



## Emergency Management and Response Information Sharing and Analysis Center (EMR-ISAC)

**INFOGRAM 14-09**

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***NOTE:** This INFOGRAM will be distributed weekly to provide members of the Emergency Services Sector with information concerning the protection of their critical infrastructures. For further information, contact the Emergency Management and Response- Information Sharing and Analysis Center (EMR-ISAC) at (301) 447-1325 or by e-mail at [emr-isac@dhs.gov](mailto:emr-isac@dhs.gov).*

### Review: Secondary Explosive Devices

Considering the increased use of secondary explosive devices (SEDs) in several foreign nations, Emergency Services Sector (ESS) personnel occasionally express their concern in various forums about being confronted with SEDs at incidents within the United States. Instances of SEDs targeting American emergency personnel are uncommon according to research by the Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC). However, former Homeland Security Secretary Michael Chertoff said a few months ago that ESS departments and agencies “need to understand the latest terrorist bomb-making techniques being used overseas if they are to help thwart domestic bombings and the existence of a secondary device.”

The Occupational Safety and Health Administration (OSHA) reports that SEDs are bombs placed at the scene of an ongoing emergency response that are intended to cause casualties among first responders. “These devices are typically designed to explode after a primary explosion or other major emergency response event has attracted large numbers of responders to the scene to inflict additional casualties, create fear and confusion, disrupt command and control, and prevent rescue operations.” SEDs could be hidden in everyday objects, be part of a sequential attack, or detonated later after the initial attack.

The following basic guidelines for ESS organizations were derived by the EMR-ISAC from multiple sources and reviewed here for the benefit of emergency planning and training:

- Anticipate the presence of a secondary device at any suspicious incident.
- Search for SEDs before moving into the incident area.
- Avoid touching or moving anything that may conceal an explosive device.
- Report the discovery of a suspected device immediately.
- Prevent the conduct of operations close to an identified device.
- Mark the location of the unexploded device clearly.
- Manage the incident scene with boundaries, exclusion zones, triage areas, etc.
- Evaluate and evacuate victims and non-essential personnel as quickly as possible.

For frequently asked questions about SEDs, see the OSHA web site at <http://www.osha.gov/SLTC/emergencypreparedness/guides/secondary.html>.

### Terrorist Recognition Cards

The Department of Defense developed Terrorist Recognition Cards to increase awareness and recognition of high-threat terrorists. These cards contain images of terrorists and related biographic information. Included among the cards are known terrorists from five different geographic regions: Afghanistan/Pakistan, Iraq, the Horn of Africa, Arabian Peninsula, and Southeast Asia.

The Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC) examined many of the cards in the collection, which is not an exhaustive compilation. For example, the cards do not include many known high-threat terrorists for whom pictures are not available or for whom only limited biographic information is available.

Although the pictured terrorists will likely alter their appearance to avoid capture, the Defense Intelligence Agency requests anyone with information about individuals in the Terrorist Recognition Cards should contact the Federal Bureau of Investigation (FBI). The EMR-ISAC offers the following link for more information about the FBI's Most Wanted Terrorists: <http://www.fbi.gov/wanted/terrorists/fugitives.htm>. The online version of the Terrorist Recognition Cards can be seen at [http://www.dia.mil/site6\\_images/cards/index.htm](http://www.dia.mil/site6_images/cards/index.htm).

## Radiological Training Resources

In February, the Radiological Threat Awareness Coalition (R-TAC) sponsored the 2009 Radiological Threat Summit in Washington, D.C. Focusing on the Emergency Services Sector (ESS), conference speaker Jeffrey Runge, M.D., former Chief Medical Officer for the Department of Homeland Security, acknowledged that in "an uncommon situation, especially one that involves a possible radiological threat...the public expects [responders] to know what to do." "It's imperative," he said, that they "be prepared and have the tools to do just that." ([http://www.r-tac.org/summit\\_video.html](http://www.r-tac.org/summit_video.html))

As part of his guidance to senior leaders of emergency organizations, Dr. Runge stressed the importance of responders becoming familiar with their local radiation safety officer, and the individual's capabilities and resources. Based on Dr. Runge's suggestions, and an interview with Brooke Buddemeier of the Lawrence Livermore National Laboratories, the Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC) assembled resources relevant for responses to radiological incidents and those involving radiological dispersal devices (dirty bombs).

- The Conference of Radiation Control Program Directors (CRCPD) offers a state-by-state listing of radiation protection programs with appropriate contact information, links to federal programs involved in radiation issues, a grant-funding handbook geared to state and local emergency management partners, and a matrix of key grant programs from numerous federal departments and agencies under which state and local governments and first responders are eligible to receive planning, training, equipment, and exercise assistance. Among many other resources at the CRCPD site is the downloadable "Radiological Dispersal Device (RDD) [*Dirty Bomb*] First Responder's Guide—The First 12 Hours" at <http://www.crcpd.org/default.aspx> (102 pp., 4 MB).
- A new skills training video, "Screening People for External Contamination: How to Use Hand-held Radiation Survey Equipment," is available from the Centers for Disease Control and Prevention (CDC). The 18-minute video demonstrates how to screen people for external contamination using a handheld Geiger Mueller Detector, and is designed for responders assigned to conduct mass screening for contamination from radioactive materials following large-scale incidents. Supplementary training material on the use of ion chambers and alpha scintillation detectors is provided in addition to a downloadable graphic illustration (job aid) of the procedure for performing a radiological survey. (<http://emergency.cdc.gov/radiation/screeningvideos/index.asp>)
- The American Society for Testing and Materials (now known as ASTM International) developed, and in August 2008, published "Standard Practice for Radiological Emergency Response" (ASTM E2601-08) to provide guidance for responses to incidents that involve the intentional release of radioactive materials. The standard also applies guidance for general radiological emergency response, and decision-making considerations jurisdictions can use to respond to radioactive materials incidents. It conveys a consistent set of practices that can be incorporated into the development, planning, training, and implementation of guidelines for radiological emergency response, but does not incorporate long-term recovery or mitigation considerations, or provisions for improvised nuclear devices (INDs). Regrettably, the EMR-ISAC is not able to provide access to a free download of the full standard. A brief summary is available at <http://www.astm.org/Standards/E2601.htm>. The EMR-ISAC will examine resources for responses to nuclear incidents in a future INFOGRAM.

## Cyanide Poisoning Update

Three educational supplements that inform and advise responders about the threat and dangers of cyanide are available from the Cyanide Poisoning Treatment Coalition (CPTC), a non-profit organization whose members include physicians as well as Emergency Services Sector (ESS) organizations and personnel.

The Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC) summarized the three publications as follows for the benefit of ESS departments and agencies:

- “SMOKE – Perceptions, Myths, and Misunderstandings” addresses the unrecognized threat of cyanide to responders, air management critical issues, respiratory protection, and the importance of prompt recognition and treatment for pre-hospital care during EMS operations. First published in 2005, it discusses acute cyanide poisoning of emergency personnel in the United States and in France where new treatments are being used to treat fire smoke inhalation cyanide poisoning.
- “SMOKE – Cyanide and Carbon Monoxide: The Toxic Twins of Smoke Inhalation,” released last month, delves more deeply into fire smoke inhalation issues. In addition to smoke chemistry complications, responder air management needs, mandates, and solutions, it covers rehabilitation, cyanide exposure, recognizing signs and symptoms, and new drug treatments now available in the U.S.
- “SMOKE – The Toxic Twins: An Advanced Perspective on Cyanide and Carbon Monoxide Poisoning,” newly written by David G. Penney, retired Professor and special consultant in toxicology at the School of Medicine at Wayne State University in Michigan, examines the physical properties, sources, and physiological effects of cyanide and carbon monoxide poisoning. Dr. Penney explores signs and symptoms, cardiac effects, long-term central nervous system (CNS) effects, and treatments for cyanide and carbon monoxide poisonings.

For more information about this safety and survival threat to responders, and to inspect offerings from the Cyanide Poisoning Treatment Coalition, visit <http://www.firesmoke.org>. The EMR-ISAC notes that all three supplements with download links have been compiled at <http://www.bigmedicine.ca/specialfeature.htm>.

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### **REPORTING NOTICE**

The National Infrastructure Coordinating Center (NICC) within the Department of Homeland Security (DHS) Office of Infrastructure Protection is the central point for notifications regarding infrastructure threats, disruptions, intrusions, and suspicious activities. Emergency Services Sector personnel are requested to report any incidents or attacks involving their infrastructures using at least the first and second points of contact seen below:

- 1) NICC - Voice: 202-282-9201, Fax: 703-487-3570, E-Mail: [nicc@dhs.gov](mailto:nicc@dhs.gov)
- 2) Your local FBI office - Web: <http://www.fbi.gov/contact/fo/fo.htm>
- 3) EMR-ISAC - Voice: 301-447-1325, E-Mail: [emr-isac@dhs.gov](mailto:emr-isac@dhs.gov), fax: 301-447- 1034,  
Web: [www.usfa.dhs.gov/subjects/emr-isac](http://www.usfa.dhs.gov/subjects/emr-isac), Mail: J-247, 16825 South Seton Avenue,  
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