

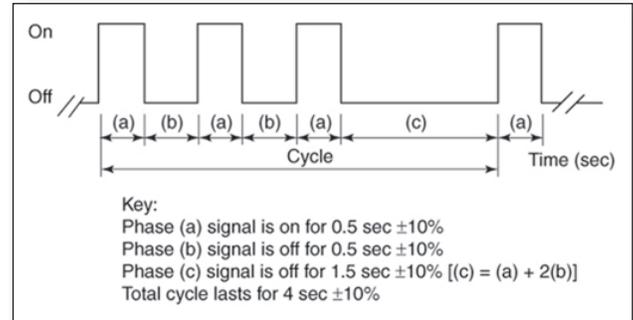


## Three “Beeps” or Four “Beeps”?

No. FM-2013-8 July 11, 2013

**Learning Objective:** The student shall be able to understand the difference in sounds between smoke alarms and carbon monoxide alarms.

You are presenting a public fire education program about smoke alarms. A parent asks you this excellent question about combination smoke/carbon monoxide (CO) alarms; “How do I know when it is the smoke part of the alarm going off?” Neither National Fire Protection Association (NFPA) 72, *National Fire Alarm and Signaling Code* nor NFPA 720, *Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment* have a requirement for a voice announcement when the alarms activate. However, the smoke alarm is equipped with a requirement to “beep” three times with a short pause between each beep and then a slightly longer pause before the next three beeps. A CO alarm is equipped with a requirement to “beep” four times with a short pause between each beep and then a slightly longer pause before the next four beeps.



This diagram is of a smoke alarm going into alarm. The diagram for a carbon monoxide alarm is similar.

The International Residential Code (IRC) requires new homes to have CO alarms if they have an attached garage, a fireplace or any fuel-burning appliances (such as a gas clothes dryer, gas water heater, oil furnace, etc.). In most cases, hard-wired battery-backup smoke alarms are installed in the bedrooms, but combination smoke/CO alarms are being installed in the common areas to save money. It is very important for everyone in the home to know the difference in sounds between the smoke and CO alarms.

Currently, there are a number of different battery powered smoke/CO alarms available in retail stores. These devices offer a wider variety of alarm service for the occupants; however, it is critical that the occupants know the difference in sounds the alarms make if there is no voice announcement.

Test your smoke alarms on a regular basis (at least monthly). Vacuum the dust off smoke alarms every six months.

Have a home fire escape plan for the entire family and include overnight guests.