



Issue: Carbon Monoxide (CO) Alarms/Detectors — Affordable Life Safety

Carbon monoxide (CO) is a colorless, odorless, tasteless, poisonous gas that is produced by the incomplete combustion of fossil fuels. Common sources of CO include gas furnaces, portable generators, fireplaces, gas appliances, camp stoves, gasoline and diesel vehicles, and farm equipment. Because CO has no odor, color, or taste, and is otherwise undetectable by human senses, people may not realize they are being exposed to the “silent killer.” When fossil fuels are burned in confined spaces without adequate ventilation, severe and even deadly consequences can result, as CO readily replaces oxygen in the bloodstream. Detrimental health effects depend on the length of exposure, blood concentration levels, and personal health conditions. Those who survive CO poisoning remain at risk for serious chronic health problems, including brain damage, Parkinson’s disease, and cardiovascular diseases.

Position:

NEMA supports state and local legislative and regulatory initiatives to require the installation and use of CO detection devices in residential and commercial occupancies. NEMA supports federal legislative/regulatory efforts to raise awareness of CO dangers and to encourage state adoption of CO detection requirements.

Importance:

The U.S. Consumer Product Safety Commission (CPSC), the lead federal agency charged with protecting consumers from risks of serious injury, advises homeowners to “install a CO alarm in the hallway near the bedrooms in each separate sleeping area.” Other life safety experts emphatically endorse the use of CO detection and alarm devices, including the U.S. Centers for Disease Control and Prevention (CDC), the National Fire Protection Association, the International Code Council, the *Journal of Emergency Medicine*, and Underwriters Laboratories. According to CDC, each year more than 400 people die in the U.S. and approximately 20,000 Americans seek medical attention or lose at least a day of normal activity due to CO poisoning.

Carbon monoxide makes no distinction in its victims, affecting not just those in the northern tier of states in the dead of winter, but those who unknowingly leave cars idling in attached garages, fail to properly maintain their furnaces and gas appliances, or misuse portable generators. In fact, according to the most recent CPSC data, CO poisoning from improperly vented portable generators accounted for 732 of 931 (79%) of CO deaths related to engine-drive tools from 1999-2012.

Carbon monoxide alarms and detectors, readily available for modest cost on the market today, are highly effective in reducing exposure by reliably alerting people to the peril of CO. A majority of the states, as well as many municipalities, have enacted CO detection installation requirements for homes, apartments, hotels/motels, dormitories, and other residential and commercial occupancies. General information on CO and applicable state laws is available at www.lifesafetysolutionsonline.com. These state initiatives, resulting in growth in CO alarm and detector use, may be a significant reason for the decline in the CO death rate.

Contact: Jonathan Stewart, jonathan.stewart@nema.org, 703-841-3245

NEMA is the association of electrical equipment and medical imaging manufacturers, founded in 1926 and headquartered in Rosslyn, Virginia. Nearly 400 members strong, its companies manufacture a diverse set of products including power transmission and distribution equipment, lighting systems, factory automation and control systems, and medical imaging and radiation therapy systems. Total U.S. shipments for electroindustry products exceed \$100 billion annually.

Did You Know?

- NEMA Members include industry leaders and innovative small businesses that manufacture products used in the generation, transmission and distribution, control, and end-use of electricity.
- NEMA promotes safety, innovation, interoperability, environment, and market enhancement through advocacy, business information, and standards for products, systems, and technologies.
- NEMA publishes over 600 standards, application guides, white papers, and technical papers.
- NEMA responds to codes and standards proposals of other organizations in the U.S. and around the world, facilitating the development of international and North American harmonized standards.
- NEMA was named in the Energy Independence and Security Act of 2007 to work with federal agencies on efforts to enhance the efficiency, sustainability, and security of the electricity grid. As part of this, NEMA has been instrumental in the Smart Grid Interoperability Panel (SGIP) and the National Institute of Standards and Technology (NIST) Smart Grid Federal Advisory Committee.