CHAPTER 3
EMERGENCY PROCEDURES

COPING WITH EMERGENCIES 112
  Marine Radio Victoria 113
  Emergency position indicating radio beacon (EPIRB) and personal locator beacon (PLB) 115
  Flares 115

ABANDONING VESSEL 117

PERSON OVERBOARD 117

COLD WATER IMMERSION 118
  Cold shock 118
  Hypothermia 118

FIRE 120
  Fighting the fire 120
  Helping another vessel on fire 120

CARBON MONOXIDE POISONING 121

FIRST AID 122

REPORTING INCIDENTS AND ACCIDENTS 122
CHAPTER 3: EMERGENCY PROCEDURES

[Image of a person in a life jacket in the water by a sunken boat.]
EMERGENCY PROCEDURES

ALL OCCUPANTS TO PUT ON LIFEJACKETS

RAISING THE ALARM - HOW TO GET HELP

BY PHONE: Call 000

BY FLARES: Activate when you see a potential rescuer or when you believe they will be seen

BY MARINE RADIO: VHF – Ch 16, VHF – Distress button on DSC equipped and registered radios

BY EPIRB/PLB: Activate your distress beacon: a PLB or registered EPIRB

STAY WITH YOUR BOAT

• A vessel is a lot easier to spot than a person
• Anchor your vessel to maintain position if it is safe to do so.

As of 1 February 2009 only digital 406MHz EPIRBs are detected by satellite. Analogue 121.5MHz EPIRBs are not detected. Switch to a digital 406MHz EPIRB and register it with the Australian Maritime Safety Authority.
COPING WITH EMERGENCIES

Most emergencies afloat can be avoided by good seamanship. However, they can happen to the most experienced operator on even the best maintained vessels so you need to be equipped to handle them. Not only do you need to carry safety equipment on board, you must know how to use it. Reviewing and practising emergency procedures should be part of your boating habits.

TELEPHONE

Call 000 or Water Police on 1800 135 729. If you don’t have a waterproof phone, it is recommended you store your phone in a waterproof container on your boat.
MARINE RADIO VICTORIA

Marine Radio Victoria (MRV) replaces Coast Radio Melbourne and provides the marine distress and emergency monitoring system for Victorian coastal waters.

MRV uses a new VHF coastal network completed in 2017. Radio calls are monitored and recorded 24/7 along the entire Victorian coastline out to 20 nautical miles off shore.

Distress channels/frequencies
This table provides a summary of the channel frequencies for each radio type.

<table>
<thead>
<tr>
<th>RADIO TYPE</th>
<th>CHANNEL FREQUENCIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>VHF</td>
<td>16 (67 alternative)</td>
</tr>
<tr>
<td>27MHZ</td>
<td>88</td>
</tr>
<tr>
<td>HF</td>
<td>4125, 6215 and 8291 KHz</td>
</tr>
</tbody>
</table>

Distress call format
A distress message is used only when there is grave and imminent danger to a vessel. It has absolute priority over all other transmissions and may only be transmitted on the authority of the master or the person responsible for the safety of your vessel. The distress call ‘MAYDAY’ (spoken three times) should be used to indicate that vessel is in grave and imminent danger.

DISTRESS CALL

Distress signal (x3) MAYDAY, MAYDAY, MAYDAY

Words “this is” THIS IS

Station calling (x3) MAPLE MS742, MAPLE MS742, MAPLE MS742

DISTRESS MESSAGE

Distress signal MAYDAY
Name/call sign MAPLE MS742
Position 5 NAUTICAL MILES SOUTH OF FAWKNER BEACON
Nature of distress SWAMPED AND SINKING. ESTIMATE FURTHER 10 MINUTES AFLOAT
Other information SEVEN METRE HALF CAB WHITE HULL WITH BLUE AWNING
(If time permits) THREE PERSONS ON BOARD EPIRB ACTIVATED OVER

If no answer is received, repeat the distress call and message on the other distress frequencies or any other available frequency on which help might be obtained.
Urgency call

When a distress call is not fully justified, the urgency call ‘PAN PAN’ (spoken three times) should be used to indicate that a very urgent message follows concerning the safety of a vessel or person. The call details should be the same format as for a distress message except with the message beginning: ‘PAN PAN, PAN PAN, PAN PAN’.

Safety signal

Safety signals are used when a station wants to pass important information such as navigational or weather warnings and are identified by the word ‘SECURITE’ (spoken three times as SAY-CURE-E-TAY).

Digital selective calling (DSC)

VHF radios that are DSC enabled transmit a range of vessel identification information at the press of a button. This includes location information if connected to a global positioning system. If linked, search and radio agencies are able to get a good fix on your location, improving your chances of being located.

A DSC enabled radio must be linked to a mobile maritime service identity (MMSI) number for full functionality. The MMSI number is issued by AMSA and applicants must hold a minimum of an Australian Waters Qualification. Refer to Marine radio operator certification in Chapter 1 – Trip Preparation for more information.
EMERGENCY POSITION INDICATING RADIO BEACON (EPIRB) AND PERSONAL LOCATOR BEACON (PLB)

Once an EPIRB or PLB has been activated, leave it on until instructed by rescue authorities to switch it off. Your beacon is the best reference point for rescuers whose aircraft, vessels and vehicles may not be able to remain with you throughout the emergency. If you must abandon your vessel, attach the beacon to yourself, not the vessel.

While EPIRBs are required by law to be carried when operating more than 2 nm from the coast, MSV recommends operators on other waters also carry an EPIRB or wear a PLB when operating alone.

FLARES

Be aware that different brands of flares may differ in their firing methods. Carefully follow the instructions for your flares, as a misfire or misuse can cause injury. Remember, it is an offence to misuse flares, or to activate a flare for ‘practice’.

For more information on carriage, use and disposal of flares see Chapter 1 on Essentials for Safe Boating on page 19.

1. Check instructions
2. Remove cap
3. Pull yellow knob upward and outward
4. Hold out and leeward (down wind)
Internationally recognised 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.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SIGNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rockets or shells throwing red stars fired one at a time at short intervals.</td>
<td><img src="image" alt="Rocket with red star" /></td>
</tr>
<tr>
<td>2. (a) signal made by any light or sound signalling method consisting of the group in the Morse code – SOS   (b) a signal sent by radio consisting of the spoken word, MAYDAY</td>
<td><img src="image" alt="Morse code “SOS”" /> <img src="image" alt="Microphone" /></td>
</tr>
<tr>
<td>3. A rocket parachute flare or a hand-held flare showing a red light.</td>
<td><img src="image" alt="Rocket parachute flare" /> <img src="image" alt="Hand-held flare" /></td>
</tr>
<tr>
<td>4. A smoke signal giving off orange-coloured smoke.</td>
<td><img src="image" alt="Smoke signal" /></td>
</tr>
<tr>
<td>5. Slowly and repeatedly raising and lowering arms outstretched to each side.</td>
<td><img src="image" alt="Person raising and lowering arms" /></td>
</tr>
<tr>
<td>6. (a). A rectangle of the internationally accepted colour orange material with a black letter v.   (b). A rectangle of the internationally accepted colour orange material with a black square and circle.</td>
<td><img src="image" alt="Red letter v with black square and circle" /></td>
</tr>
<tr>
<td>7. EPIRB</td>
<td><img src="image" alt="EPIRB" /></td>
</tr>
<tr>
<td>8. Continuous sound of fog horn.</td>
<td><img src="image" alt="Fog horn" /></td>
</tr>
</tbody>
</table>
ABANDONING VESSEL

If your vessel capsizes and you are unable to right the vessel, stay with it to improve your chances of being seen by the rescue vessel. A vessel is a lot easier to spot than a person or persons in the water. Do not remove your lifejacket and, if you are in the water, stay together in a HUDDLE or HELP position.

Do not try to swim ashore unless it is very close and a suitable landing place exists. Distances can be deceptive.

Try to get the EPIRB and distress signals out of the capsized vessel and raise the alarm. Make yourself as visible as you can to both ships and aircraft. Put on more clothes if you are able to. They will help to keep you warm and may delay the onset of hypothermia.

Abandon the vessel as a last resort and take the EPIRB and distress signals with you. Switch on the EPIRB and leave it on until emergency services tell you to turn it off.

PERSON OVERBOARD

When people fall overboard, the worst thing to do is jump in after them. The potential for drowning immediately doubles. If the person overboard is close to the vessel put the motor in neutral, raise the alarm and swing the propeller quickly away from them.

Throw a lifebuoy ring, horseshoe or lifejacket to them and keep them in sight at all times.

Ask someone on board to point continuously at the person in the water for the reference of others on board who may be preparing equipment or other head-down activities.

Check your bearings relative to any prominent landmarks. If operating with a GPS or chart plotter it may be possible to quickly create a waypoint where the event occurred. These will assist if a search is required.

Position the vessel to bring the person alongside then stop engines to avoid striking them with a spinning propeller.

Help the person into the vessel, preferably over the stern, as a small vessel might capsize or take on water if you try taking them in over the side. On yachts with overhanging sterns, they should be pulled in at the lowest point of the freeboard.

It is recommended that your vessel is fitted with a ladder or that you carry a portable ladder to help with reboarding a person in the water.

A person recovered from the water may be hurt, cold or exhausted. If they cannot help themselves, it is difficult to get them back into the vessel. Practice your ‘man overboard’ drill whenever possible and in all conditions.
COLD WATER IMMERSION

COLD SHOCK

Victoria’s coastal waters range from about 9.5°C in midwinter to about 22°C in midsummer. Cold shock can kill long before hypothermia. When a person falls into water less than 15°C the first reflex is to gasp and then to hyperventilate making it extremely difficult to hold your breath. The heartbeat may become very fast and irregular during this time. There is a high danger of drowning if the head is not kept above water. It may take several minutes to regain control of breathing and become able to climb back aboard if this remains possible.

You lose strength and coordination quickly in cold water, typically in ten to fifteen minutes. It is important to inflate lifejackets and rafts, and set off EPIRBs quickly for the best chance of survival and rescue. Prepare flares and signals next, so they are easy to access and deploy when help arrives.

Activity such as swimming will increase heat loss. Hypothermia commences when the body core temperature reduces, typically within an hour of immersion.

If you fall into cold Victorian waters you will generally have:

- 1 minute to get your breathing under control and keep your head out of the water
- 10 to 20 minutes of useful movement in which to get out of the water to prepare for rescue
- 1 to 3 hours before you become unconscious due to hypothermia.

HYPOTHERMIA

The term ‘hypothermia’ means lowering deep-body or core temperature. ‘Immersion hypothermia’ is an acute type of hypothermia produced when a person is immersed in cold water such as experienced in Victoria in winter.

The time is very short when you include the time lost before a search and rescue operation is under way.

The heat escape lessening posture (HELP) pictured combats hypothermia and can be a lifesaver for people in cold water.

The HUDDLE position can also be used if there is more than one person in the water. To reduce body heat loss, make sure you stay close (huddle together) and remain still.

WARNING: the consumption of alcohol, attempting to swim or movement in the water will cause the body to use up heat rapidly, which will hasten the onset of hypothermia.
Key points for treatment of hypothermia

1. Remove the person from the cold-inducing environment.
2. Protect the person from cold wind.
3. Remove wet clothing if practical.
4. Warm victim with dry blankets, towels or skin-to-skin contact.
5. Warm the area of high heat loss, that is, head and neck, sides of chest, armpits, and groin. Do not warm, rub or massage limbs. This stimulates the skin and takes warm blood away from vital organs.
6. Observe the person for deterioration in condition.
7. Manage an unconscious person by placing them in the lateral position, making sure their airway is clear. Continue warming procedures.
8. Do not give the person alcohol.
9. Do not allow the person to walk around.
10. Seek medical assistance.
Fighting the Fire

- Raise the alarm (to others onboard and to rescue organisations).
- 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 immediately 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 and monitor for any re-ignition.
- Do not motor up to another vessel if you need to abandon your vessel.
- If you need to abandon the vessel leave on the windward side (upwind) to stay clear if the vessel drifts and any fuel spreads in the water.

Helping Another Vessel on Fire

As a master your responsibility lies first with your own vessel and all persons on it. Provide what aid you can reasonably give, according to your knowledge and experience, and your vessel's capabilities.

- Fires on other craft are indicated by large black smoke palls.
- 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 cooking fats and oils. Fuel and gas fires spread very quickly. Even a minor spill can create an almost explosive spread of flames.

In an emergency, make sure you are wearing your lifejacket.
CARBON MONOXIDE POISONING

Carbon monoxide is a common part of exhaust gases from engines, generators and stoves using any kind of fuel. It is colourless, odourless and very toxic. It is heavier than air so it accumulates in restricted spaces such as cabins and engine bays, and on low surfaces such as the water beside exhaust ports and under duck boards at the stern of powerboats.

TO AVOID CARBON MONOXIDE POISONING:

- ensure inboard engines exhaust outside the vessel
- make sure canvas enclosures are adequately ventilated
- ensure stoves and fuel heaters are exhausted outside the cabin
- never use a gas stove or oven for heating
- keep cabins and engine bays well ventilated
- make sure the engine bay vents are outside the cabin
- be aware of another vessel’s exhaust. Carbon monoxide from the boat docked next to you can be just as deadly
- install carbon monoxide alarms in cabins and keep them serviced regularly
- be wary when external exhaust gases are blown by the wind into the cabin or into a sheltered part of the deck for any length of time
- always have your equipment installed and serviced by a competent person

SYMPTOMS

- Dull headache
- Weakness
- Dizziness
- Nausea or vomiting
- Shortness of breath
- Confusion
- Blurred vision
- Loss of consciousness

Carbon monoxide poisoning can be especially dangerous for people who are sleeping or intoxicated.

TREATMENT

- get the victim into fresh air, being careful not to be exposed yourself
- seek immediate medical attention.
FIRST AID

Every vessel should have a suitable first-aid kit on board. A simple kit can be purchased from a chemist shop and supplemented with sunburn cream, seasickness tablets and a pair of side cutting pliers for removing fish hooks. Make sure it 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 methods is an essential addition to the kit. MSV recommends operators obtain first aid training.

More information on emergencies at transportsafety.vic.gov.au/msv/emergency

REPORTING INCIDENTS AND ACCIDENTS

Always dial 000 in an emergency. If an incident has occurred but you are not in immediate danger, report it to Victoria Police on 1800 135 729.

Where death, injury or property damage occurs, report the incident details as soon as possible to the police officers present or to the police station nearest to where the accident took place.

Vessel operators involved in an accident must give assistance to other persons involved, without endangering their own vessel, crew or passengers.

They must give their name, address, identification and registration details to (when applicable) any person injured or his or her representative, to the owner of any property damaged and to the police present at the scene.