NEWS Ohio

# Smoke detectors don't save lives, at least not the most commonly used detectors

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1st Responder Newspaper Story Number 102710102



Smoke detectors don't save lives, at least not the most commonly used detectors.

In the early 1970's less than 10% of the homes had smoke detectors, back then 8 people died for every 1,000 fires that occurred. Today 95% of homes have smoke detectors, however 8 people still die for every 1,000 fires that occur. 70% of fire-related fatalities, in Hamilton County, are due to smoke inhalation, not the heat or flames. 75% of fatalities occur during sleeping hours.

Smoke detectors are built with one of two sensors in them. One sensor, Ionization, is designed to recognize and alarm in the presence of a flaming fire. It detects the small particles that are suspended in the air (ionized electrons), these particles are so small you may not even be able to see or smell them. The Ionization detectors utilize a very small amount of a radioactive isotope that emits Alpha radiation (don't worry, unless you are playing with the detector or inhaling the air directly off of it, the radiation is harmless). The second sensor, Photoelectric, is designed to recognize and alarm in the presence of a smoldering fire. The Photoelectric senses the smoke that is produced from smoldering fires or from items such as synthetic materials. The smoke disrupts a light sensor inside the detector and activates the alarm.

In a flaming fire, such as a kitchen fire, an Ionization detector goes off about 10 seconds prior to a Photoelectric detector. In a smoldering fire, such as electrical or careless smoking, the Photoelectric detector can activate 10, 15, 20, even 30 minutes before the Ionization detector goes off, if it even activates at all. Studies have been done by the National Institute of Standards and Technology, National Fire Protection Association, and Texas A&M University, all of which confirm similar findings that Ionization smoke detectors are failing us. Their test results have been shown on multiple television shows and posted on various websites such as YouTube. Many states have banned, or are currently debating the banning of, detectors that use Ionization technology. Many of the courts have passed judgment against the detector manufacturers for faulty Ionization detectors.

The overwhelming majority of the population has Ionization detectors in their home. Why?, because it is the cheapest in cost. A Photoelectric detector costs about twice what the Ionization sells for. Therefore the Ionization detector is the cheaper and more economical choice. How do you know which one you have? Look on the back of the detector, if you see an "I" or "radioactive" then its an Ionization detector. A Photoelectric detector will have a "P" on it.

Please provide your family with the proper safety equipment. We buckle our kids into child seats and seat belts; our cars have airbags and bicycle helmets are in common use now. So why not provide your family with the proper smoke detector? Replace your ineffective Ionization detectors with the Photoelectric detectors.

Call your local fire department for more information.
Colerain Township Fire & EMS 825-6143

Extracted 28 October, 2010 from:
www.1rbn.com/webpages/news/displaynews.aspx?ID=c8e24578-3be2-4760-8847-246364efe5ee