

Homeland Security



Nations face a wide range of natural and manmade threats to public safety and internal stability. Sources of threat often cannot be isolated as strictly domestic or international and require complex international and multiagency responses. Such threats include natural disasters, terrorism, and international crime. The complex nature of homeland security issues calls for a rigorous, multidisciplinary approach to social and behavioral research—a cornerstone of RTI’s working philosophy—to assess complex causes and evaluate optimal solutions.

RTI’s staff of over 2,800 includes scientists and technicians with advanced expertise in a broad array of the social, life, information, and engineering sciences working in teams to effectively integrate various disciplines to solve our clients’ problems. Areas of competency include

- Multiagency coordination and response
- Bioterrorism preparedness, health security, and epidemiology
- Criminology and law enforcement
- Cyber security
- Economic analysis and modeling
- Immigration and population studies
- Data mining and predictive analytics
- Survey research and geospatial modeling.

In addition, RTI can organize conferences and bring together expert panels to support our clients’ communication needs.

RTI uses advanced technical and management skills in working with the Department of Homeland Security (DHS), the Department of Justice, the Centers for Disease Control and Prevention (CDC), state and local response

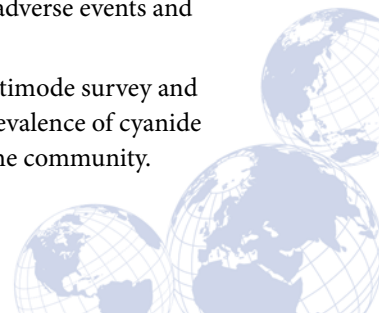
agencies, and law enforcement agencies. Specific examples of RTI’s work on homeland security issues include the following.

Multiagency Coordination and Response

- Assessing the potential for standardized models of multiagency planning and response through the examination of successful and failed responses to events in the United States and abroad.
- Developing a survey to assess the interaction of public and private mitigation and responses to terrorism events.

Bioterrorism Preparedness, Health Security, and Epidemiology

- Collecting sensitive information from over 100,000 respondents as part of the World Trade Center Health Registry.
- Evaluating the distribution of prophylactic antibiotics to prevent anthrax and assessing adverse events and adherence.
- Using interactive mapping of multimode survey and secondary data to estimate the prevalence of cyanide and possible exposure points in the community.



- Conducting a survey of government employees, international travelers, and physicians for the CDC's Division of Quarantine to assess knowledge and attitudes concerning the role of public health and to identify barriers and preferences in communication and training methods.

Cyber Security

- Identifying economic barriers that prevent the private sector from making private and socially optimal cyber security investment decisions and investigating potential government policies to improve non-optimal investment.
- Managing, coordinating, and facilitating the acquisition and delivery of Internet traffic data from data providers to researchers through a restricted-access Web portal (called PREDICT) to defend against cyber threats.

Economic Analysis and Modeling

- Conducting economic assessments of hurricane damage for state and federal agencies to facilitate the development of preparedness and emergency response plans.
- Evaluating potential impacts of the planned implementation of the DHS-sponsored Western Hemisphere Travel Initiative on the U.S. economy and its border communities.

Immigration and Population Studies

- Conducting and analyzing the results of a survey-based evaluation of the DHS "Welcome to the U.S." program.
- Estimating the economic benefits of anticipated changes in inspection and waiting times resulting from the DHS "Free and Secure Trade Program."

Data Mining and Predictive Analytics

- Data mining to identify hostile surveillance patterns and determine whether a complex set of suspicious activity reports can be explored and modeled to make recommendations for terrorism prevention and deterrence efforts.
- Evaluating and testing specific tools for intelligence analysis, including data mining applications that can be used for open-source data and unstructured text.

Institute for Homeland Security Solutions

The Institute for Homeland Security Solutions (IHSS) is a research consortium established to conduct applied research in the social and behavioral sciences to address a wide range of homeland security challenges. IHSS develops near-term solutions to practical, real-world problems that have broad policy and operational applications. IHSS also performs research to improve our understanding and analysis of homeland security threats.

In addition, IHSS manages the Violent Intent Modeling and Simulation (VIMS) project. The purpose of VIMS is to develop analytical tools that use modeling and simulation to interpret the motivations and behaviors of violent groups and to identify factors indicating that a group may engage in ideologically motivated violent activity.

IHSS is a collaborative initiative between RTI, Duke University, the University of North Carolina at Chapel Hill, and the North Carolina Military Foundation. IHSS is administered by RTI International and overseen by a Steering Committee with representatives from each collaborating institution.

Radiation Research

- Leading the development of an unprecedented medical registry of as many as 20,000 construction workers who are building a new containment structure at the damaged Chernobyl nuclear power facility.
- Using these data to facilitate assessment of countermeasures for radiation injury, with potential application to radiation exposure due to terrorism, battle, or civilian nuclear disaster.

For more information, please contact

Brent Rowe
Social and Statistical Sciences
Phone: 415.848.1317
E-mail: browe@rti.org

Joe Eyerman, Ph.D.
Social and Statistical Sciences
Phone: 919.541.7139
E-mail: Eyerman@rti.org

RTI International
114 Sansome St., Suite 500
San Francisco, CA 94104
Web site: www.rti.org

RTI International
3040 Cornwallis Road, PO Box 12194
Research Triangle Park, NC 27709-2194

RTI-6175 05-09



RTI International is one of the world's leading research institutes, dedicated to improving the human condition by turning knowledge into practice. Our staff of more than 2,800 provides research and technical expertise to governments and businesses in more than 40 countries in the areas of health and pharmaceuticals, education and training, surveys and statistics, advanced technology, international development, economic and social policy, energy and the environment, and laboratory and chemistry services. For more information, visit www.rti.org.

RTI International is a trade name of Research Triangle Institute.

