



► CASE STUDY

Carbon monoxide poisoning results in fatalities

The Incident

A summer holiday on the Norfolk Broads on board a 15-year-old motor cruiser ended tragically when a couple and their dog were killed by carbon monoxide poisoning. At the time of the accident the boat was moored at a quiet river island location.

The motor cruiser's 5.7 litre petrol-driven inboard engine had been left running at 3000rpm while it was moored alongside, mostly likely to charge the batteries. A slight wind blowing from the stern caused exhaust gas, emitting from below the aft transom, to enter the canopy covering the aft deck from where it spread down into the accommodation area forward.

Observations

The Marine Accident Investigation Branch (MAIB) identified that:

- occupants of vessels without carbon monoxide (CO) alarms will have no warning if the lethal fumes are present in habitable areas. It is essential that CO sensors are fitted in areas where CO could accumulate and pose a risk to health (such as the accommodation areas).
- the use of canopies can lead to the accumulation of CO within an enclosed space and potentially increase the risk of poisoning, even when a boat is making way. It must be ensured that all spaces, including those under a canopy or an awning are always well ventilated.
- CO is a silent killer and it is important to recognise that the symptoms can be similar to colds, flu or hangovers - headaches,

dizziness, nausea, vomiting, tiredness, confusion, stomach pain and shortage of breath, are warning signs of its presence. If CO poisoning is suspected, it is important to stop the source, access fresh air and seek medical attention.

- CO may not always originate from internal sources or even from your own vessel. The occupants of neighbouring boats are at risk when moored near vessels emitting high concentrations of CO.



Source: Marine Accident Investigation Branch

This case study has been extracted from the MAIB Safety Bulletin 2/2016 & the MAIB Accident Report no 9/2017.