

Countering Biological Threats Across the Globe

Overview

Sandia National Laboratories develops innovative, science-based solutions to the most challenging national and global security problems.

Sandia's Center for Global Security and Cooperation reduces terrorism and WMD proliferation threats to US national security through global technical engagement.

The International Biological Threat Reduction (IBTR) program, a division of Sandia's Center for Global Security and Cooperation, reduces biological threats by promoting safe, secure, and responsible use of dangerous biological agents. IBTR introduces sustainable, robust, and affordable solutions that are tailored to the needs of specific regions and facilities.

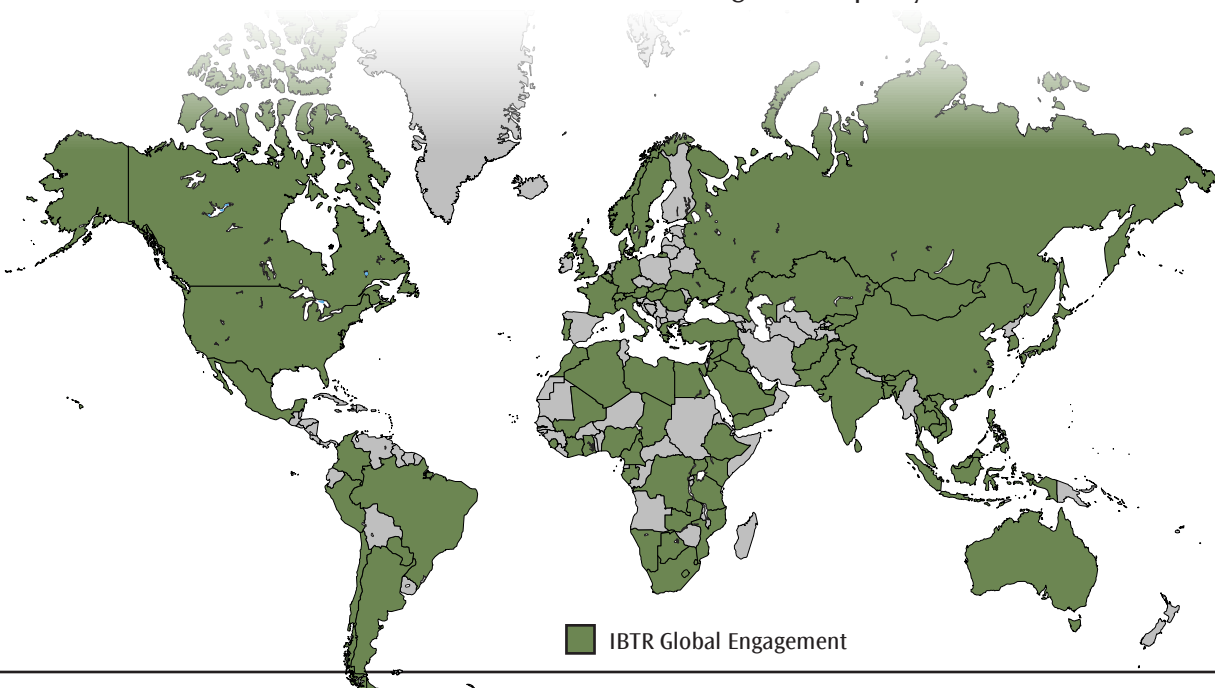
By using advanced technical resources, expertise, and a systems approach, IBTR works to improve 1) laboratory biorisk (biosafety and biosecurity) management and 2) infectious disease prevention, detection, and control. Actively engaged in countering biological threats since before the 2001 anthrax attacks, IBTR is regarded as the nation's leading expert in identifying and mitigating biological threats around the world.

IBTR Goals

- Promote the responsible use of biological agents, equipment, and expertise globally
- Strengthen capacities to safely, securely, and responsibly detect, handle, and control biological agents
- Improve understanding and management of the risks associated with accidental and deliberate misuse of biological agents
- Encourage global partnership and adherence to international biorisk management standards

Global Engagement

IBTR, in its effort to improve global biological risk management, has current or previous engagements with dozens of countries. By interacting with US agencies, partner country governments, and other international collaborators, IBTR develops strategies that meet local, regional, and global needs. Through training workshops, laboratory walkthroughs, tabletop discussions, and face-to-face interactions, IBTR strengthens the world's biorisk management capacity.



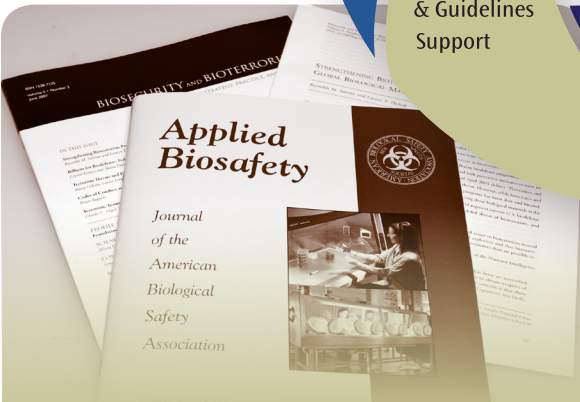
- Performing country and regional studies that focus on highly infectious diseases and the bioscience technologies, expertise, and infrastructure to combat those diseases
- Prioritization of biological threats worldwide, within a country, or within a region using robust, transparent, and reproducible methodology
- Developing risk assessment methodologies for laboratory biorisks



- Conducting risk assessments at biomedical and bioscience research facilities worldwide
- Assisting in the design of new biological laboratories, taking into account biorisk management best practices
- Implementing laboratory biorisk management systems at already existing facilities



- Training scientists, laboratory managers, policymakers, and law enforcement officials on biorisk management best practices
- Curating a library of biorisk management training curriculum that is free and available to stakeholders
- Training implementation strategies, including regional training centers and train-the-trainer programs
- Partnering with universities to incorporate biorisk management materials into curriculums



- Helping to develop national and international biorisk management policies, regulations, standards, and guidelines
- Reviewing and drafting biorisk management procedures and plans for partner countries
- Assisting countries in the development of national biosafety associations
- Authoring publications in biological threat reduction and biorisk management

Infectious Disease Control & Diagnostics

Oie Collaborating Center for Laboratory Biorisk Management

- Collaborating Center for the World Organisation for Animal Health
- Engaging with public and veterinary health professionals to enhance awareness of biological threats
- Engaging key global disease surveillance stakeholders to enhance detection, reporting, and response efforts
- Conducting exercises and workshops in emergency preparedness and response
- Designing and implementing modern molecular diagnostics to enhance infectious disease detection and reduce reliance on live biological agents