INTERNATIONAL COLLABORATION FOR RADIOLOGICAL/NUCLEAR INCIDENTS AND ACCIDENTS

U.S. Department of Energy
National Nuclear Security Administration
Nuclear Incident Preparedness and Collaboration

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U.S. DOE/NNSA International Workshops

For over 20 years, the U.S. DOE/NNSA has been providing workshops with international partners on preparedness and collaboration for responding to radiological/nuclear incidents and accidents.

- Specialized workshops are designed for emergency preparedness and response
- Focus is on operational response to radiological/nuclear incidents and accidents
- Designed for first responders, law enforcement, emergency managers, and regulatory agencies
- Includes international best practices and practical hands-on operational experience
- Includes Train-the-Trainer knowledge building for experts to enhance their nations capabilities

Focus Areas for Workshops

- Search and recovery of lost or stolen radiological material out of regulatory control
- Aerial radiological surveys of plume deposition from a nuclear power plant accident
- Characterization and adjudication of radiation alarms on cargo containers at ports and borders
- Consequence management response to a terrorist radiological dispersal device incident
- Development and implementation of nuclear security measures for Major Public Events
- Radiological plume modeling and risk assessment for protective action recommendations
- Public health and safety medical advice and consultation for radiation sickness and injuries

Advanced Workshops Topics

Workshop topics include Consequence Management, Aerial Surveys, Major Public Events, Radiation Injuries, and Interdicting Illicit Materials on Ships and at Ports.

Partnerships and Collaborations

Innovative in-person and virtual advanced training workshops to specifically address concerns of the IAEA and international partners.

Partnerships and Collaborations include:

- Bilateral Agreements
- NATO Organization Partnerships
- IAEA Incident and Emergency Center
- IAEA Nuclear Security Division

I-RAD Workshop Series

The I-RAD workshop series was designed to address primary concerns of partner nations for radiological/nuclear incidents and accidents and includes:

- I-RAD-Basic – fundamentals of radiological search, identification and source recovery
- I-RAD-Major Public Events – advanced techniques for nuclear security measures at MPEs
- I-RAD-Ports – advanced techniques for adjudicating alarms on cargo containers
- I-RAD-Advanced – advanced search techniques and radionuclide identification/assessment

Advanced Workshop Series

In addition to the I-RAD series, several advanced workshops have been developed for the IAEA and partner nations to address more complex radiological/nuclear scenarios:

- I-AMS – advanced aerial survey techniques for reactor accident plume deposition
- I-Maritime – advanced techniques for searching cargo ships for illicit sources
- I-CM – advanced consequence management techniques for radiological dispersals
- IXP – website application for plume modeling, risk assessment, and protective actions
- I-TRIAGE – international expert advice and safety assessment of radiological data
- I-MED – international expert advice and medical consultation for radiation injuries

Summary

Radiological and nuclear incidents and accidents can rapidly elevate to complex national level responses requiring coordination, experts, and specialized resources from multiple agencies.

For over 20 years, the U.S. DOE/NNSA has been collaborating with the IAEA, NATO and international partners to provide workshops to advance radiological/nuclear safety and security worldwide.

We would like to thank our international partners for your continued participation, engagement, and sharing best practices in these workshops.

U.S. DOE/NNSA - Thank You

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