

Safety alert: Carbon monoxide hazards on boats

The silent killer known as carbon monoxide (CO) can imperil boaters as well as people at home. Since 1990, CO has killed at least 93 people while they were boating and sickened nearly 400 others, according to federal safety investigators. The poisonings affected people inside and outside boats, when boats were moored, and even when under way.

CO comes from the exhaust emissions of the engine driving the boat, the engine powering a generator, or a cook stove or heater. CO becomes a problem in several ways:

- When passengers hang onto the rear of the boat and allow themselves to be pulled through the water until the boat's wake builds enough to allow body surfing. "Teak surfing," as it's called, puts passengers close to the engine exhaust.
- When passengers ride on or swim beneath a platform near the exhaust.
- When leaky seals between decks, bulkheads, and the hull or a faulty or poorly maintained exhaust system allows CO to build up inside the cabin.
- When boats are moored close together and one has an engine running.
- When the "station wagon effect" generates air currents that pull exhaust gas into the cabin, much as auto exhaust enters through an open rear hatch.

Investigators from several federal agencies, including the National Park Service and the National Institute for Occupational Safety and Health (NIOSH), first identified CO hazards in a study involving houseboats on Lake Powell, in Arizona. On average, about 750 people are killed in all types of boating accidents each year.

WHAT YOU CAN DO

- Keep the boat's exhaust system in good repair.
- Have a marine-grade CO detector on board.
- Don't let passengers teak surf, and keep passengers off the swim platform when the engine or generator is running.
- The Coast Guard and other groups advise keeping a forward hatch open to promote fresh-air circulation in the cabin. Others we spoke with said that advice, while plausible, hasn't been tested. We recommend providing as much ventilation as possible to confined spaces.

