



North Carolina Department of Health and Human Services  
Division of Public Health

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December 18, 2013

**POSITION STATEMENT:** Update to Carbon Monoxide Detectors in Lodging Establishments

**PURSUANT TO:** Session Law 2013-413 (House Bill 74)

**SOURCE:** Larry D. Michael, Food Protection and Facilities Branch Head  
Environmental Health Section  
Division of Public Health

**QUESTION / ISSUE:**

Clarification of issues regarding enforcement of carbon monoxide (CO) detectors in lodging establishments.

**DISCUSSION AND RATIONALE:**

Effective October 1, 2013, Session Law 2013-413, Section 19, required lodging establishments to install CO detectors in every enclosed space having a fossil fuel burning heater, appliance, or fireplace, and in any enclosed space, including a sleeping room, that shares a common wall, floor, or ceiling with that enclosed space. The Division has received a number of inquiries regarding enforcement of this law. In consultation with the Department of Insurance, Office of State Fire Marshal (OSFM), the Division provides answers to the following questions.

**RESPONSE / INTERPRETATION:**

Are candles, canned fuels, and similar products considered appliances subject to this law?

No. For purposes of this law, candles, canned fuels (e.g., Sterno®), and similar products are not considered appliances or heaters and are not subject to enforcement under this law. Moreover, canned fuel is typically made from denatured and gelled alcohol and although alcohol fuels can be derived from fossil fuels, they are usually produced from other methods. The OSFM does not classify such alcohol fuel as a fossil fuel.

Should CO alarms be installed in bathrooms, attics, underfloor spaces, and mechanical/furnace rooms?

The legislation includes a provision that states, in part, that CO detectors must be installed in accordance with the manufacturer's instructions. According to the OSFM, after reviewing instructions from two of the primary manufacturers of CO alarms, both manufacturers state that CO alarms should not be installed in bathrooms, attics, underfloor spaces, or in mechanical/furnace rooms where the heating equipment is located.

The manufacturer's instructions restrict placement of CO detectors in bathrooms because excessive moisture may inactivate the detector and render the alarms unreliable. Temperature extremes (e.g., less than 40°F and greater than 100°F) in attics and similar locations may damage the detector. With respect to mechanical/furnace rooms where the heating equipment is located, some appliances emit a small amount of CO, especially during startup,

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and may result in nuisance alarms. However, manufacturer's instructions may provide a minimum distance (usually 15 feet) away from fossil fuel burning devices. If the minimum distance can be achieved, then the CO detector must be installed within that enclosed space. Please be advised that the manufacturer's instructions may restrict other rooms and spaces not listed in this question.

Is there a new definition of enclosed spaces?

No. The Engineering Division of the OSFM will continue to work on an acceptable definition for enclosed spaces that is applicable to this legislation.

As a reminder, there is ongoing discussion with the OSFM and other stakeholders regarding this law and additional guidance and clarification is likely after the Building Code Council, Division of Public Health, and the Commission for Public Health provides a report on the effectiveness of this law in April 2014.

As the Division continues to partner with the OSFM, you are encouraged to communicate and work with your local fire and building code officials as questions or concerns arise.

**This position statement supersedes information provided in the position statement released on September 25, 2013, *Carbon Monoxide Detectors Required in Lodging Establishments*.**

**REFERENCES:**

Session Law 2013-413

*NOTE: Position statements are policy documents to clarify how to interpret or enforce a law or rule. They are not enforceable on their own, but are intended to promote uniform interpretation and enforcement of the underlying law or rule.*