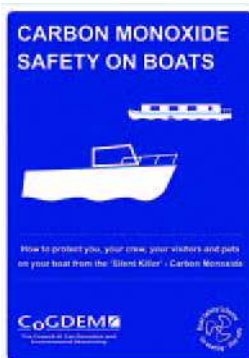


The silent killer

Carbon monoxide—New advice from the BSS and Council of Gas Detection and Environmental Monitoring



More Information

Copies of the guide can be obtained from

CoGDEM, Unit 11, Theobald Business Centre, Knowle Piece, Wilbury Way, Hitchin, Hertfordshire, SG4 0TY,
Tel: 0800 1694 457

Further information is available from BSS at www.boatsafetyScheme.org/co, and CoGDEM at www.cogdem.org.uk/CoGDEMCOsite, which also has links to a guide to CO alarms.

The Gas Safe Register for gas fitters is at www.gassaferegister.co.uk

Each year, boaters die or are made ill from carbon monoxide (CO) poisoning and in response, the BSS and Council of Gas Detection and Environmental Monitoring have brought out a booklet on protecting yourself and crew. CO is produced when any fuel doesn't burn completely and so it can be produced by stoves, generators, engine exhausts and even barbeques. The gas cannot be seen, tasted or smelled, and at high concentrations it can kill within minutes. At lower concentrations, symptoms include headache or bad temper, feeling sick and dizzy, tired or confused. Where victims survive they can be left with long-term brain damage due to CO causing oxygen starvation. If you suspect that you or a crew member has CO poisoning, get everyone and any pets outside immediately, if possible turning off appliances as you go. Seek medical help straightaway because CO poisoning can only be tested for shortly after exposure and its traces begin to disappear when you breathe fresh air. If CO poisoning is confirmed, get a qualified engineer to examine and repair appliances or the engine before they are used again.

Here are some things you should do routinely:

- Check all fuel-burning appliances and engine or generator exhausts for staining, discolouration or sooty deposits. If appliances are difficult to light or keep lit, burn weakly with a 'floppy' yellow or orange flame, or emit smoke into the cabin, get them serviced.
- Check that flue pipes are clean and sweep solid fuel stove chim-

- neys at least once per year.
- Make sure flue or chimney outlets have not been damaged by bridges or restricted by stowed equipment on the roof.
- Check engine or fixed generator exhaust systems for leaks and do not use a portable generator inside any accommodation space. Mooring with the exhaust against a bank and certain wind conditions can also result in CO entering the cabin.

And here are some things that you should never do:

- Allow cabin ventilators or an appliance air inlet or heat outlet to become blocked (e.g. by piled clothing or cobwebs).
- Leave LPG appliances on overnight, unless they are room-sealed type.
- Use mobile gas heaters in a boat.
- Bring used barbeque charcoal or ashes into a cabin unless they are completely cold.
- Use a solid fuel stove with its doors open.
- Run a portable generator in a cabin or covered cockpit with doors, windows or ventilators near to the generator closed.
- Swim near to moored boats that have engines running—the exhausts can create a toxic atmosphere at water level, particularly when the air is still.

CO alarms do not take the place of regular servicing and proper maintenance of appliances. Only use alarms that meet BS EN 50291 standard and not the 'black-spot' colour changing indicator cards—these do not give an instant warning and do not have

an alarm. CO alarms should be fitted in all sleeping quarters unless the boat has a single multi-use cabin. In the main cabin they should ideally be placed 1-3 metres (in plan view) from a fuel-burning appliance, high on the cabin wall but at least 150mm from the ceiling. In bedrooms, alarms should be placed on the wall in the 'breathing zone' near the top of the bed head.

Test the alarm to make sure you can hear it from any point in the boat—if you can't then buy another one. Replace alarms before the expiry date and temporarily remove the alarm from the boat if you are working with paints, solvents or degreasers, or over winter if there is a risk of long periods of sub-zero temperatures that may affect the sensor or batteries.

BSS review

Significant changes to Boat Safety Scheme

Communication manager at the BSS, Rob McLean outlines the changes

The following is a summary of changes to the BSS Examination Checking Procedures for privately owned and privately managed boats, which came into effect from 1st January 2013. Most of the changes are to tidy up terms and descriptions, the aim being to see that the checks are applied consistently by BSS examiners, reducing risks and making boats safer.

The other changes can be summarised as:

- portable fuel tanks will not be allowed in inboard engine spaces to connect to fixed engines,
- five new advice checks concern the type and condition of inlet and lead connections in AC systems, ensuring that it is impossible to connect simultaneously more than one power source to the AC distribution system and a check that all AC circuits pass through a consumer unit,
- a new advice check for cracks and unintended gaps on solid fuel appliances,
- 15 existing checks are amended to introduce enhanced technical requirements,
- 63 changes have been made to

the existing checks that reduce or slightly change the technical impact,

- two checks, one about marine fuel filters and the other about AC shore connections, are being removed.

Note: Examiners will not disconnect LPG cylinders so boat owners must ensure that the examiner has full access to be able to check the LPG locker for condition, including the temporary removal of LPG cylinders.

Owners should discuss their locker arrangements with the examiner before the examination as this may require the owner to attend or make prior arrangements with service agents.

Boaters are also asked to make available for examination AC shore-power, battery charging and other power source leads for examination of type and condition. They should provide information about the location of the AC consumer unit to the examiner before the examination.

If practicable and safe to do so, owners should disconnect shore-power, battery charging and other power sources for the examination.



More Information

Full details and the rationale are at www.boatsafetyscheme.org/about-us/news-from-the-bss.

A complete version of the revised BSS Checks is available at www.boatsafetyscheme.org/boat-examination/private-boats.