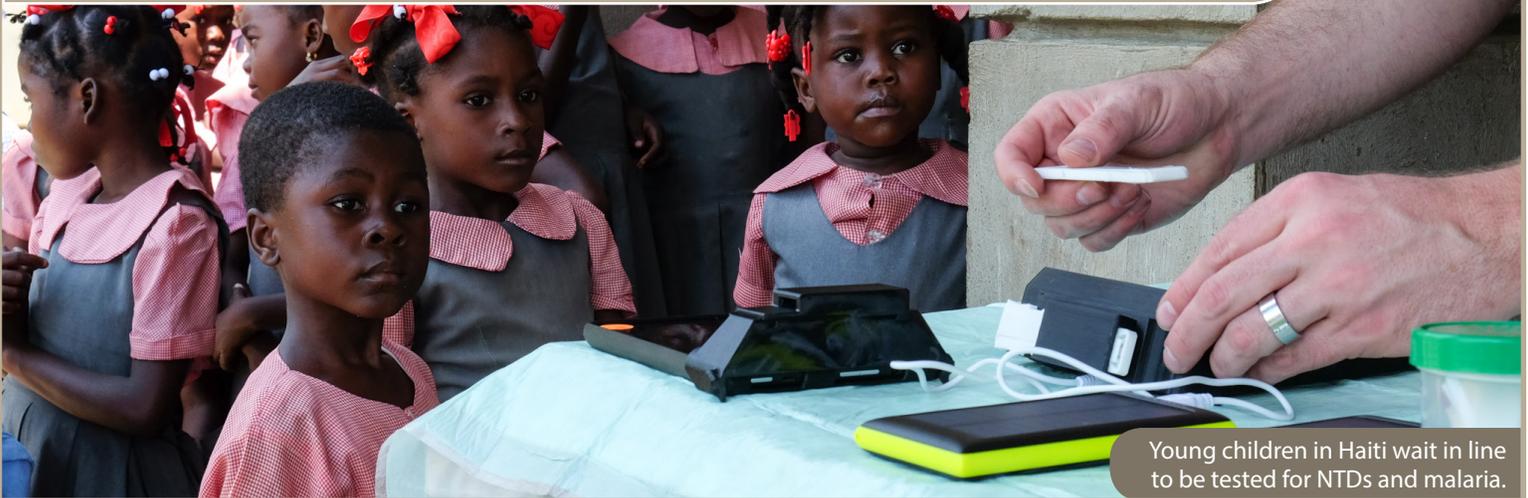


CDC's Neglected Tropical Diseases Program



Young children in Haiti wait in line to be tested for NTDs and malaria.

Neglected tropical diseases (NTDs) are a group of infectious diseases that cause devastating illness for more than **one billion people**. Affecting the world's poorest people, NTDs cause disabilities that make it difficult to succeed in school, care for family or earn a living. Thus, NTDs have a disruptive impact on productivity and already unstable economies.

Global efforts to control and eliminate NTDs **reduce the risk for everyone**.

Since 2006, tremendous progress has been made in controlling NTDs, with **1.6 billion treatments** distributed through global efforts including the U.S. Government (USG) NTD program. With a strong public-private partnership, the relatively small USG investment has **leveraged more than \$11 billion in drug donations** by pharmaceutical companies.

Several NTDs can be controlled or eliminated through mass administration of safe and effective medicines (mass drug administration or MDA), including:

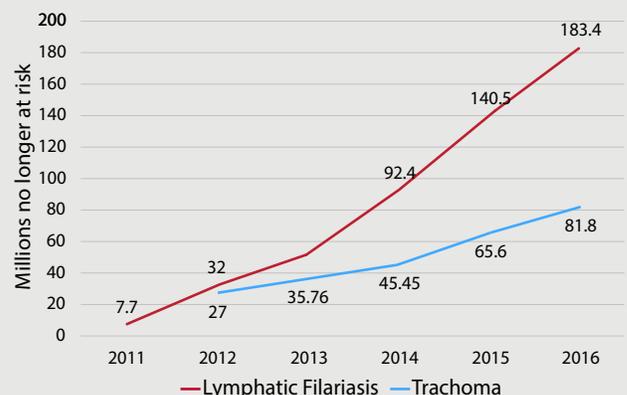
- Lymphatic filariasis (LF)
- Onchocerciasis (river blindness)
- Schistosomiasis
- Intestinal worms (soil-transmitted helminths (STH) — *Ascaris*, hookworm and whipworm)
- Trachoma

Other simple interventions can eliminate some NTDs, for example water filtration for Guinea worm disease.

Progress Against NTDs

- **Guinea worm disease (GWD)** affected an estimated 3.5 million people in 1986, but in 2016 only 25 cases were reported.
- Rates of **lymphatic filariasis (LF)** have fallen by more than 70% since the global elimination program began in 2000.
- **Onchocerciasis (river blindness)** was interrupted in 11 of the 13 major areas of transmission in the Americas, and has been controlled throughout much of sub-Saharan Africa.
- Blinding **trachoma** was eliminated from Iran, Mexico, Morocco and Oman, with additional countries (Ghana, Nepal) on track to eliminate it as well.

Millions of people no longer at risk for NTDs



Courtesy of USAID

CDC at Work Around the World: Science to eliminate and eradicate NTDs

Despite tremendous progress, there is still much to be done. We need simple, accurate ways to know when it is safe to stop treatment and how to monitor to ensure these diseases don't come back.

We are **working to accelerate elimination** of NTDs in several ways:

- Researching better **laboratory surveillance tools** and making them ready for use by country programs where these diseases are being eliminated.
- Developing and field testing **epidemiologic methods** to monitor and accelerate program progress.
- **Assisting countries** with implementing their programs.
- Providing **global scientific leadership** on NTD elimination through collaborations with the WHO and others.

Laboratory Surveillance Tools

CDC developed a blood test that can help determine the level of trachoma transmission in a community. This tool will make it possible to better monitor the impact of trachoma elimination programs and provide early detection if trachoma returns. The test has potential for huge program savings in training costs alone, compared to the clinical eye exams currently used.



Children in a village being examined for trachoma.

Epidemiologic Methods

CDC led development of Transmission Assessment Surveys (TAS) to help countries determine when transmission of lymphatic filariasis (LF) has reached levels low enough to stop treatment, and helped WHO train countries on its use. CDC is field testing methods for countries to use to strengthen healthcare systems to provide services to prevent disability from lymphatic filariasis.



A healthcare worker teaches a woman with lymphatic filariasis in Bangladesh to care for her swollen leg to help prevent disability.

Assisting Country Programs

In Haiti, mass drug administration for LF was recently stopped for 5 million people (50% of the population) as a result of CDC and partner efforts to help eliminate the disease. The success in Haiti shows elimination is possible in even the most challenging settings.



A young boy in Haiti is tested for NTDs.

Global Scientific Leadership

CDC is the World Health Organization (WHO) Collaborating Center for Dracunculiasis (Guinea worm) Eradication and supports the global Guinea Worm Eradication Program efforts by providing laboratory diagnosis of suspect Guinea worms and developing new surveillance tools to understand where Guinea worm remains.



A village volunteer oversees the removal of a Guinea worm emerging from a man's leg.

Photo: The Carter Center

For more information, see www.cdc.gov/globalhealth/ntd/