

# DHS Science and Technology Directorate – First Responders Group

## National Urban Security Technology Laboratory (NUSTL)

### Performance Test and Evaluation at NUSTL (PTEN)

#### Providing quality assurance for first responders

The Performance Test & Evaluation at NUSTL (PTEN) program supports the nation's need to detect and protect against radiological and nuclear threats by conducting functional tests of law enforcement radiation detection equipment before they are used by responders in the field. PTEN ensures that equipment supplied to first responders works as designed and that all supporting materials are delivered. As a result of PTEN, first responders have increased confidence in their equipment because they know that each unit has been independently tested.

PTEN was developed by NUSTL and is made possible by a Memorandum of Understanding with the New York Police Department, which states all radiation detection equipment purchased through the Domestic Nuclear Detection Office's (DNDO) Securing the Cities (STC) program be tested by NUSTL. STC is a cooperative federal, state, and local program which seeks to design and implement architecture for coordinated and integrated detection and interdiction of illicit radiological materials that may be used as weapons. PTEN has expanded to include testing equipment beyond STC, including other first responder agencies and equipment deployed within the New York City metropolitan area purchased under non-STC funding. In addition to testing and evaluation, PTEN also provides:

- Technical guidance and support to responders for radiological detection devices
- Warehousing and logistical expertise to facilitate deployment of equipment



PTEN functional test on a radiological detector

#### Testing radiation detectors for functionality

As of FY 2014, PTEN has tested and deployed over 10,000 pieces of radiological detection equipment worth approximately \$25 million. This equipment includes personal radiation detectors, backpack detectors, mobile detection units, and isotope identifiers. The equipment undergoes specific tests based on the expected function of the product in order to ensure that the hardware, software, and accessories are fully functional before the units are deployed.



NUSTL has tested over 10,000 radiation detectors for first responders. The units at left are Personal Radiation Detectors that were previously deployed by the U.S. Coast Guard which are being tested for DNDO use.

#### Partnering with state and local first responders

Equipment that has passed NUSTL's quality check is used by first responders and law enforcement agencies to combat terrorist threats by aiding in the detection of localized radiation sources that could potentially indicate the presence of devices such as nuclear weapons, improvised nuclear devices (INDs) or radiological dispersal devices (RDDs). NUSTL's PTEN partners include the New York Police Department, Fire Department of New York, Suffolk County Police Department, New Jersey State Police, Port Authority Police Department, Connecticut State Police, and Metropolitan Transportation Authority Police Department. NUSTL also prepared personal radiation detectors for temporary deployment to Amtrak personnel to support security efforts for the [2014 Super Bowl](#).

#### What's next?

PTEN will continue to instill confidence in radiological detection capabilities by ensuring responders have quality equipment for deployment in the field. The PTEN quality assurance program is of high value because of the vast amount of equipment it tests and because having radiological detection equipment that functions properly in the field can save lives.