tropical Data, a WHO-led system helping countries track progress toward elimination of trachoma as a public health problem. RTI manages the system’s technology and supports global standardization trainings for trachoma clinical examination as well as use of the technology and data.

**Conducting innovative operational research.** RTI carries out high-quality operational research that builds the evidence base for effective NTD programming that reach the most vulnerable populations. The outputs of operational research are used to strengthen not only RTI’s programming, but NTD programs and policies around the world. For example, we are currently trialing new diagnostic approaches for LF and onchocerciasis. If successful, this will enable us to better understand when countries are no longer at risk of the disease and can stop treating.