

## Smoke Detector Recycling

Smoke detectors are a life-saving device that should be in everyone's home. Smoke detectors have an expiration date—10 years for smoke detectors and 5 to 7 years for combination smoke and carbon monoxide detectors. So how do you dispose of an expired smoke detector?

The answer to this question depends on the type of smoke detector. There are two types of smoke detectors: ionizing and photoelectric.

Ionizing smoke detectors use a tiny amount of a radioactive isotope and electrically charged plates to detect smoke. When smoke enters the detector, it stops the flow of ions between the two electrically charged plates, causing the alarm to sound. Ionizing smoke detectors are best at detecting flaming fires.

Photoelectric smoke detectors contain a light sensor and a light aimed away from the sensor. When smoke enters the detector, the light is reflected onto the light sensor, causing the alarm to sound. Photoelectric smoke detectors are best at detecting smoldering fires.

There are also dual sensors which contain both types of detectors in one unit. You can identify the type of smoke detector by looking at the back. If you see a radioactive symbol (pictured to the right), then you have an ionizing or dual sensor smoke detector. The back of the smoke detector has the manufacture date, which you can use to determine the expiration date.



Smoke detectors are not accepted at Montgomery County household hazardous waste or E-waste recycling events or drop-off locations. Photoelectric smoke detectors can be thrown in your household trash after removing the battery. Due to the radioactive material in ionizing smoke detectors, they must be recycled; however, they cannot be put into a household recycling bin. There are two options for properly recycling ionized or dual sensor smoke detectors:

Return to manufacturer: many companies will accept their brand of ionizing smoke detectors for recycling. The United States Postal Service provides [a list of manufacturers](#) that accept smoke detectors and their addresses. You must pay for postage and, in some cases, a small fee for recycling. Google provides a [free shipping label](#) to recycle their Google Nest smoke detectors.

Smoke detector recycling kit: Curie Environmental Services offers a [smoke detector recycling kit](#) to recycling ionizing smoke detectors, regardless of brand. The kits include proper shipping materials and paid postage. The kit will be shipped to your home, and you can simply add your smoke detectors (battery removed) and drop off with the shipping carrier listed on the postage.

For more information on recycling smoke detectors, go to [www.northmontcorecycle.com](http://www.northmontcorecycle.com)