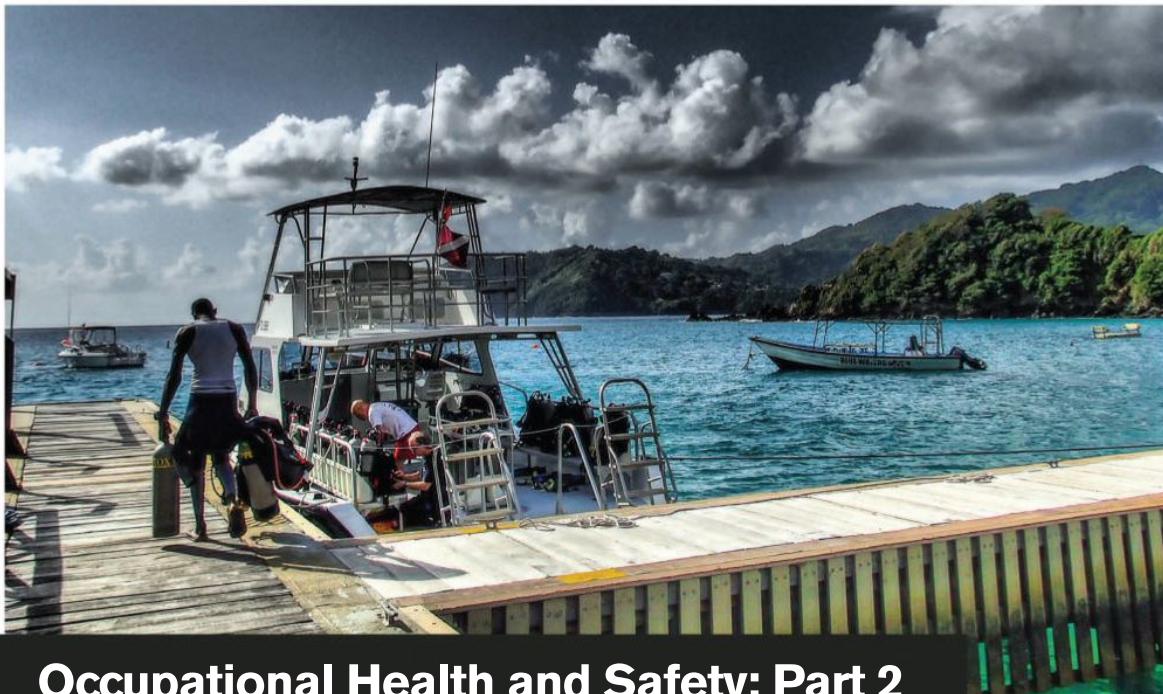


## TRAINING



## Occupational Health and Safety: Part 2

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### DIVING OCCUPATIONAL SAFETY RISKS: BOAT OPERATIONS

In the previous issue of *Sources*, we had a look at some of the various health and safety risks that dive operators are exposed to while looking after us when we go diving. In this article, we will try to identify a number of risks that divers need to consider when we want to help operators to make their tasks easier and safer. Think of the role you are playing in adding to their tasks.

**Capsizing/Sinking** — The Red Sea, for example, has hundreds of small rocky outcrops and reefs scattered everywhere. The captain must know where the dangerous reefs are located so that he does not inadvertently hit one of them and become the next wreck. He must also ensure that when the boat does tie up on anchors or buoys, the lines are secure and the anchor has bitten into the bottom properly. And all this boat handling is done while we, their customers, are watching the crew and commenting among ourselves about the way that the deckhands handle the lines.

**Carbon monoxide levels** — A leak in the exhaust system on inboard motors, or even from a poorly maintained outboard motor, can release fumes that could cause serious issues for staff and customers alike. I have yet to see a carbon monoxide analyzer on board to ensure against unnoticed build-up of carbon monoxide in an engine room.

**Motor handling** — Engine compartments are often noisy areas and frequently maintenance is done while the motors are running. If proper care is not taken to minimize noise levels or protect the ears, over a period of time, this could cause deafness in the operator.

**Propellers** — When preparing outboard motors for running, the props are always prevented from running by placing the gearbox in neutral. Imagine what could happen to an innocent bystander if the operator is not concentrating and puts the motor into gear while somebody is standing aft next to the propeller.

**Divers falling off boats** — In South Africa, launching and beaching after dives take place through surf conditions. Sometimes these conditions are quite rough, and skippers always tell the divers to hold on tight when going through the surf. It is fascinating to sometimes see “old-hand” divers and divemasters/instructors using this opportunity to rather play the fool and make as if they are falling overboard. Famous last words include: “Trust me; I have done this a thousand times!”

In addition, when people are not holding onto the lines or something solid when going through surf conditions and get washed or knocked overboard, they could easily be hit by the props on the boat, which is usually running at full throttle to get through the surf.

**Lost at sea** — A nightmare of every captain or skipper is losing a person on his watch. Often, these lost at sea issues are caused by divers not adhering to the simple rules, such as wearing a PFD or being secured to the boat or listening to the advice of the skipper or captain. If there is a current flowing on a dive site and the visibility is down to 3 meters (10 feet), there is no chance that you will see any trailing buoy line, and the chances of you getting lost have just gone from zero to 100 percent. Adhere to sound advice from those in the know.



## ***“Adhere to sound advice from those in the know.”***

**Nausea** — Mal de mer, naupathia, motion kinetosis — call it whatever you want, seasickness is a condition nobody wants to experience, but hundreds, probably thousands, are affected by this every year. When experiencing seasickness, anyone leaning over the side of the boat to be sick is normally not caring about holding onto something and being securely in place while feeding the fishes. This increases the risk of the person falling overboard — with all its hazards.

**Knocks and bruises** — The constant sway of the boat in the ocean and lakes can be very disturbing for a person not used to walking on such decks on a daily basis, and often a person does not want to hold onto a support while walking up and down decks or going up and down ladders, often resulting in trips and slips with sometimes serious injuries.

**Rough sea conditions** — Rough sea conditions worsen a number of the already listed issues: nausea, falling from boats, knocks and bruises. Yet I was witness, on a dive live-aboard in a particularly rough stretch of sea, to a cluster of people standing in the middle of the deck, not holding onto anything, just to see who could remain standing the longest.

**Filling fuel tanks** — Petrol/fuel/gasoline is a highly combustible liquid and easily starts fires. While care is normally taken to prevent sparks when filling fuel tanks, or on small boats, by not filling up on the boat, sometimes time is ticking away and operators want to quickly fill an on-board tank without thinking about what they are

doing. On a rocking boat, a sudden splash of fuel could lead to fumes building up, and a spark then cause a flash or fire. In one incident, a boat owner spilled gas on his boat, so he got the wet and dry vacuum cleaner to suck up the spill. His entire boat and the boathouse were totalled, and two persons were seriously injured.

**Yachts and booms** — Sailing yachts and sailboats make for extremely peaceful diving — no engines, no noise, just the sound of the wind and the waves. But the boom is called the widow-maker for a reason. A sudden shift in the wind direction can cause the boom to quickly move from one side of the boat to the other, taking anyone in its path along with it, often resulting in a person being injured as well as knocked overboard.

**Fires** — When at sea, the biggest risk to everybody aboard is a fire. Should you not be able to extinguish the fire in time, which means almost immediately, you will have no option but to spend a few hours or — worst case scenario — days in the open water waiting for a rescue.

As a dive leader you may not be dive boat operators, but as NAUI leaders, we should always be promoting safety and lessening risks. Educate yourself in boat safety; there are good courses available. For safe diving, our global awareness as leaders must include our conveyance as well as the people on it.