

# What To Do In An Emergency

## Coping with Emergencies

Most emergencies afloat can be avoided by good seamanship. Emergencies are something we cannot foresee, but with a little common sense, risks can be reduced.

## Sinking

A number of basic steps should be followed if you find that your vessel is sinking.

- Brief all on board on the location and use of all the safety equipment.
- Do not panic, remain as calm as possible.
- The skipper or operator is to take control and create a calm atmosphere.
- Identify and brief all on board concerning the nature of the emergency and take appropriate action.
- Hand out PFDs and wear according to the instructions.
- Attempt to stop the leak by block the access point with any suitable material that will slow down the entry of water.
- Remove water by bucket, manual bilge pump, electric bilge pump or emergency engine bilge pump.
- Check to make sure there is no danger of fire or explosion.
- If there is a fire attempt to extinguish it.
- Attract attention from any passing vessel or if close to shore, a person on land, by waving or using a torch or flare if the situation becomes desperate.
- If you have a "V" distress sheet, place it on top of the vessel or trail it in the water and secure properly.
- If in grave and imminent danger and you have an EPIRB, activate it.

## Capsize

A vessel can capsize as a result of excessive speed, rough seas, surf, high wind, inexperience and stupidly.

A capsize can happen in seconds. Always have your PFD in an accessible position.

Survivors from a capsize should remain together.

It is recommended that you stay with the capsized vessel as it easier for aircraft to spot an upturned vessel than persons in the water.

## **Abandoning the Vessel**

The operator of a recreational vessel must ensure that all hatches and doors on the vessel are kept unlocked and clear of obstruction at all times while the vessel is underway.

There may be instances where a vessel is involved in a sudden disaster, which despite the best intentions of those on board, puts the boat into such a state of distress that abandonment is necessary.

If faced with this course of action ensure that everyone is wearing a correctly fitted PFD before going over the side.

Survival in cold water is hard enough without struggling to stay afloat, too.

If the boat is equipped with radio send a distress message. Use flares only if there is a reasonable likelihood of them being seen – it is pointless to waste a small stock of distress flares.

Activate your EPIRB, if the vessel is carrying one. Stay with the boat. Most boats involved in accidents don't actually sink and can be more readily sighted than a person in the water. Even a partially submerged boat can be used as a means of support.

Resist impulses to swim ashore. Distances over water usually appear much less than they actually are. Unless land is known for certain to be within swimming distance, it is always safer to stay with the boat.

## **Engine Failure**

Even the best maintained engine may fail, so it is important to have at least some basic knowledge of what to do. Always carry a kit of essential tools.

Before attempting to carry out any running repairs while on the water, use an anchor to stop drift and keep the bow facing into the sea.

Learn to distinguish the sound of an engine that is not running normally – you may then be able to take action in time to avoid a complete breakdown.

Wherever possible it is good practice to carry an auxiliary motor. This motor should be maintained in good operational order so that it is ready for immediate use if required.

## **Fire**

Most vessel fires start during fuelling procedures, or just after, when fumes are still present. Where there is fuel, there is always the risk of fire. Fuel safety is the critical factor in prevention of fire. Smell is often the best method detecting fumes or spillage. Take sensible steps to minimize the risk.

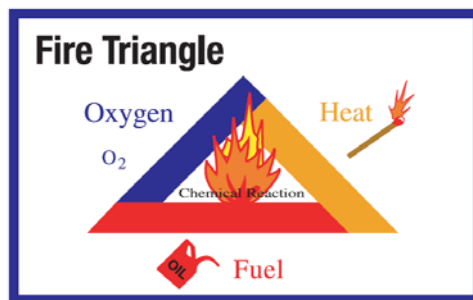
### ***Elements of fire***

There are THREE (3) elements of fire. If these elements are brought together in sufficient quantities then a fire will occur. The elements are

- FUEL
- HEAT
- AIR (OXYGEN)

There is an exception to this rule and that is SPONTANEOUS COMBUSTION. Therefore removal of any of these elements will result in the fire being extinguished. The element that is to be removed depends upon the agent used to extinguish the fire.

- REMOVAL OF FUEL – STARVING
- REMOVAL OF HEAT – COOLING
- REMOVAL OF AIR – SMOTHERING



### ***Causes***

- Defective equipment
- Carelessness
- Incorrect operation

### ***Prevention (on the vessel)***

Fuel, fires aboard vessels spread rapidly and generate intense heat. You can avoid explosion and fires on boat by following a few common senses safety tips.

- Shut down the engine, motors, fans and heating devices before refueling. Never smoke whilst refueling.
- Leave room for expansion in the tank and wipe up any spills.
- Refill portable tanks on shore, not on the boat.
- Check bilges for leakages, fuel odour and ventilation.
- Carry the appropriate approved fire fighting appliances. The preferred location for the fire extinguisher is adjacent to the drivers seat or adjacent to the exit.
- Do not stow fire extinguishers in the areas of potential fire risk e.g. next to fuel caddies.
- Check fire extinguishers regularly.
- Fit a smoke alarm (if you sleep onboard) and check it regularly.
- Keep a fire blanket in the galley and stow it away from the stove.

- Correctly install fuel and LPG systems.
- Regularly check perishable fuel lines for wear and tear and carry a spare.
- Fit a reminder notice above gas appliances (“turn off gas when not in use”).
- Fit detection devices for gas and fuel vapour and check regularly.
- Keep the vessel neat and tidy and free of oil or fuel in the bilges.
- Don’t fit curtain above the stove.
- After refueling, ventilate bilges by opening hatches and operating a blower fan if fitted.
- On hot days, if the engine has been turned off for some time, always lift the engine cover before attempting to start engine. This will dissipate any built up fuel vapours.

### ***Prevention (at the marina)***

- Know where fire fighting equipment is located within the marina and how to use it.
- Don’t leave shore supply electrical cable wound on a reel or drum as the cables may overheat.
- When re-fueling use a wide-mouthed funnel or use a siphon hose and clean up any splashes (fuel spills will make the deck dangerously slippery).
- If possible fill the portable fuel tank away from the vessel in a well ventilated no smoking area.
- Remember – do not fuel with persons onboard.
- Secure spare fuel in a tightly capped secure container designed for fuel storage.
- Don’t keep oily or fuel soaked rags on board.

### ***Fighting the fire***

- Raise the alarm (to others onboard and to rescue organizations).
- Manoeuvre the vessel to operate with the least wind effect (generally downwind).
- If within an enclosed or confined space, close all the hatches, vents and ports to reduce oxygen.
- If a burning object can be safely moved, get it over the side quickly.
- Shut off fuel lines and gas lines as soon as possible as flexible fuel lines may collapse and add to the fire.
- Try to extinguish the fire with fire fighting appliances and remember to direct the extinguisher into the heart of the fire not the flames.
- Maintain a watch on the area once the fire has been extinguished to monitor any reignition.
- If you need to abandon the vessel do not motor alongside another vessel.
- Do not leave the vessel on the leeward (downwind side) as the vessel may drift onto you or any fuel may spread in the water (you should be wearing your PFD).

### ***Helping another vessel on fire***

- Fires on other craft are indicated by large black smoke pales.
- Be extremely cautious as you approach and keep to the windward side of the vessel on fire.
- Remember most fires on small vessels originate from fuel, heating appliances, stoves, leaking gas or fat. Fuel and gas fire spread very quickly. Even a minor spill can create an almost explosive spread of flames.

### **Person Overboard**

When you hear someone call loudly “man overboard” do not jump in after the person, it only doubles the problem. A lifebuoy or buoyancy aid can be thrown to the person. Delegate one person on board to keep the person in sight at all times. Don’t panic; remain as calm as possible. At night, use the best available light to illuminate the area.

### ***Recovery of person overboard***

- Steer the vessel as if to pass the person within one metre.
- When the person is opposite the bow, select neutral and turn the vessel away from the person.
- Approach the person from downwind.
- Leave the motor running until the person is being held.
- Switch the motor off, so that when the person is climbing over the stern of the vessel (being the most stable point of entry, the boat may capsize if you try pulling the person over the side) the gears are not engaged accidentally causing injury to the person in the water.
- If you don’t have a boarding ladder, use a rope to make one. On yachts with overhanging sterns, the person should be pulled in at the lowest point of freeboard.

Victims may be hurt, cold or exhausted. If they cannot help themselves, it is difficult to get them back into the vessel.

Practice this procedure with your crew members. If they know the procedure, there is a good chance that they will be able to perform the rescue.

### **First Aid Afloat**

#### ***First Aid Kit***

Every vessel should have on board a suitable First Aid Kit. A simple kit can also be purchased from a chemist shop and be supplemented with sunscreen lotion, seasickness tablets, a felt-tip pen and a pair of side-cutting pliers for removing fishhooks.

Make sure the kit contains adequate wound and burn dressings. The kit should be kept in a sturdy, watertight plastic container clearly marked and secured in a position where anyone on board can reach it if necessary. A booklet giving basic First Aid procedures is an essential part of the kit.

### ***Distress Signals***

The following signals are some of those that are internationally recognized and indicate distress and need of assistance. Use of these signals except for the purpose indicated is prohibited.

1. Rockets or shells, throwing red stars fired one at a time at short intervals.



2. (a) A signal made by any light or sound signaling method consisting of the group in the Morse Code. SOS.



- (b) A signal sent by radio consisting of the spoken word – MAYDAY MAYDAY MAYDAY.

3. A square flag having above or below it a ball or anything resembling a ball.



4. A rocket parachute flare or a hand-held flare showing a red light.



5. A smoke signal giving off orange coloured smoke.



6. Slowly and repeatedly raising and lowering arms out-stretched to each side.



7. (a) A rectangle of the internationally accepted colour orange material with a black letter V: or

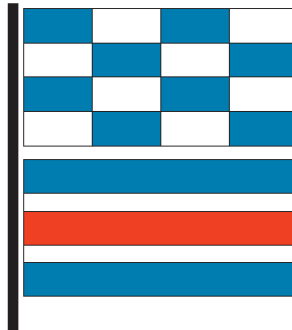


(b) A black square and circle.



8. A dye marker.

9. The international Code Signal of Distress indicated by NC.



10. EPIRB.

11. Oar with cloth on the end.

## Rescue by Helicopter

The helicopter is a faster, efficient method of recovering or deploying personal to aid injured or stricken persons aboard vessels or in the sea.

The search for stricken vessel can pose a problem if direct communications cannot be established. An EPIRB is the ideal method of location. Smoke flares, and/or a "V" sheet will also aid location.

For easier, safer recovery, it is preferable for a helicopter to carry out any winching operation into wind. For ease of operation, the vessel should be underway and steering 20 to 30 degrees to port or

starboard off the relative wind line. This will allow the aircraft to format on the vessel, giving the pilot and crew better visibility, and ensuring any downwash will lie behind the vessel and aircraft.

Recovery from a disable vessel requires a technique where the helicopter is required to maintain position over the target.

To prepare, all loose articles above deck should be securely stowed or lashed down and a clear area prepared before the arrival of the aircraft.

***The winch (or rescue line) must never be attached to the vessel.*** It can literally pull the aircraft from the sky, particularly in rough seas. The increased danger of snagging a winch cable in these circumstances must also be guarded against.

## **Reporting Incidents and Accidents**

If you are operating a boat that is involved in a collision or other casualty, you are obliged to:

- Stop your boat. If the accident results in death or injury of any person, or damage to another vessel that affects the seaworthiness or the safety of those on board, render any assistance possible without serious danger to your own passengers or crew.
- Give your name and address and, if required the name of any other boat involved any injured person or the owner of any damaged property.

If the accident has resulted in death or injury requiring medical attention to any person or damage to any vessel or property, you must report the matter to Police Officer near the place of the accident as soon as possible and within 48 hours, stating the;

- Time and place of the accident
- Circumstances
- Name and address of any person killed or injured
- Name and address of any witnesses
- The nature of property damage

If you are not directly involved in the accident, but see one occur you have a legal obligation to assist where possible, providing that in doing so you do not seriously endanger your own passengers or crew.