



OFF-CAMPUS

By Tim Knisely

March 2014

The basics of smoke and carbon monoxide alarms...

Today's student is high-tech and exposed to a variety of audible sounds to alert them to a text message, voicemail, appointment reminder, open fridge and more. Will they recognize the smoke alarm or carbon monoxide alarm if it sounds? The alarm itself may have different messages based on the audible pattern such as an alarm condition, low battery, malfunction or even the end-of-life signal. We need to work with the building owners and their staff to make sure that the students are informed so they can take the appropriate action when these alarms sound.

It all starts with the building owner, property manager and maintenance staff. These professionals need to understand how the systems are intended to function, and how to be properly maintained. It may be as simple as installing the proper batteries as required by the manufacturer. Or, knowing that the life

expectancy of carbon monoxide alarms is dependent on the manufacturer, and these expiration dates may be different than the smoke alarms. The manufacturer or the manufacturer's representative can provide staff training on the equipment that is purchased.

Next, much of this information must be relayed to the students that occupy their buildings. At the time of move-in every student must be provided with information about the type of smoke and/or carbon monoxide alarms that are in their house or apartment. Without getting too technical, explain the difference in the audible pattern of the alarms. The 3-beeps



Smoke alarm with the manufacturer provided battery, and also shows manufacturer date & battery warning



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signal a fire condition, where 4-beeps are for carbon monoxide, otherwise known as the Temporal 3 or Temporal 4.

This is also the time to remind them of the appropriate actions to take when the alarm sounds and there is a fire or carbon monoxide emergency. For interconnected smoke alarms, the room where the alarm is sounding may seem okay, but a fire may be in another room or another floor. This is also very important so carbon monoxide alarms are not ignored because everything seems normal, only to find out too late that the colorless, odorless, and tasteless gas is present.

Most students have never tested a smoke alarm or changed the batteries, so this must also be covered. Inspectors come to find this out when we ask a student to test their smoke alarm during an inspection, and they reply back “how do I do that” or “what button do I push”? If the student is expected to change the batteries they must be

shown how to do so, especially if the alarm utilizes locking bases. If building maintenance will change the batteries (recommended) then the students must be instructed to call and request a work order, and to not remove the batteries. Manufacturers now provide a “hush” button to temporarily silence the alarm until non-fire conditions improve, without needing to remove the batteries. This is a great tool to use when steam, or smoke from cooking triggers the alarm, or the batteries are low. Building

management should also encourage students to call for maintenance when they have issues with the alarms, such as activating when cooking, going off for no apparent reason or intermittent beeps. Building maintenance may need to be reminded that these intermittent beeps may mean the alarm is malfunctioning or needs replaced, not just low batteries. Always refer them to the manufacturer’s instructions for more information.

Smoke alarm tampering - pen cap installed instead of a battery





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Fire Alarm Systems: If students live in an apartment building or rooming house that contains a fire alarm system in addition to their dwelling unit alarms, this is also important information to be relayed at the time of move in. Information such as the sound the alarm makes, is it connected to the alarm company or fire department, and who to call if the alarm sounds. In student housing alarm activations are not

uncommon. If you are testing the alarm system make sure that notice has been provided to all tenants in advance of the testing. This way they can make other arrangements if they are preparing for an exam, sleeping or just want to get away from the noise. Plus, the less inconvenience we can cause the students the more likely it is they will take appropriate action when the alarm sounds.

In future articles we'll discuss false alarm reduction strategies for these buildings, as well as new alarm technologies that are now - or soon to be available.

Please share your experiences - what are you having trouble enforcing or raising awareness to? Or, if you have an idea for future articles that you'd like to contribute contact me at tknisely@campusfiresafety.org.



Warning sign for pull stations that rings locally in the building, not to the alarm company or the fire department (where permitted)



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