

Smoke Detectors & Radiation:

What you need to know



How do smoke detectors work?

There are two types of smoke detectors – photoelectric detectors and ionization detectors. The principle difference between these two types is the smoke detection method in each. Photoelectric detectors use a beam of light. Ionization detectors use a small amount of radioactive material – Americium 241 – to detect smoke. The most common type of smoke detector used in residential homes is the ionization detectors.

What is the health risk of the radioactive material contained within the smoke detectors?

The amount of radioactive material is so small that it does not pose a risk to human health or the environment. These radioactive sources are manufactured at such low levels that they are classified as “exempt” and are therefore exempt from regulations.

How do I dispose of my old smoke detector?

The best way to dispose of an old smoke detector is to return the product to the manufacturer, not to the trash can. The Radiation Protection Section encourages disposal through the manufacturer because all municipalities have the authority to deem what does and does not get disposed of as municipal waste. Some municipalities do not allow even exempt, non-regulated quantities of radioactive material to enter their landfills. Contact information for manufacturers and distributors of smoke detectors is listed on the following page.

List of Smoke Detector Manufacturers and Distributors

<p align="center">American Sensors 100 Tempo Ave. Unit 15 East Toronto, ON Canada M2H3S5 800-387-4219</p>	<p align="center">Amway Corp. 616- 787- 6000 7575 E. Fulton St., Ada, MI 49355</p>
<p align="center">Code One/Firex/Maple Chase Products Invensys Climate Controls Americas 191 East North Avenue Carol Stream, IL 60188 United States of America (630) 260-3402</p> <p align="center">Or</p> <p align="center">2820 Thatcher Road Downings Grove, IL 60515</p>	<p align="center">Dicon 3334 Main Street Skokie, IL 60076</p>
<p align="center">Edwards Co. 203-699-3300 90 Fieldstone Ct., Cheshire, CT 06410-1212</p>	<p align="center">Entronic Co. 4348 Riverline Dr., Earth City, MO 63045</p>
<p align="center">Family Safety Products 205-663- 3855</p>	<p align="center">First Alert/BRK Brands 3920 Enterprise Court Customer Service Dept. Aurora, IL 60504-2495 800-392-1395 or 800-323-9005</p>
<p align="center">Honeywell 800-328-5111</p>	<p align="center">Gentex Corporation 616-772-1800 600 N. Centennial St Zeeland, MI 49464</p>
<p align="center">Interactive Technologies 651-777-2690</p>	<p align="center">Life Saver/Frynetics, Inc. 1055 Stevenson Court Suite 102W Roselle, IL 60172</p>
<p align="center">Nighthawk Systems 800-880-6788 1394 South 3rd St Mebane, NC 27302</p>	<p align="center">Radio Shack 817-415-3205</p>
<p align="center">Safety's Sake/Funtech 388 North Ellicot Creek Rd. Amherst, NJ 14228 800-877-1250</p>	<p align="center">Sears 785- 830- 2000</p>
<p align="center">Sentrol 503-692-4052</p>	<p align="center">System Sensor 630-377-6580 3825 Ohio Ave., St Charles, IL 60174</p>
<p align="center">Thermtechnology, 2879 Remico, Grandville, MI 49418</p>	<p align="center">Triad Safety Systems 308-236-7062 4595 Airport Rd Carney, NE 68847</p>
<p align="center">Walter Kidde / Lifesaver / KIDDE Frynetics 919-563-5911 1394 S. 3rd St. Mebane, NC 27302</p>	