

Why is it important to secure radioactive materials?

Radioactive materials are used to treat cancer, irradiate blood and food, and sterilize equipment. These applications use isotopes such as cesium-137 and cobalt-60. If lost or stolen, these sources can pose a great risk to our people. A terrorist could use any of these sources to make a radiological dispersal device, or “dirty bomb,” and detonate it in one of our cities.

What are the consequences of an act of radiological terrorism?

A radiological dispersal device could have devastating economic and psychological consequences for our country. Such an event could contaminate critical infrastructure, businesses, homes, schools, and shopping areas, resulting in evacuations, relocations, lost wages, and costly cleanup. Economic losses could be in the billions of dollars.

Are radioactive materials used in radiological devices of interest to terrorists?

Terrorists are more likely to attempt radiological terrorism, rather than nuclear terrorism, due to the fact that radioactive materials are so prevalent and are much easier to make into an improvised weapon. Radical terrorist organizations have demonstrated interest in obtaining radioactive materials and have the expertise to weaponize them. The Islamic State of Iraq and Syria (ISIS) has proven its willingness to use weapons of mass destruction.

What would happen if our radioactive sources were stolen?

Should your radioactive sources be stolen, some radiological facility managers have indicated your organization may be held liable for the damages and loss of life.

What is ORS doing to secure radioactive materials here in the U.S.?

The Office of Radiological Security (ORS) enhances security here in the U.S. and globally by preventing high-activity radioactive materials from being used in acts of terrorism. ORS has already secured many facilities in the U.S. and provided training to site security and law enforcement. ORS works with partner facilities to protect radioactive sources, remove and dispose of disused radioactive sources, and reduce the global reliance of high-activity radioactive sources by promoting the adoption and development of non-radioisotopic alternative technologies.

How can ORS help permanently reduce the risk that radioactive materials pose?

ORS works with its partners to achieve permanent risk reduction through the elimination of radioactive sources by leading efforts to encourage development and adoption

of viable alternative technologies. Certain alternative technologies, like X-ray, can work as well as, or better than, the equipment and sources being replaced. Facilities that move to alternative technologies eliminate risks and reduce the burden of stringent security requirements and source disposition costs. ORS has a cost-sharing incentive program, the Cesium Irradiator Replacement Project (CIRP), that encourages replacement of cesium-137 irradiators.

If my facility already meets regulatory requirements, what additional benefits does ORS provide?

ORS’s physical protection upgrades complement Nuclear Regulatory Commission Regulations (e.g., 10 CFR Part 37) and promote effective physical protection performance by implementing best security practices. The goal of these upgrades is to detect and delay an adversary attempting a radioactive source theft and to enable responders to arrive in time to contain the adversary at the facility. ORS also offers permanent risk reduction solutions by cost sharing with facilities to replace radioactive devices with alternative technologies and removing disused radioactive sources.

How can ORS help remove disused radioactive sources?

The ORS Off-Site Source Recovery Program (OSRP) can help you remove your disused radioactive sources. ORS will help identify disposition options for unwanted sealed radioactive sources. If your organization has disused radioactive sealed sources, you can register them online. Visit <http://osrp.lanl.gov> or call OSRP at 877-676-1749. You can also register sources currently in use for eventual future disposition.

Why is ORS focusing on response and integration of law enforcement with the facilities?

Facilities or businesses that use radioactive materials are generally open civilian facilities. For these facilities, security forces are typically unarmed and would not be able to prevent a sophisticated adversary from stealing radioactive materials. These facilities depend on local law enforcement to provide effective and timely response should an attempted radiological theft occur. It is critical that site security plans are integrated with local law enforcement response plans. ORS provides law enforcement with both the alarm monitoring systems as well as the training to enable timely, safe response to a radiological theft event.

For more information, contact: ORSinfo@nnsa.doe.gov.



ORS

Office of Radiological Security

Protect • Remove • Reduce