

Safety Bulletin 04 of 2025 **(Update and re-issue of Safety Bulletin 02 of 2020)**

The Dangers of Carbon Monoxide and how to guard against the effects of Carbon Monoxide poisoning

This Safety Bulletin is updated and re-issued following the MAIB safety Bulletin issued in April 2023, available on the following website: <https://www.gov.uk/government/publications/>

What is Carbon Monoxide?

- Carbon monoxide is a by-product of combustion appliances fuelled by oils, solid fuel or gas;
- It can be found in different concentrations in almost all boat and car engine exhaust fumes;
- It has no smell, no taste, is colourless and is extremely difficult for human senses to detect.

What are the Symptoms of Carbon Monoxide Poisoning?

- Symptoms will present themselves when Carbon Monoxide is inhaled in high concentrations which can be common in poorly ventilated areas;
- The symptoms of Carbon Monoxide poisoning can be similar to colds, flu or hangovers, headaches, dizziness, nausea, vomiting, tiredness, confusion, stomach pain and shortness of breath.

What can I do to protect myself from Carbon Monoxide poisoning on-board my vessel?

- It is essential that carbon monoxide alarms are fitted in areas where carbon monoxide could accumulate. This is especially important in accommodation areas of all vessels fitted with internal combustion engines;
- When selecting a carbon monoxide alarm, preference should be given to those marked as meeting **safety standard EN 50291-2:2010**, which are intended for use in a marine environment. It is essential to fit alarms following the manufacturer's guidance, to test them routinely using the test button and not to ignore them;
- Avoid the use of canopies. Exhaust gases containing lethal CO can accumulate inside a boat even when it is underway. Although external engine exhaust outlets discharge exhaust fumes into the open, the wind, aerodynamic effects and the proximity of nearby structures frequently result in the fumes entering the boat;
- Ensure that all spaces are always well ventilated. Never ignore the smell of exhaust fumes in any enclosed space;
- Combustion appliances fuelled by oils, solid fuel or gas such as fuel heaters are readily available to purchase both new and second-hand and may not necessarily be installed by a professional installation engineer. However, it is essential that they are installed in accordance with the manufacturer's instructions and all components, used in a marine environment, should be approved for marine use. They should also be inspected by a suitably qualified engineer after installation and be regularly serviced and tested for leaks.

What action do I take if I suffer the symptoms of Carbon Monoxide poisoning?

- The symptoms of CO poisoning can be similar to those of a cold, the flu or a hangover; warning signs include headaches, dizziness, nausea, vomiting, tiredness, confusion, stomach pain and shortness of breath;
- As soon as any symptoms are experienced or seen in someone else, stop the source of fumes, get to the open air and seek medical attention;
- If you are at sea and underway (and it is safe to do so) stop your engine, contact Jersey Coastguard and await assistance.