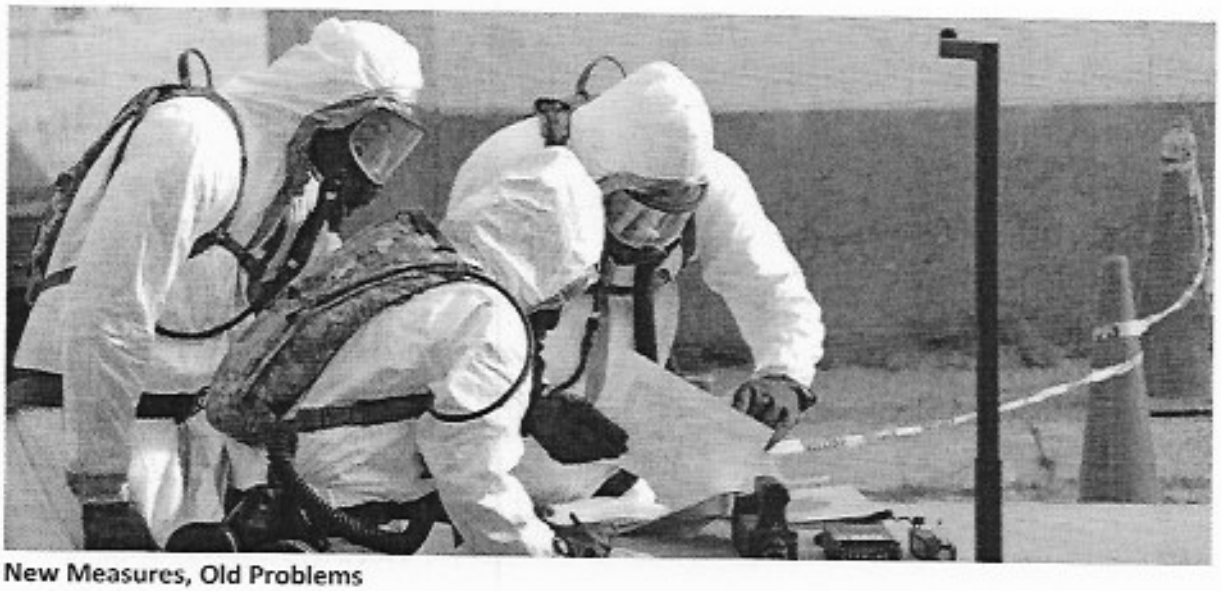


New Measures, Old Problems

Nov 15, 2017

This post is also available in: עברית (Hebrew)

The possibility of a chemical attack in a central urban venue has accelerated US Department of Homeland Security (DHS) efforts to develop more security alert platforms. A testbed will be established in the World Trade Center Transportation Hub in New York City for chemical detection sensors. The move will be under an agreement announced between the DHS and the Port Authority of New York and New Jersey.

"The goal is to achieve independent detection by at least two different types of sensors in the event of an intentional release of a chemical dangerous to the public and employees", Don Bansleben, program manager of the DHS's Science and Technology Directorate's Chemical and Biological Defense Division, said. "The results from this testbed could be integrated into the Port Authority's operational and emergency plans to enhance security and public safety measures."

According to a report on homelandprepnews.com, chemical attacks on public transportation systems predate 9/11. A terrorist group known as Aum Shinrikyo killed 11 people in a Japanese metro station back in 1995 with a homemade sarin nerve gas. Chemical weapons were more recently deployed during the Syrian conflict in April. Despite the Chemical Weapons Convention treaty's ban on the production or sale of chemical weapons, Bansleben said there's concern that people can make them at home and easily carry them into busy transportation hubs.

Argonne National Laboratory has been contracted to install the chemical sensors. Sensors that use varying physical detection techniques — point sensors that register agents close to them and standoff sensors that cover large areas— will be used to independently confirm if a chemical agent is present in a particular area. "For example, one of these sensors may be sending an infrared beam across a large space, and if the beam passes through a cloud of hazardous material, it may absorb the energy," Bansleben said. "Every molecule has a fingerprint in the infrared region and will absorb energies at different frequencies; if there is a match, security would be alerted."