

More Scrutiny Needed on Proposed Retrofit Requirements for Carbon Monoxide (CO) Detectors

The San Antonio City Council is poised to vote on adopting the 2012 International Fire Code (IFC), which includes a new requirement that Carbon Monoxide detectors be installed in more than 30,000 apartment homes and several hundred thousand single-family houses in less than six months. **The 2012 IFC requires any single-family home or multifamily property with fuel burning appliances (e.g. gas furnace, water heater or stoves) or attached garages that are not open or mechanically ventilated, as required by the IBC, to be retrofitted with CO detectors.**

The San Antonio Apartment Association (SAAA) has serious concerns about the implications of this mandate. Before this issue came up as part of the IFC, SAAA had never been approached by the San Antonio Fire Department or other officials about concerns regarding the incidence of CO poisoning. We respectfully request that the City of San Antonio delay adoption of the 2012 IFC until this issue can be thoroughly vetted and it can be established whether this drastic policy change is justified.

What are the sources of carbon monoxide that result in poisonings?

From 2005 to 2007 engine-driven tools (e.g. generators) were the most common source of non-fire carbon monoxide deaths, responsible for 49 percent of fatalities. Portable heaters contributed to 10 percent of deaths, furnaces contributed to 14 percent and wall/floor furnaces at 3 percent¹.

How many individuals have died as a result of carbon monoxide poisoning?

While there seems to be significant discrepancies in available data, the Center for Disease Control and Prevention (CDC) shows that in the entire United States, an average of 439 persons died annually from unintentional, non-fire-related CO poisoning. In Texas, about 24 people per year die from CO-related exposures². However, data from the National Poison Data System shows that from 2000 through 2009, a total of 235 deaths from CO exposure were reported, significantly lower than the CDC report. This discrepancy highlights the point that there simply is not enough information and data to make the most informed decision.

What portion of carbon monoxide poisonings occur in multifamily housing?

- **Exposure-related incidents involving CO are disproportionately lower in multifamily dwellings than in single family homes.** According to a 2005 report from the National Fire Protection Association, though 92 percent of CO poisoning incidents

occur in residential settings, only 17 percent occurred in multi-family dwellings³. This is likely explained in part by the difficulty of residents in multifamily dwellings to utilize common sources of CO poisoning, such as portable generators. In a multifamily setting, generators are less likely to be found because of constrained space, noise, fumes, etc. Further, most owner/operators prohibit the use of generators inside a unit. It would be difficult for residents to operate them without management discovering it.

What is the environment for CO poisoning in San Antonio?

- **San Antonio is located in an area less likely than others to have CO poisoning.** According to the Center for Disease Control (CDC) and Consumer Product Safety Commission (CPSC), CO-related deaths most commonly occur during winter months, likely because of increased use of gas-powered furnaces and other alternative heating and power sources⁴. Obviously, San Antonio does not have the long sustained periods of cold weather that are experienced in many other parts of the country.

What are the impacts of this mandate on San Antonio?

- **The proposed mandate would have a significant cost impact on all housing.** Purchasing and installing CO detectors could cost homeowners and the San Antonio apartment industry \$24 to \$60 million, and this cost will have to be repeated at least every five years as CO detectors need to be replaced.
- **Data justifying this policy change in San Antonio has not been presented.** There doesn't seem to be evidence that CO poisoning is a significant risk in San Antonio. SAAA has received no reports of incidents where there have been problems with CO exposure in apartments in San Antonio. In conversations with San Antonio fire officials, the department has been unable to produce any statistics showing that there has been any issue in multifamily properties.

¹Centers for Disease Control and Prevention, Carbon Monoxide Related Deaths, United States 2000-2009

²Centers for Disease Control and Prevention, Carbon Monoxide Related Deaths, United States 1999-2004

³National Fire Protection Association, Non-Fire Carbon Monoxide Incidents Reported in 2005 by Jennifer D. Flynn of the Fire Analysis and Research Division, Revised April 2008

⁴Centers for Disease Control and Prevention, Carbon Monoxide Related Deaths, United States 1999-2004