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Press Release

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USE AND CARE OF SMOKE DETECTORS

It is that time of the year again: time to change the batteries in your smoke detectors and test them to make sure they work. Make certain that all of the occupants of your home are aware of the sound made by the detectors. Also, have an agreed upon location outside the home where the entire family will meet in the case of an emergency.

In the United States, 80 percent of all civilian fire deaths result from home structure fires and occur at night when occupants are sleeping. In most cases, a working smoke detector could have saved these lives. Contrary to popular belief, the smell of smoke may not wake a sleeping person. Poisonous gases and smoke produced by fire numb the senses, putting victims into a deeper sleep. Smoke detectors are one of the best, cheapest, and easiest safety features you can use to protect yourself, your family, and your home. By providing time to escape, smoke detectors cut the risk of dying in home fires by half.

Did you know that there are two different operational methods with which smoke detectors function? They are **ionization and photoelectric** smoke detectors. They work off differing methods. **Ionization** smoke detectors use an **ionization chamber** and a source of **ionizing radiation** to detect smoke and then sound a horn. This type of smoke detector is more common because it is inexpensive and better at detecting the smaller amounts of smoke produced by flaming fires. The other type is a **photoelectric** smoke detector which contains a **light** and on the other side a **photodetector** that can "see" the light. The photodetector senses the lack of light and triggers a horn. Always choose a detector that bears the label of a recognized testing laboratory (such as UL or FM). A detector will alarm you if installed, maintained, and tested properly.

In general, ionization detectors are better at detecting free burning type fires where lesser amounts of smoke are produced (such as a burning Christmas tree in a room) and photoelectric detectors are generally more responsive to smoldering fires (such as a smoldering mattress). For the best protection, both types of detectors, or a combination detector (photoelectric and ionization), should be installed in homes. In either case, install a smoke detector in every bedroom (within three feet of the doorway), hallways leading to bedrooms, and at least one on

every level of your home, including the basement. Follow the manufacturer's installation instructions. Smoke rises, so make sure your smoke detector is mounted on the ceiling. If you must place it on the wall, it should be between 4 inches and 12 inches down from the corner of the ceiling and the wall. In a room with a pitched ceiling, mount the detector within 36 inches of the highest point. In stairways, place the detector at, or near, the top of the stairs.

Installation is important as there are more strategic areas in a home that will result in earlier notification of occupants and thus more time for escape. Smoke detectors should be tested periodically (manufacturers recommend monthly) and replaced after 10 years of service or sooner if periodic testing results in improper results. Detectors should be cleaned periodically with a vacuum and never painted. Dust and spider webs can cause faulty alarms or reduce sensitivity. If an alarm "chirps," warning the battery is low, replace the battery right away. Under no circumstances should you "borrow" a battery from a detector to use in some other location.

Alarms are not recommended to be placed in kitchens, bathrooms, or garages. Fumes, steam, or exhaust can be the cause of activation. Never dismantle your alarm if it goes off when cooking or after a steamy bath/shower. Simply move the location of the alarm so it is more functional.

Practice often. It is important to conduct regular tests of detectors and home fire drills and to make sure everyone in your home knows how to "get out and stay out" in the event of a fire. Fire drills aren't just for schools- they are important at home, too!

Fire Resistive Christmas Trees. As we get closer to the holidays, a reminder that all live Christmas trees that are brought inside a structure during the holiday period must have a fire retardant applied to it to be compliant with California State Fire Code. Look for a tag with the State Fire Marshal's Office seal on it to ensure that the tree has been properly treated.

If you would like more information on this or any other related matter, please feel free to contact the station at 934-2300.