

Advancing Global Health Security

For over 25 years, RTI International has been at the forefront of fighting infectious diseases and pioneering health system innovations. By leveraging our multidisciplinary expertise, we create and evaluate programs that bolster health security, enhance resilience against pandemics, strengthen health systems, and improve public health preparedness to advance global health security.

Our strong partnerships with governments, academia, the private sector, and community organizations in the U.S. and in over 90 countries enhance our collective global health security. With a deep bench of experts, we have been instrumental in combating COVID-19, Ebola, MERS, Zika, and other infectious threats. Our integrated approach ensures that countries' health systems are robust and adaptable, ready to face both current and future public health threats.

Areas of Expertise:

- Antimicrobial Resistance (AMR)
- Border Health
- Disease Surveillance
- Epidemiologic Modeling
- Health Information Systems
- Health Economics
- Health Systems Strengthening
- Immunization

- Laboratory Capacity Building
- Monitoring and Evaluation
- One Health
- Public Health Workforce Development
- Rapid Outbreak Response
- Research and Data Management
- Risk Communication and Community Engagement
- Zoonotic Diseases



Prevent Avoidable Epidemics

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- Led a **One Health assessment** in **Southeast Asia** to understand the priorities of the Association of Southeast Asian Nations (ASEAN), determining how the One Health approach can help (1) adjust existing policy frameworks to address the risk of zoonotic disease spillover and (2) identify entry points to facilitate ecosystem health and counter wildlife trafficking. *Client: U.S. Agency for International Development (USAID).*
- Use existing disease data and social and environmental/climate determinants to provide countries with **epidemiologic modeling services to anticipate the outcomes of potential outbreaks**, such as anticipating an increase in malaria cases after a severe climate event or planning for health risks of mass events. Results from models help health leaders forecast and plan budgets and resources accordingly for more efficient and effective preparedness and response. *Clients: Northeast Regional Center for Excellence in Vector-Borne Diseases, World Bank, RTI-funded.*
- Assessed the strength of the surveillance system to detect priority zoonotic diseases in the Democratic Republic of the Congo (DRC) by conducting a multilevel surveillance evaluation of institutional and individual capacity in two provinces. Client: U.S. Centers for Disease Control and Prevention (U.S. CDC).
- Addressed upstream levers for viral spillover in **Tanzania by strengthening capacity for conservation and wildlife law enforcement** to tackle illegal trafficking of wildlife and reduce unsafe and unregulated wildlife consumption. Working with border control officials and conservationists, RTI supported Tanzania's safeguarding of biodiversity to prevent unhealthy interactions between humans and wildlife and reduce the potential for zoonotic viruses jumping from animals to humans. *Client: USAID*.

Detect Threats Early

- Partner with Ministries of Health in 13 countries to **control and eliminate neglected tropical diseases (NTDs)** by strengthening capacity for resilient health systems and communities, operationalizing data reporting and management, bolstering government planning, and facilitating advocacy for domestic resource mobilization. *Client: USAID*.
- Supported Guinea to implement and scale up from phone- and paper-based management of surveillance data to
 nationwide use of eIDSR (Electronic Integrated Disease Surveillance and Response system) using the DHIS2 platform.
 This quickened country responses to the COVID-19 outbreak in 2020 and led to rapid detection and containment of an Ebola
 outbreak in 2021. In DRC, we support implementation of eIDSR system in the Haut Katanga province providing a model for
 strengthening surveillance including linking laboratory results to immediate case notifications to inform response efforts. *Client: U.S. CDC.*
- Work with the Caribbean Public Health Agency (CARPHA) to optimize their DHIS2 regional repository to **strengthen disease surveillance**, ensuring that relevant, timely, and accurate surveillance data are available to monitor the health status of member states and provide strategic information, thus enabling evidence-informed policymaking at national and regional levels. *Client: CARPHA*.
- Implemented an all-hazards **event-based surveillance system** in pilot health zones in Haut Katanga province in the DRC to utilize informal health information and trained community actors to detect and report events to the formal health system that may signal a public health threat to their communities. *Client: U.S. CDC*.
- Supported the **Field Epidemiology Training Program (FETP)** by developing case studies, piloting training materials, and conducting evaluations on outcomes from FETP cohorts, including developing timely COVID-19-related case studies for FETP in 28 countries. *Client: U.S. CDC*.



Respond Rapidly and Effectively to Disease Outbreaks

- Deployed RTI personnel and consultants and satellite phones to support the DRC's 7th **Ebola outbreak** in May-June 2017, helping to contain the outbreak in a matter of weeks. RTI provided technical assistance to the Ministry of Health to investigate the origin of the outbreak and the chain of transmission and train community health workers to perform contact tracing. Our IT consultant provided telecommunications support to ensure timely transmission of outbreak data to the national level. *Client: U.S. CDC*.
- Supported disaster response and risk reduction for H1N1 influenza monitoring in Costa Rica, Zika virus monitoring across Latin America and the Caribbean and mobilized surge support to conduct a COVID-19 situation report in Ecuador. Client: USAID/Office of U.S. Foreign Disaster Assistance.
- Lead technical monitoring (e.g., governance, workforce development, data integration and standards and data analytics) of Global Public Health Data Innovation activities to **strengthen global outbreak response and pandemic preparedness** through improved data availability and modernizing data systems in Kenya, Uganda, Zambia, Sierra Leone, Colombia, Honduras, Paraguay, Georgia, Thailand, and Ukraine. *Client: U.S. CDC*.



Enhance National and Local-level Health Security Systems

- With the Nigerian CDC, RTI developed the country's **preparation for the Joint External Evaluation (JEE)** and customized the JEE tools for a sub-national evaluation of the International Health Regulations (IHR). *Client: U.S. CDC*.
- Supported 508 community health workers and health personnel at 16 sites in Guinea to **develop capacity for identifying potential health threats** and alerting authorities. *Client: U.S. CDC*.
- Health Security Policy Analysis: To help countries meet the IHR (2005) requirements and strengthen their core capacities for global health security, we worked with the Government of the Philippines to categorize and conduct analyses of all their existing national policies, guidelines, and strategies to assess alignment with the IHRs. *Client: Philippines Department of Health*.



Strengthen Laboratory and Surveillance Capabilities

- Building laboratory and surveillance capacity by establishing a surveillance system to screen for 26 acute febrile illness (AFI) pathogens in northern and southern Nigeria amongst 1200 patients using PCR and serology; laboratory capacity building and clinical research for detection of emerging and re-emerging pathogens of epidemic potential; and equipping two laboratories with biosafety cabinets, PCR, and centrifuge equipment. *Client: Defense Threat Reduction Agency*.
- Purchased and delivered equipment identified for regional labs in Mbandaka and Lubumbashi, in the DRC, **including** equipping the laboratories with biosafety cabinets, hematology mixers, and freezers. Regional personnel were prepped for sustainable transition of equipment for long-term maintenance. *Client: U.S. CDC*.



Risk Communication

- Supported **social mobilization for Ebola prevention** and reduced community resistance in Guinea thanks to relatable health communication distributed by networks of local NGOs and community health workers conducting 24,000 home visits and distributing 25,000 wash kits. Client: *U.S. CDC*.
- Trained and supervised over 1,400 Cellules d'Animation Communautaire members and over 8,000 community leaders and volunteers in Kinshasa and Haut Katanga provinces, DRC, to conduct **risk communication and community engagement activities** in response to COVID-19 and other health threats in their communities. Client: *U.S. CDC*.



Prevent, Detect, and Mitigate Antimicrobial Resistant (AMR) Pathogens

- As a **founding member of the TB Alliance**, RTI developed, tested, and acquired U.S. Federal Drug Administration approval for the multi-drug-resistant TB treatment pretomanid, used in the latest World Health Organization-recommended BPaL regimen. *Client: TB Alliance*.
- Developing the prototype for a **centralized AMR database and dashboard** that will support the implementation of a national AMR data coordination center for veterinary medicine in the United States. *Client: Iowa State University.*



Emerging Disease Innovation: COVID-19



With the emergence of COVID-19, RTI rapidly adapted existing programs and leveraged our multidisciplinary expertise to enhance U.S. and global pandemic response across the cascade of pandemic response:

- RTI rapidly facilitated the **development of the national laboratory system** in **Honduras** and **El Salvado**r in response to COVID-19 testing demand, updating guidelines for preventing and controlling infection and case management, improving laboratory efficiencies and testing effectiveness, training laboratory staff, and building the information systems for sharing data. *Client: USAID*.
- Through identification and data collection of risk communication and community engagement (RCCE) professionals in 25 provinces in the DRC, RTI established 1,492 COVID-19 Community Action Committees (CAC) and trained 8,067 CAC members. These members helped implement RCCE activities using communication tools and materials within the national integrated communication plan co-created with RTI. Conducted participatory evaluations of the COVID-19 vaccination rollout in DRC. Client: U.S. CDC.
- In the Philippines, RTI supported the national COVID-19 response in 32 provinces, including case management and prevention, community engagement, and vaccine roll-out to 9 million Filipinos. *Client: USAID*.
- In Senegal, in response to COVID-19, the USAID GoLD project implemented by RTI led the coordination of 17 multisectoral projects, helping galvanize key stakeholders to immediately help prevent the spread of COVID-19 and promote socioeconomic stability. *Client: USAID*.
- The Centers for Research in Emerging Infectious Diseases (CREID) Network, consisting of 10 research centers and a coordinating center, operates globally to study and respond to emerging infectious diseases. It focuses on pathogen surveillance, transmission, and developing diagnostic tools, while also building a rapid research response infrastructure. Additionally, the Network defines where resources should be quickly deployed during an outbreak response. Client: U.S. National Institute of Allergy and Infectious Diseases (NIAID).

Partner with us

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Learn more about our work

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