

October 2024

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Smoke Alarms

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Supervising Safety Newsletter

October is National Fire Prevention Month. This year the initiative is, "**Smoke Alarms: MAKE THEM WORK FOR YOU!**" How many take for granted the smoke alarms at work and in our homes? Smoke alarms and other devices are sensitive pieces of equipment that require testing, maintenance, and replacement when the units break or wear out.

Types of Fires and Alarms

There are two types of fires to be aware of: flaming fires and smoldering fires. Smoldering fires are especially deadly due to poisonous gases that can accumulate while you are sleeping.

There are three main types of smoke alarms:

- Ionization smoke alarms monitor "ions" or electrically charged particles. Smoke particles change the electrical balance of the air. The alarm will sound when the change in electrical balance reaches a preset level. Ionization alarms perform best in fast flaming fires. Research has shown ionization alarms to be unreliable in tests of slow, smoky fires.
- Photoelectric smoke alarms use a beam of light and a light sensor. Smoke particles change the amount of light that reaches the sensor, causing the alarm to sound.
- Dual smoke alarms combine ionization and photoelectric sensors to detect both types of fires. **Dual smoke alarms provide the greatest overall safety for either type of fire.**
- Smoke alarms equipped with transmitters, vibration technology, strobe lights, and other enhancements are also available for those with sensory or physical disabilities.



- At work, smoke alarms and various sprinkler and fire protection systems are all around us. Take time to locate and identify the systems in use at our facility. If there are any questions, ask one of the safety personnel.
- Smoke alarms and other detectors should be tested monthly to ensure they function correctly. This can be done by pushing in on the test button until the alarm sounds.
- Replace alarms when they are ten years old or have stopped responding when tested.
- Batteries should be replaced every six months. If your smoke alarm makes a "chirping," noise or has a blinking red light it means new batteries are needed right away.
- Extend the life of your alarm by cleaning off the cobwebs or accumulated dirt. Gently vacuum the outside with the soft brush attachment on a vacuum or blow debris away with compressed air. Do not use water, cleaners, solvents, or an air compressor.
- Those who live in older homes should inspect their homes and install smoke alarms where needed.

Make sure everyone knows the sound of the smoke alarm and what to do when they hear the beep. We should also

know who to call in the event of an emergency at work (**2911 or Channel 1**) and at home (**911**). Everyone, whether at work or at home, should have a fire escape plan and know what to do and where to go in the event of an alarm. Take the time to look for escape routes in your work area and remember to avoid the elevators.

At IPSC, Muster Stations are used to account for workers during an emergency. When at home, a safe place away from the home should be used to meet. Stay safe by developing an escape plan at work and at home and ensure everyone takes the time to practice.

Installation and Maintenance

- Smoke alarms should be installed in bedrooms and outside sleeping areas in main hallways on every level of the home. Avoid installing them in kitchens where they could malfunction frequently.