



Who Needs Personal Radiation Detection?

- Sources can show up at border crossings, scrap yards, landfills, and other public locations.
- Accidents involving sources have resulted in human casualties and have had serious environmental and economic impact.
- Orphan sources of radioactive materials are more common than you think, and a growing problem due to increased use in different markets such as medical and construction industries.

Here are some examples of the types of workers who should utilize radiation detection and monitoring equipment to keep themselves and the public safe from potential threats.

First Responders	Remediation Personnel	Industrial Workers	Power Plants	Medical Personnel	Scrap Yard Workers	Military / Civil Defense
						
<p>In emergency response situations, flammable and explosive materials like gases, dust and fibers can spread radioactive sources, putting responders at risk. Instruments can passively monitor the environment and alert users when elevated dose rates are detected.</p>	<p>Soil can become contaminated by hazardous wastes from neighboring plants or improper disposal. Screening during site remediation exposes workers to potential high radiation doses. Instruments should be used to constantly monitor personal dose while simultaneously pinpointing radiation sources.</p>	<p>Industrial radiography to check metal parts, machines used to kill bacteria and other pathogens, and devices that test construction materials are examples of industry where radiation can be found.</p>	<p>Daily monitoring for radiation exposure is standard regulatory procedure in nuclear power plant operations.</p>	<p>Nuclear medicine and radiography personnel who work in close proximity to radiation materials and radiation producing equipment have a high risk of exposure, particularly on their hands.</p>	<p>Radioactive sources can make their way into the metal recycling stream. Radioactively contaminated scrap threatens both the workers who handle it and the consumers who buy the products made of recycled material. Instruments can be used to search and find sources in scrap before the source is melted at the foundry.</p>	<p>Military and civil defense personnel may be exposed to radiation during service. Exposure from depleted uranium in artillery, nuclear power on ships and submarines, require radiation monitoring. Instruments can provide protection while also enabling users to search for WMDs during their mission.</p>

Find out more at thermofisher.com/radiationsecurity