

When it comes to boater safety, Minnesota leads the way.

Minnesota is the first state to protect boaters from the dangers of carbon monoxide (CO) poisoning by requiring CO detectors and warning stickers on motorboats.

Carbon monoxide is an odorless, tasteless and extremely toxic gas which can be fatal without warning. In Minnesota, 5 percent of carbon monoxide poisonings occur on boats.



'Sophia's Law'

This new law, known as Sophia's Law, is named for a 7-year-old girl who tragically lost her life to carbon monoxide poisoning while boating on Lake Minnetonka in 2015. The family set out to enjoy a rare 80-degree October day, but 30 minutes into the trip Sophia complained of a headache

and went below deck to rest. Others on the boat began feeling nauseous as well. When Sophia's father checked on her—a mere 7 minutes after she went into the boat's cabin—he found her unconscious. Her parents, both physicians, started CPR but were unable to revive her.

It was later determined that a leak in the boat's exhaust system was the source of the carbon monoxide on board. Because CO has no odor, the cause of Sophia's symptoms were not recognized until it was too late.

It is the family's mission to prevent a tragedy like this from occurring again. Sophia's parents have advocated for Sophia's Law because they believe earlier detection and awareness to the dangers of CO would have alerted them sooner, possibly saving her life.

Learn more about boating and the dangers of carbon monoxide poisoning

Visit the DNR website for additional information on carbon monoxide laws and safe boating: www.mndnr.gov/boatingsafety

- U.S. Coast Guard: uscgboating.org
- National Safe Boating Council: safeboatingcouncil.org
- Minnesota Statutes 86B.005 and 86B.532



BOAT AND WATER SAFETY

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Carbon Monoxide Law for Boaters



What you need to know. How to comply.



www.mndnr.gov/boatingsafety

New law designed to save lives

What is the law?

A new carbon monoxide (CO) law for Minnesota boaters (Sophia's Law) goes into effect May 1, 2017.* The law requires that:

- all motorboats, regardless of fuel type, with an enclosed accommodation compartment be equipped with a functioning marine CO detection system
- all gasoline-powered motorboats with an enclosed occupancy compartment display a total of three CO warning stickers

* see www.mndnr.gov/boatingsafety for updates

What does this mean for my boat?

Carbon monoxide detector and warning sticker requirements depend on whether your boat has an enclosed accommodation compartment, an enclosed occupancy compartment, or no enclosed compartments at all.

An enclosed accommodation compartment is defined as having all three of the following spaces:

- designated sleeping accommodations
- a galley area with a sink, and
- a head (toilet) compartment

On boats with all three of these spaces, a CO detector is required in each of the sleeping quarters and in the main cabin area per the American Boat and Yacht Council A-24 Standard.

A CO detector is not required, but is strongly recommended on boats with an enclosed occupancy compartment. Enclosed occupancy compartment is defined as:

- one contiguous space within the boat that may be occupied by a person.

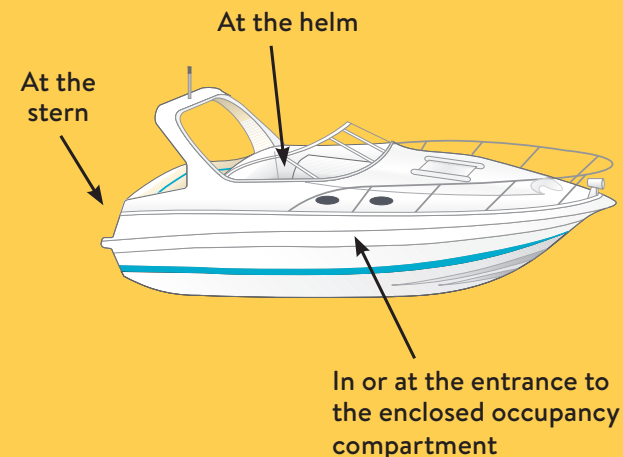
All gasoline-powered motorboats with an enclosed occupancy compartment must display three CO warning stickers (provided by the DNR).

The CO warning stickers must be placed:

- at the helm (steering station)
- at the aft boarding/stern area
- in or at the entrance to any enclosed occupancy space

Motorboats with diesel engines are not required to display the warning stickers, but are strongly encouraged to do so, especially if they also have generators or other fuel burning appliances. CO detectors are required on diesel-powered boats with an enclosed accommodation compartment.

Gasoline-powered motorboats with an enclosed occupancy compartment must display three CO warning stickers



What are the dangers of carbon monoxide?

Carbon monoxide can concentrate within, alongside or behind a boat in seconds. CO is a potentially deadly gas produced when a carbon-based fuel, such as gasoline, propane or charcoal, burns. Sources on your boat include gasoline engines, generators, cooking ranges, and space and water heaters. Early symptoms of carbon monoxide poisoning include irritated eyes, headache, nausea, weakness and dizziness, which can often times be confused with seasickness or intoxication. Prolonged exposure to low concentrations or very short exposure to high concentrations can lead to death.

Where can CO accumulate?

Carbon monoxide can accumulate anywhere in or around your boat. How to protect yourself:

- Keep engine and exhaust properly maintained.
- Ventilate enclosed spaces including canvas and three-sided enclosures.
- Stay off the back deck and the swim platform while the engine is running.
- Keep back at least 20 feet during towed activities—especially tubing.

My boat isn't required to have stickers, what should I do with them?

Some boat owners may receive the warning stickers even though their boat does not require them. The law requires that the stickers be sent to all owners of motorboats 19 feet or greater to help educate boaters about the dangers of carbon monoxide. It is recommended to display the warning stickers at the helm and stern—areas where carbon monoxide can accumulate, even on boats without enclosures.

Owners of boats under 19 feet, other boats with enclosed spaces or boats documented by the U.S. Coast Guard, can find stickers at all deputy registrars, at many local marinas, or by request from the DNR.

Carbon Monoxide Symptoms



Headache



Nausea

Dizziness



Weakness

