



Internal Fund to Support Neglected Tropical Disease (NTD) Elimination and Control Efforts

RTI is committed to deliver \$3 million over 5 years (2019 – 2023) in strategic investment funding for NTDs. The goal of this internal investment is to conduct research that fills gaps in knowledge and ultimately accelerates global progress toward the control and elimination of NTDs. To date, this strategic investment has funded activities which provide evidence for surveys and surveillance related to the NTD elimination end game, access to treatment, integration with other health programming, and mainstreaming of NTDs into the overall health system. Ultimately, this evidence will inform NTD program design and implementation efforts.

Image: RTI International

For 15 years, RTI has led USAID's global flagship NTD programs and partnered with a variety of multilateral and private donors to reach over 75 countries with training, technical support, and resources to improve the impact and effectiveness of NTD programs.

The RTI NTD strategic investment fund

- Funds research to inform innovative approaches and tools to address gaps in current programs
- Provides resources to conduct NTD elimination work not covered by current programs
- Enables collaboration with the NTD community, RTI staff, and host-country stakeholders to further strengthen NTD capacity

PREVIOUSLY FUNDED ACTIVITIES

Title	Purpose of activity
Benefits and limitations of school-based MDA delivery platforms in reaching school-aged children (SAC)	To provide the Act East program information for decision-making on using school-based platforms to reach SAC for MDA. The primary research question is: what are the pros/cons of using school-based platforms to reach SAC for MDA?
Investigation of the correlation of trachoma prevalence trends in Ethiopia with new population models and geospatial population parameters	To investigate the correlation, if any, between new population estimation models and known trachoma prevalence trends over time. While local population estimates are considered critical to treatment supply planning and logistical considerations, different population estimation methods may produce more realistic estimates on the ground than others and can help explain some of the variability seen in MDA campaign success. This study aims to investigate these new population distribution models that are now available via WorldPop and other services that adjust the methods with which total populations are assigned to different regions of a district or country.
Landscape analysis incorporating NTDs into health programs	To identify and analyze mechanisms of integration, characteristics of health programs and health systems that may help or hinder incorporation, and resources that may help incorporation of NTDs into other health programs.
MDA update among certain groups across preventive chemotherapy packages and time	To review changes in MDA coverage overtime to identify differences or gaps across diseases and demographic groups. The team will describe treatment coverage levels from 2007 to 2020 for lymphatic filariasis, trachoma, onchocerciasis, schistosomiasis, and soil-transmitted helminth infections stratified by age and sex.
Operationalizing NTD surveys in the End Game: trachomatous trichiasis (TT) survey simulations, integrating morbidity measures in trachoma surveys, using image recognition to diagnose TT.	To provide guidance to country programs on when it is appropriate to combine evaluation units into larger units and reduce their sample size during a TT survey.
	To create an integrated survey which can simultaneously measure trachoma impact, lymphatic filariasis morbidity, podoconiosis morbidity, and other skin disease prevalence. These activities have applicability beyond NTDs and even beyond health.
	To build a smartphone-based image recognition-driven app to identify TT, with hopes of improving the efficiency of TT surgery campaigns and thus paving a novel path to possibly expediting elimination goals. Through validating this approach in the context of case finding, the team is setting the stage to use this AI technology in the context of surveillance.
Rapid qualitative assessment to improve mass drug administration (MDA)	To create an innovative approach for rapid qualitative research that is easy to use at scale within programmatic settings, building on existing knowledge and learning from previous experiences.
Trachoma spatial modeling	To create high-resolution risk maps of trachomatous follicular (TF) prevalence using geospatial modeling methods. This novel and timely research explores the utility of model-based geostatistical methods and machine learning approaches to create risk maps with their associated uncertainty surfaces by leveraging existing geospatial covariate and survey data. The maps are being created with an implementation mindset, capitalizing on the knowledge of the RTI team and consulting with in-country and other partners on how to make these useful and user-friendly.
The importance of mobile and migrant populations (MMPs) in the elimination of NTDs	To assess and understand the importance of MMPs in the elimination of NTDs and develop and pilot-test an intervention package that would increase access and coverage of NTD interventions. The eventual approach will be applicable to a range of NTDs as well as other health issues (e.g., HIV, TB, malaria).