Confronting the Radiological/Nuclear Threat

*Prevent, detect, and respond* to the use of *radiological nuclear weapons* and *dispersion devices.*

**Planning**
- Understand the threat
- Assess vulnerabilities
- Develop detection architecture/strategies
- Implement standard operating procedures
- Develop response plans
- Training and exercise support for preparing

**Rad/Nuc Detection**
- Develop and deploy rad/nuc detectors
- Train
- Conduct exercises

**Event Response**
- Crisis management
- Consequence management
- Recovery
- Forensics

**Capabilities**
- Modeling
- System architectures
- Radiation detection materials
- Advanced radiation detector development and testing
- Ultra-low background radiation detection
- Radiation dose reconstruction and dosimetry
- Training first responders
- Data analysis
- Development and engineering of integrated detection systems
- Border and interdiction technology
- Forensics
- Radiological Assistance Program response teams
- National Guard Civil Support Team training and technical reachback

**National Laboratory Contributions**
- Extensive successful history and leading expertise in radiation detection and health physics
- Full knowledge of the rad/nuc threat and how to address it
- Testing and evaluation expertise and highly specialized facilities
- Deployment of detectors in complex operational environments

**Collaborations**
- DOE National Laboratories
- Industry (e.g., General Electric, ATK)
- Universities (e.g., University of Michigan)
- Government agencies (e.g., DOE/NNSA, DTRA)

For more information, contact:
Northwest Regional Technology Center, http://nwrtec.pnl.gov/
Steve Stein, Director, steve.stein@pnl.gov, (888) 347-6983

*Science-Based Solutions for Homeland Security*