The Association of Electrical and Medical
Imaging Equipment Manufacturers
www.nema.org

Setting Standards for Excellence

NEMA Statement on Carbon Monoxide Detection in Schools

The National Electrical Manufacturers Association (NEMA) supports the installation of carbon monoxide detectors in schools.

Carbon monoxide (CO) poisoning is the leading cause of accidental poisoning death in the United States. High concentrations of CO—a colorless, odorless gas that is produced when fossil fuel is incompletely burned—can cause cognitive impairment, loss of consciousness, coma, and often death. Because it is undetectable through human sensory experience, CO is commonly known as "the silent killer." The U.S. Centers for Disease Control and Prevention (CDC) reports that every year, more than 400 people die in the U.S. from accidental CO poisoning. In addition, over 20,000 individuals are injured due to CO poisoning each year.

Due to their smaller size, young children are especially vulnerable to the effects of carbon monoxide, may be more severely affected by exposure to the gas, and may exhibit signs (which often mimic the flu) sooner. As such, an adult teacher may not intuitively recognize that a number of sleepy students could be attributable to exposure to elevated levels of CO if he/she has not been affected to the same extent.

One of the most effective ways to reduce the incidence of CO poisoning is to ensure that effective CO detection devices are installed in places where people live, work, sleep, and study. Carbon monoxide detection devices are a cost-effective, reliable way to protect the public from CO poisoning. To assure that the technology and installation are on a comparable level with fire safety, CO detection devices should be tested and listed by a Nationally Recognized Testing Laboratory (NRTL) accredited by the U.S. Occupational Safety and Health Administration (OSHA) to applicable product standards (ANSI/UL 2075, *Standard for Gas and Vapor Detectors and Sensors*, or ANSI/UL 2034, *Standard for Single and Multiple Station Carbon Monoxide Alarms*). To be most effective, such devices should be installed in accordance with National Fire Protection Association (NFPA) 720, *Standard for Installation of Carbon Monoxide (CO) Detection and Warning Equipment*, which establishes requirements for proper installation and maintenance of systems that would go into schools.

It is important to ensure that children, faculty, and support staff are protected while they are away from home. Unfortunately, the recent incident at Finch Elementary School in Atlanta is not an isolated occurrence. During the past several years there have been a number of recorded incidents of CO exposure at schools nationwide. However, it is difficult to quantify the exact number of CO incidents in schools. Due to the fact that carbon monoxide affects each individual differently and symptoms of exposure mimic those of common ailments such as the flu, it is highly probable that the number of CO exposure incidents has been underreported. The number of CO incidents in schools could rise over the coming years, particularly if HVAC equipment is not properly maintained due to resource constraints or other factors.

Requiring CO detectors in schools has the potential to save lives, prevent illness, and lessen the time away from school. As the trade association representing manufacturers of CO detection devices and active participants in the development of national codes and standards, NEMA hopes that you will consider our industry as one of your best resources for carbon monoxide and life safety product information.

NEMA is the association of electrical equipment and medical imaging manufacturers, founded in 1926 and headquartered in Arlington, Virginia. Its member companies manufacture a diverse set of products including power transmission and distribution equipment, lighting systems, factory automation and control systems, and medical diagnostic imaging systems. NEMA Signaling, Protection, and Communication Section member companies manufacture fire, smoke, and carbon monoxide (CO) detection and warning equipment and systems.

###