

SAFETY
ON THE
WATER



motorboating

SEA SAFETY GUIDELINES



Marine Safety Working Group

Aim

To use its collective expertise and experience to create and communicate marine safety information and messages to endeavour to reduce accidents and to prevent the loss of life on Irish waters.

Objectives

- To establish strong working relationships with other National and Local Organisations to create/promote accident prevention programmes.
- To establish cause and trends in accidents at sea and inland waters.
- To develop accident prevention programmes.
- To provide a co-ordinated approach to the dissemination of safety information in response to individual enquiries.
- To measure effectiveness of prevention programmes.

www.safetyonthewater.ie

The MSWG would like to thank the following people and organisations for their support in the production of this publication:

McMurdo, Pains Wessex, Practical Boat Owner, Simrad.

Photo credits: Roger Turner (Cover, 4, 9,10,11, 13, 14, 16, 17, 21 23, 24, 25), David Branigan (1, 18), Kevin Riley (2, 5, 8, 20), RNLI (3), Patrick Roach Picture Agency (6, 7, 12, 15), Nicholas Leach (19), PPL Ltd (22), Irish Coast Guard (26).

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Preparation is the key to safe boating. The right boat, knowledge of weather conditions, boating skills, appropriate clothing and safety equipment are essential.

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Once at sea, it's vital that your passengers and crew are organised, know what they are doing, understand the 'rules of the road' and what to do if things go wrong.

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Knowledge can be the difference between life and death. So familiarise yourself with recovery procedures, distress signals, first aid and rescue techniques.

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We probably can't answer all your questions in this booklet, so we've included a list of people who may be able to help.

Yacht and Boat Safety Scheme

For added protection at sea, join the safety identification scheme. It's a free service and you'll find an application form at the back of this guide.



before you go

Get the right boat for the job

Be realistic about the size and type of motorboat you can handle. Bigger does not necessarily mean better – you can learn more and have just as much fun by starting out with a boat that is comparatively small.

- Get expert advice when buying. An independent survey by a marine expert will show if the boat is in good, seaworthy condition and assess the standard of equipment.
- If you hire or charter, make sure the boat is comprehensively insured with full cover for all crew. Check that the boat is fully equipped with safety equipment and that all paperwork is in order. Check that the Inspection Certificate is in date.
- For more advice on buying or charter, call the ISA on [01 2800239](tel:012800239).



Master basic skills

- Before setting out, you and your crew must possess sufficient skill to use the boat safely. This means acquiring basic knowledge of boat handling, navigation, meteorology, rules of the road, use of safety equipment and maintenance of the boat and its engine.
- The ISA administers a comprehensive Motorboat Cruising Scheme for all abilities, starting with ‘Introduction to Motor Cruising’ and extending to ‘Yachtmaster Ocean’. For information call the ISA on [01 2800239](tel:012800239) or visit the website at www.sailing.ie
- It is also recommended that anyone going on or near the water should learn to swim, develop water confidence, rescue and lifesaving skills. For information, call Irish Water Safety on [1890 420202](tel:1890420202).



Free safety advice from the RNLI

The RNLI provides sea safety advice in a friendly and confidential manner and can arrange to send a trained adviser to discuss your boat's safety equipment totally free of charge. The service is called SEA Check (Safety Equipment Advisory Check) and has provided practical advice to thousands of boat owners. Practical demonstrations, including man overboard, liferafts and sea survival, flares and use of liferaft and GMDSS equipment, are available from SEA Check.

- For more information or to arrange a visit, call [freephone 1800 789 589](tel:1800789589) or register online at www.rnli.org.uk/seacheck.asp



Dressed for action

The crew must stay dry and warm, whatever the weather. All crew members should have access to suitable clothing, which is fully functional and will help protect against hypothermia when they are on deck or facing an emergency.

- Base and mid layers should be fleece and fibre pile garments, which trap warm air and provide quick drying comfort. Thermal headgear can play a major role in helping to conserve body heat.
- The outer layer should preferably be dedicated marine gear for foul weather use. Chest high trousers and jacket with high collar, hood and storm cuffs will provide a complete barrier against rain, spray and wind. Breathable fabrics, which transmit sweat to the outside, are likely to provide the best performance. Bright colours and retro- reflective strips are strongly recommended. Some jackets have built in lifejackets and harness.
- Yachting boots will provide the necessary warmth and protection in poor conditions or an emergency. They must have effective non-slip soles and should pull on and off easily. Yachting shoes provide the best possible grip, which is vital when moving round the deck.
- Marine gloves help protect the hands from abrasive modern ropes and any possible injuries. They will also keep out the cold.



Wearing personal floatation devices

- It is a legal requirement for a motor cruiser to have sufficient lifejackets or suitable personal floatation devices for everyone on board. This means having lifejackets or suitable personal floatation devices which will fit all of your crew including children.
- It is the skipper's responsibility to show the crew where lifejackets or suitable personal floatation devices are stowed, how to don and secure them and when and how to operate them.
- It is recommended and best practice for all the crew to wear a lifejacket or suitable personal floatation device when on deck. Remember – it is important to use the crotch straps.
- Wearing lifejackets or suitable personal floatation devices on deck should be mandatory when a boat is out in poor weather conditions, restricted visibility, or at night.
- It is a legal requirement for anyone under age 16 to wear a lifejacket or suitable personal floatation device on deck.
- People drown every year because they do not wear lifejackets or suitable personal floatation devices.

Using a harness

- A motor cruiser must have at least one harness for use on the foredeck. The modern style of combined air-inflation lifejacket and harness is easy to wear with minimal restriction of movement.
- The skipper should identify harness attachment points for moving forward on the boat. They should be placed close to the companionway and be accessible from the flybridge and foredeck. Always clip on when wearing a harness, making sure you are clipped to something strong enough to take your weight.
- If a person falls overboard when clipped on, they could be dragged back and held in the area around the propellers. Be aware of this potential danger, which will depend on the length of the line, the position of the props and where you clip on.



Understanding personal floatation devices

Buoyancy is measured in newtons – 10 newtons equals 1kg of flotation. There are four European standards for lifejackets and buoyancy aids which must all carry the CE mark:

1. Buoyancy aids with 50 newtons are only for use by swimmers in sheltered waters when help is close at hand. They are not guaranteed to turn a person from a face-down position in the water.
2. The 100 newton personal floatation device is for those who may have to wait for rescue, but are likely to be in sheltered and calm water.
3. The 150 newton lifejacket is for general offshore and rough weather use, where a high standard of performance is required.
4. The 275 newton lifejacket is primarily for offshore and extreme conditions and for those wearing heavy protective clothing.



Personal floatation devices are available with a choice of foam-only buoyancy, air-only buoyancy or air-foam buoyancy.

- Inflatable personal floatation devices may be automatically activated on entering the water or can be inflated manually or orally. They must be checked and maintained as recommended by the manufacturer. Spare gas cylinders should be carried on board.
- It is recommended that all personal floatation devices are fitted with a whistle, light and retro-reflective strips and should have crotch straps.
- Crotch straps should be fastened under the crotch NOT on the outside of the hips. There is a real risk of drowning if personal floatation devices are not fitted properly.

Emergency electronics

VHF & GMDSS

- A VHF radio will enable you to summon help by calling the Coastguard and alerting other vessels on Channel 16.
- VHF radios with the Global Maritime Distress and Safety System (GMDSS) are equipped with Digital Selective Calling (DSC), which allows a distress alert to be transmitted at the touch of a button.



EPIRBs

Emergency Position Indicating Radio Beacons (EPIRBs) are a feature of the GMDSS system. They transmit a one-way distress signal, which can be activated manually or automatically. For instance, if a boat sinks, an EPIRB fitted with a Hydrostatic



Release Unit will float free and automatically transmit a distress signal, which relays its exact position to the nearest Coastguard co-ordination centre. An active EPIRB also enables lifeboats or helicopters to obtain a direct radio bearing. Ensure your EPIRB is correctly installed and make regular checks of the battery and hydrostatic release.

- For more information about GMDSS, contact the RNLI on [1800 789589](tel:1800789589) or the ISA on [01 2800239](tel:012800239) or The Maritime Radio Affairs Unit on [01 6782367](tel:016782367).



Radio licensing

Make sure your boat has an up-to-date radio licence. If you fit DSC equipment, you will need to obtain a Maritime Mobile Service Identity (MMSI) number. For more information, contact the Commission for Communication Regulation (COMREG) on [01 8049600](tel:018049600).



EPIRB registering

It is vital that your EPIRB is registered so that full details of your boat are known if the EPIRB is activated. Registration is provided free of charge by the Maritime Radio Affairs Unit (MRAU), which can be contacted on [01 6782367](tel:016782367). Do not transfer your EPIRB to another boat without informing the MRAU of necessary changes. If you sell a boat with an EPIRB, it must be registered to the new owner.



Mobile phones

Never rely on the use of a mobile phone to replace marine VHF radio for distress and safety calls. It is not a safe or reliable substitute! However it may be useful in some circumstances.

- In an emergency dial 112 or 999 and ask for the Coast Guard.
- The service is free – the Coast Guard is always there to help.



Training

Make sure you are properly trained and qualified so you can operate your radio kit effectively. The skipper should attend a recognised Short Range Certificate (SRC) or Long Range Certificate (LRC) course. It is a legal requirement that at least one member of the crew is qualified to use the equipment on board. The Department of Communications, Marine and Natural Resources administers the Short Range Certificate (SRC). Courses typically run over a two day period, and include routine, safety, urgency and distress communications as well as radio voice procedures and techniques. Details available from the ISA.



- Make sure your crew knows how to operate your VHF radio or EPIRB. There is a risk of setting off a false distress alert without proper training.

Close at hand



Lifebuoy

All motorboats should carry a lifebuoy. A lifebuoy should be mounted where it can quickly be thrown overboard. It should be marked with the boat's name and retro-reflective tape and fitted with a drogue to prevent drifting, a whistle to attract attention and an automatic light (projecting a continuous beam) or a strobe.

Flares

Day and night distress flares are an essential part of a motor cruiser's safety equipment and should be stored in a suitable waterproof container.

- Make sure the crew know where flares are stored. For safe use, get them to read the instructions printed on the sides – it will be too late on a dark and stormy night!
- Ensure that you have the correct quantity per the ISA recommended list for the type of boating you do.
- All flares must be in-date.
- Out of date flares must be disposed of safely. Misuse of distress flares is illegal. A list of authorised disposal points can be obtained from the Department of Communications, Marine and Natural Resources.
- Never use parachute flares in the vicinity of a helicopter.



First aid

A comprehensive first aid kit and basic first aid knowledge could prove invaluable until professional assistance arrives. It is recommended that at least one crew member should have a current first aid certificate.

- The RNLI produces a video 'First Aid Afloat' Call us on [1800 789589](tel:1800789589) for more information.
- The ISA or Irish Water Safety can provide details of suitable First Aid courses.



Throwing lines

A throwing line should be carried for instant use on deck, regardless of whether the boat is fitted with a lifebuoy. The brightly coloured floating line is coiled inside a throwing sack, with a wrist-loop or handle to retain the pulling end. Achieving a long distance throw with good accuracy requires practice, with a possible reach of over 20m.



Fire extinguishers

Fire extinguishers and fire blankets must be checked annually and maintained in line with manufacturers' recommendations. Make sure they are stowed correctly and fully accessible and that every crew member knows when and how to use them. Check fire extinguisher pressure and expiry date. Ask for advice when buying a fire extinguisher for your boat.

Liferafts

- Liferafts are essential for extended passages. They can be bought or hired at reasonable rates.
- The liferaft must be regularly serviced in line with the manufacturer's recommendations.
- The number of crew on the boat should not exceed the capacity of the liferaft.
- The liferaft should be stowed in a position where it is ready for immediate launching. Never stow it below deck or beneath other equipment.
- **1.** A hydrostatic release should be used if the liferaft is stowed above deck (two year life span).
- **2.** If generally secured against theft in the marina/mooring, remove the padlocks and ensure the hydrostatic release is operational before sailing.
- You should be familiar with the safety/survival equipment carried in your liferaft.



Practical tip from the Marine Safety Working Group

*Remember the fire triangle, HEAT – FUEL – OXYGEN.
Remove just one element and the fire will go out.*

Planning a trip

Under international regulations, you must have a plan before going afloat. You need to consider the weather, tides, limitations of your boat and crew and any navigational hazards en route. Always have a contingency plan and leave details with someone ashore.

Weather check

Always check the weather forecast before you go and be prepared to change your plans. Services of particular relevance might include:

- Weatherdial – 1550 123 855
- Weatherfax – 1570 131 838
- Teletext
- Irish Coast Guard Weather Forecasts – After an initial announcement on VHF Channel 16, these are broadcast on each Coast Guard Radio Station's normal working channel.
- National and local radio and TV.

Organising the crew

- Ensure the crew is sufficiently prepared for any trip. Be aware of their limitations – particularly young children – and try not to expect too much from them if you are planning a long passage.
- Make an absolute rule that all crew must be safely seated or holding on when the boat is at speed.
- Brief the crew on all safety issues including use of lifejackets and harnesses. Ensure extra care is taken with flammable materials and when turning off the gas.
- Give the crew specific duties to avoid confusion during the journey.
- Provide clear instructions before mooring or anchoring.



Organising the boat

When preparing to use a boat that is new to you, familiarise yourself with its good and bad points by making short inshore voyages.

- Produce and display a list of important pieces of information, including fuel capacity, maximum endurance, gallons/litres per hour, how to deal with water ingress, how to pump bilges and how to jury rig.



- Do a risk assessment. The RNLI SEA Check team can support you in this.
- Be aware of the limitations of your boat.
- Do not over estimate its speed or ability to deal with difficult conditions.
- Accept that you may be slowed by foul tide or poor weather.
- Check all relevant charts, tide tables and pilots. Take those that are required on board.
- Do your navigation before you set off. Slow down or stop if there is any doubt.
- It is better to be pessimistic when estimating the duration of a trip. Work out alternative strategies that include putting into safe havens en route.
- Leave details of a planned trip with a reliable person on shore. This should include destination and route, expected times of departure and arrival, description of boat and contact names for all people on board. Keep shore contact advised of any changes.
- On a long passage, it is good practice to inform the Coast Guard of your plans and estimated time of arrival, and remember to contact them upon your safe arrival.
- Check all radio equipment is functioning fully before setting out.

Emergency repair checklist

- Spanners
- Screwdrivers
- Pliers
- Waterproof torch
- Batteries
- GRP repair kit
- WD40
- Stainless steel knife
- Bungs
- Heavy duty tape
- Spare fuel filters, pump impellers and vee belts
- Link belting for quick repairs
- Lubricating oils
- Liquid sealant

Regular servicing of all safety equipment is highly recommended

Around the deck

- Guard rails provide a safety barrier round the main cockpit and foredeck.
- Treat any slippery areas with non-skid paint or stick-on strips. Pay particular attention to the tops of hatches and sloping coachroof sides.
- ‘Bow riding’ is potentially dangerous and has been made illegal in some countries.
- Avoid standing next to a working radar antenna.
- Slow down in bumpy conditions or when there are waves ahead. Warn everyone when the boat is going to change speed or direction or is about to hit unexpected waves. Give them time to sit or hold on securely. No one should be on the foredeck.
- Make sure all deck gear is securely stowed, including loose mooring lines and the anchor.
- When a line or painter is secured at one end, make sure it is not likely to foul the propeller if it falls over the side.
- Check fixings and equipment stowed on deck regularly for deterioration.



The RNLI's engine check list

- The engine plays a vital role in the safety of your boat. It must start every time and be ready to get you out of trouble in an emergency.
- The RNLI produces a laminated card ‘Engine Check List’. To request your copy, freefone the RNLI on [1800 789589](tel:1800789589).
- ISA provide diesel engine training courses.



Remember!

- Read the engine handbook, keep it to hand and make sure you are familiar with its contents.
- Make sure the engine is regularly maintained. Engine failure is the main cause of lifeboat calls to motor cruisers.
- Always carry at least 20 per cent more fuel than you expect to need. Calculate fuel consumption, check that fuel gauges are accurate and plan your trip so you never have to top up the tanks when at sea.



Yacht and Boat Safety Scheme

The Yacht and Boat Safety Scheme administered by the Irish Coast Guard, provides vital information in an emergency.

See the back page for more information and the registration form.



Practical tip from the Marine Safety Working Group

Before embarking on a passage, check the engine oil and take a reserve supply with you. Ensure that you have more than enough fuel for the trip.



under way

Radio sense

Maintain a good radio watch when at sea, using the recommended channels for distress, calling and ship movements.



- Keep information about correct radio distress procedures and your call sign adjacent to the radio.
- The Marine Safety Working Group produces an ‘Emergency Radio Procedures’ sticker which is free of charge – call the RNLI on [freephone 1800 789589](tel:1800789589) or call the Department of Communications, Marine & Natural Resources on [1850 392392](tel:1850392392).



Mal de mer!

Seasickness strikes down many a sailor, particularly those with little to do. Its effects are dangerous if the crew becomes too incapacitated to maintain proper control of the boat:

- Seasickness medication works for some people and should be taken well before the trip. Check the instructions for possible side effects, which may include drowsiness.
- Don't get cold and miserable. Dress up warmly and take a spell at the wheel to occupy your mind.
- If a crew member feels sick, the skipper must decide if it is necessary to seek shelter before the problem gets worse.
- Get someone to help if you need to be sick. The boat must stop, but there may still be an unpleasant motion and hanging over the side is potentially dangerous. The safest and easiest solution may be to use a bucket in the cockpit.
- Don't continue on an empty stomach. Dry toast, bread or plain biscuits are all good fill-ups. You must drink plenty of water to offset dehydration.

Drink & drugs

It is illegal to operate a motor boat under the influence of drink or drugs to the extent that you are incapable of having proper control of the craft. Be sensible about drinking alcohol, as it will impair your judgement. Consider it as irresponsible for a skipper and crew to be in charge of a powerboat under the influence of alcohol as it is for the driver of a car. Beware of the side effects of any medication which may impair judgement and reduce the effectiveness of the person concerned.

Fire brigade!

Make regular checks of gas bottles and fuel containers to ensure no flammable vapours escape into the bilge. The active gas bottle and all taps must always be turned off when not in use. Turn the gas bottle off first, let the gas burn out of the system, then shut off the main cock and burner tap on the stove. Take extra care if anyone on board is a smoker. The engine compartment and cabin should be ventilated regularly, especially before going afloat.

Rules of the road



The primary role of these rules is to prevent collisions. They rely on common sense and good practice to succeed. This is only a brief summary. Complete ‘International Regulations for the Prevention of Collisions at Sea’ should be on board every yacht and motor cruiser and are available from the ISA. Phone [01 2800239](tel:012800239) for more information.



Under power

- Boats under power give way to sail.
- Boats under power approaching head-on should turn to starboard.
- When boats under power are crossing, the vessel with the other vessel on its starboard side must give way.

General rules

- It is the responsibility of the skipper to maintain a good look-out at all times.
- An overtaking boat must always keep clear.
- There is a risk of collision if the bearing of an approaching vessel remains constant.
- Vessels of less than 20m should not impede vessels using a traffic separation scheme or confined to a narrow channel.
- Give way to vessels fishing, vessels not under command, vessels restricted in their ability to manoeuvre or vessels constrained by their draught.
- Avoid diving vessels that are flying the blue and white A flag – diver down.
- Be aware that divers may also be using a surface marker buoy to indicate their position. Keep clear.



Sound signals with a foghorn

- altering course to starboard.
- ● altering course to port.
- ● ● going astern.
- ● ● ● ● your intentions are unclear.

A motor vessel which is underway in fog should give a long blast every 2 minutes and a motor vessel which has stopped should sound 2 long blasts every 2 minutes



Navigation lights for motor cruisers

- A powerboat which is underway at night must show green and red side lights, a white stern light and a white masthead light at least one metre above the side lights. On a boat of less than 20m the sidelights may be combined.
- A powerboat of more than 7m must show an all-round white light at anchor.

Remember

Don't drag!

A length of chain adds weight and greatly improves the holding capability of an anchor. The amount of chain and rope should be at least five times the depth of water.

Be seen!

Radar reflectors are required under international regulations and will help your boat to be 'seen' by larger vessels, particularly in reduced visibility. A radar can check the approach of other vessels, but don't forget to use the GPS to confirm your position and keep a good lookout as well!

Shiver me timbers!

It is the skipper's responsibility to keep the crew dry and warm. A wet, cold crew will not be able to function effectively, which may endanger both boat and crew. The onset of hypothermia is often accompanied by lack of reason and judgement. A leaflet on hyperthermia is available from Irish Water Safety.



Practical tip from the Marine Safety Working Group

If in doubt...never press on with a trip regardless. Be realistic about the situation. Be prepared to change your plans and make for a safe haven in good time. If things go wrong and you're not sure you can handle it, you must call for help – don't leave it too late.



emergency

Calling for help

If you are in distress and immediate assistance is required, a DSC Distress Alert should be sent before the MAYDAY procedure. This Distress Alert will activate all alarms in any DSC radios within range and alert any radio operators to listen on the distress working channel for the subsequent MAYDAY call. The DSC alert also contains your identification number (MMSI) and a valid position.

Do not rely solely on the DSC alert. It should be immediately followed by emergency radio procedures on VHF Channel 16.



Emergency radio procedures

It is vital that radio procedures are clear and effective in an emergency. To help boat owners ensure they will know what to do if the worst happens, the Marine Safety Working Group produces an 'Emergency Radio Procedures' sticker which is available free of charge. To request your copy, freefone the RNLI on [1800 789589](tel:1800789589), or call the Department of Communications, Marine and Natural Resources on [1850 392392](tel:1850392392).



Firing flares

- Familiarise yourself with the firing instructions.
- It is vital to aim parachute flares well clear of any radio masts or superstructure. Fire them slightly downwind so they achieve maximum height. Do not fire parachute flares if a helicopter is close by.
- Fire all flares to leeward and downwind so that smoke and debris is blown away.
- The RNLI SEA Check service can provide flare demonstrations for clubs and associations. Call on [freefone 1800 789589](tel:1800789589).
- Do not fire rocket or parachute flares in the vicinity of a helicopter.



International regulations require you to have access to an illustrated table of recognised lifesaving signals so you can communicate with the search and rescue services or other boats if you are in trouble.

Engine failure

The main cause of engine failure is likely to be blocked filters.

- A blocked fuel filter will reduce power until the engine stops. Change the filter and re-start the engine. If dirty fuel is the culprit, several changes may be required.
- A blocked salt water inlet filter will cause rapid overheating, indicated by increased steam from the exhaust and eventual seizure. Check the filters for blockage and clear as necessary. Also, check the pump is functioning and for leaks in the system.

Man overboard

Prevention is better than cure!

Ensure all actions and safety precautions have been taken to prevent someone falling overboard.

- Practice MOB drills in all weather and sea conditions using a bucket and fender.
- Always wear a lifejacket and harness that is correctly clipped on when going on the foredeck in rough weather, poor visibility or at night.
- Taking a 'leak' over the side is potentially dangerous – even when the boat has stopped. If you can't face using the heads, a 'bucket-and-chuck-it' is far safer.
- Make sure you are holding on to secure fixings on the boat at all times.



Held by a harness

If a person falls overboard when still secured by a harness, stop the boat immediately and engage neutral. Keep hold of the harness line to help them swim round to the boarding ladder. If this is not possible, you may need to rig a ladder, use some form of lifting tackle or lower a dinghy to get them back on board.

Left behind

If the person is not secured by a harness, the following are guidelines for keeping them in sight and retrieving them with minimum delay – **remember that cold water can rapidly kill.**

- Throttle back and immediately raise the alarm by shouting ‘Man overboard!’
- Instruct a crew member to watch the person in the water and point continuously.
- Alert the emergency services and let them know what's happened. If you cannot see the person in the water or have any doubts about making a recovery, send out an immediate distress alert.
- Start your recovery manoeuvre. Beware of loose lines fouling the propeller at all times.
- If possible note your position. Most navaisds have a MOB function which may prove vital if contact is lost. The MOB records where the person fell overboard, but does not allow for drift on wind and tide.
- If you are the only person left on the boat, do not leave the deck as you may become disorientated and lose sight of the casualty.
- In daylight, throw a buoyant orange smoke signal immediately after the person has fallen overboard.
- At night, if you have a lifebuoy with a light, throw this immediately after the person has fallen overboard. A white parachute flare can be used to illuminate the area and pick up the retro-reflective tape on the casualty's clothing.
- If you recover the MOB, inform the emergency services immediately.
- A CD-Rom on sea survival is available from BIM on [2845144](tel:2845144).
- A leaflet on hypothermia is available from Irish Water Safety on [1890 420202](tel:1890420202) or www.iws.ie



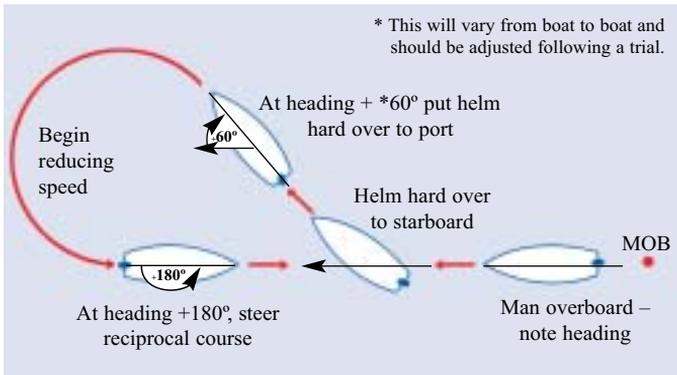
What can the casualty do?

- Ensure lifejacket is fully inflated.
- Remain as calm as possible.
- The greatest threat to survival is the cold. Cross your legs and hold your arms tightly together to restrict movement, prevent cold water flushing through and help prevent loss of heat. Tighten up wrist, ankle and neck fastenings.
- Use the light and whistle on the lifejacket to attract attention.
- In most cases, you should not attempt to swim for the boat as this will promote rapid heat loss and exhaustion. Wait until you can grab the lifebuoy or heaving line that may be floating close by.
- In rough conditions, turn your back to the waves to keep your airway clear of spray.

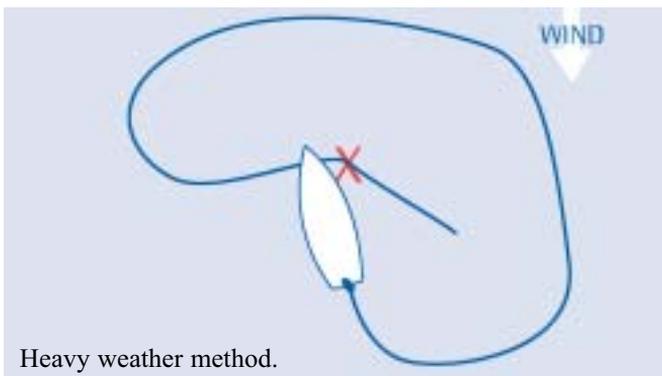
Use pic from windsurfing - which one?

MOB action

- If you can see the person in the water clearly, a simple 180 degree turn is quickest.
- If you lose sight of the casualty – due to poor visibility or a bad sea state – the ‘Williamson Turn’ is a good way to get on to a reciprocal course which will take you back down the track. Put the helm hard over to starboard and add 60 degrees to your course – the amount will vary from boat to boat and should be adjusted following a man overboard trial. When the compass is on the new heading, put the helm hard over to port. When the compass is reading the course + 180 degrees, steer a reciprocal course and the casualty should be ahead of you.



- In heavy weather, the reciprocal course may bring the sea astern, in which case a short approach head-to-sea may be more appropriate once the turn has been completed.



Preparing to come alongside

Do not waste time while the boat is turning to approach the casualty. Prepare for the recovery so that everything is ready when you come alongside.

- Determine which side you will approach. Have a heaving line ready. Be sure to wear a lifejacket and harness and clip on before throwing the heaving line – you may get pulled over.
- The initial approach will vary, depending on weather and sea conditions and the type of boat. Attempt to come on to the MOB head to wind, that way your props are away from the casualty and the vessel will not drift on to them.
- Have someone ready with a rope loop to pass over the MOB's head and under their arms. When this is done, cross the rope. This gives the casualty something to hold on to and will give them confidence.
- If you are not absolutely confident of your boat handling skills close to the person in the water, throw the heaving line as soon as you get within range. You can then pull the casualty alongside to a safe place for recovery.
- Ensure the propeller is not turning when you are alongside the person in the water. Make sure there are no lines which could foul the propeller.

Recovering the casualty

This may be the hardest part of the whole MOB procedure:

- If you have a boarding ladder and the casualty is able to help themselves, this may be the safest and most obvious method. Beware that a stern-mounted boarding ladder can be dangerous in a rough sea.
- Launching the dinghy can be used to aid the recovery.
- The casualty may well be suffering from shock and hypothermia. Be prepared to administer immediate first aid. Assess if the casualty needs professional medical attention.
- Lifting gear will need to be improvised if the casualty is exhausted or unconscious. A short strop with a block and tackle can be attached to a strong securing point – on the wheelhouse, anchor windlass or davits – to help lift the casualty on board. A sling using ropes or net can be made to roll the casualty up out of the water.



Practical tip from the Marine Safety Working Group

Another method of recovering the MOB is to use the tender/dinghy as a stepping platform by using the outboard propeller as a means of climbing out of the water and onto the boat.

Fire on board

If you have a fire on board:

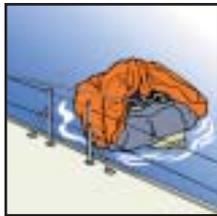
- Rig a sea anchor/drogue so that smoke and flames blow downwind. Rig it from the stern or stem, whichever is appropriate.
- Do not enter any smoke filled space. Try not to breathe in any smoke, as it may be poisonous.
- Put on your lifejackets.
- Get everyone on deck and take all the fire extinguishers with you.
- Try to extinguish the fire where possible. Use a fire blanket to smother small fires. When using a fire extinguisher, try to hold it upright.
- Fire requires oxygen. Reduce the supply of air by sealing vents and hatches. If there is smoke coming from the engine compartment, only open the access hatch enough to insert the nozzle of the fire extinguisher.
- Notify the emergency services.
- Move both the crew and liferaft as far as possible from the seat of the fire.
- Fitting a fire access port to the engine compartment offers the greatest safety.



Launching a liferaft



A liferaft should never be launched until it is intended to abandon the boat.



Ensure that the liferaft is tied to the boat. An inflated raft cannot be towed or held alongside for any length of time in a seaway without being damaged.



It should be boarded by crew as quickly as possible, then cut free from the boat.

Climbing into a liferaft should always be considered a last resort. Unless the boat is on fire or is clearly sinking fast, it is better to postpone this until the last possible moment. A boat is likely to be easier for the rescue services to locate and the crew will suffer less from exposure. Heavier crew members should transfer into the liferaft first to help promote stability and other crew on board.

- The static line must be secured to the boat before the liferaft is thrown overboard! You may need to pull out about 8m of static line before the liferaft inflates. Cut free and move away from the boat as quickly as possible.

- Emergency equipment such as an EPIRB, hand-held VHF, flares, first aid kit, water and thermal protective aids must be taken, if not already in the liferaft. This can be provided in a grab bag which is stored in an easily accessible locker on the boat.
- Know your liferaft. Ask the service agent if you and your crew can be present when it is inflated for service. This will show you how it inflates and where the gear is stowed.
- Get training. Details of Personal Survival Techniques courses can be obtained from the ISA on 01 2800239

Getting a tow



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- Have a plan for securing the towline to your boat when it is passed by the rescue boat. Practice this as a routine drill.
- As a lifeboat approaches, the coxswain will inform you of his intentions. Advise him of hazards such as ropes or netting in the water. Follow his instructions – he is the expert.
- Do not secure the towline to fittings that are not strong enough for the job. If in doubt, back up the towline using additional ropes led to other cleats and strong points on deck.
- Avoid using knots or loops that cannot be released under load. Where possible provide protection to prevent chafe of the tow rope, such as running it through the bow fair lead.
- Some boats will tow better using a bridle rather than a single line. You may be passed a small canvas drogue for streaming astern, particularly if you have lost your rudder. This will make the tow more manageable and reduce the chance of broaching in following seas.
- If you accept a tow from a commercial or private vessel, it is wise to check if any fee is expected. There is no ‘salvage’ fee when you are towed by a lifeboat, but a voluntary contribution to the RNLI is always very welcome!
- If you are acting as the tow vessel in poor weather add something heavy e.g 2 or 3m of chain, to the middle of the rope.

Helicopter rescue

- Use a red hand-held or orange smoke flare as a signal to the helicopter if requested. Do not fire parachute flares or mini flares when the helicopter is close by.
- Once contact has been made, the pilot will tell you his intentions. Follow these instructions – he is the expert.
- Make sure you understand what the pilot has said as you will not be able to hear your radio when the helicopter is overhead.
- Winching normally takes place from the stern of the vessel. Ensure there is a clear area and that loose gear and debris is secured or cleared away. Beware that the helicopter down-draught can be very strong.
- If possible keep the vessel as steady as you can. You will be given instructions regarding course, normally more or less into the wind, and speed if you have power available.
- Allow the winch wire to earth in the water before grabbing it. Ensure it does not snag on anything. Never secure it to the boat.
- If the Hi-Line technique is to be used, have a bucket to hand to collect loose line on deck.



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Remember!

The Emergency Services are here to help, but would rather do so before you get into trouble! **Free** safety advice is always available – **freefone 1800 789589** and talk to an expert.

Useful contacts

– as referred to throughout the booklet



General



Royal National Lifeboat Institution
15 Windsor Terrace, Dun Laoghaire, Co. Dublin

Telephone: (01) 2845050 email: lifeboatsireland@mli.org.uk
www.mli.org.uk



Irish Water Safety
The Long Walk, Galway

Telephone: 1890 420202 (LoCall) email: info@iws.ie www.iws.ie



Irish Coast Guard
Leeson Lane, Dublin 2

Telephone: (01) 6785444 email: admin@irishcoastguard.ie
www.marine.gov.ie

In an emergency, call 999 or 112 and ask for the Coast Guard.

Training courses



Irish Sailing Association
3 Park Road, Dun Laoghaire, Co. Dublin

Telephone: (01) 2800239 email: info@sailing.ie www.sailing.ie

EPIRB registration

Maritime Radio Affairs Unit (MRAU)
Department of Communications, Marine and Natural Resources,
29/31 Adelaide Road, Dublin 2

Telephone: (01) 6782367 www.marine.gov.ie

Radio licensing

Commission for Communication Regulation (COMREG)
Abbey Court, Irish Life Centre, Lower Abbey Street, Dublin 1

Telephone: (01) 8049600

Marine Safety Working Group

The aim of the Marine Safety Working Group is to promote water safety. The group is made up of a number of organisations representing statutory bodies, search & rescue organisations and water users.

Who we are:

**Department of Communications,
Marine & Natural Resources**
Leeson Lane, Dublin 2
Tel: (01) 6782000
www.marine.gov.ie



Irish Coast Guard
Leeson Lane, Dublin 2
Tel: (01) 6785444

**In an emergency, call 999 or 112
and ask for the Coast Guard.**



Irish Water Safety
The Long Walk, Galway
Tel: 1890 420202 (LoCall)
www.iws.ie



Irish Sailing Association
3 Park Road,
Dun Laoghaire, Co. Dublin
Tel: (01) 2800239
www.sailing.ie



Lifeboats

Royal National Lifeboat Institution
15 Windsor Terrace,
Dun Laoghaire, Co. Dublin
Tel: (01) 2845050
www.rnli.org.uk



Bord Iascaigh Mhara
PO Box 12, Crofton Road,
Dun Laoghaire, Co. Dublin
Tel: (01) 2845144
www.bim.ie



Health & Safety Authority
10 Hogan Place, Dublin 2
Tel: (01) 6147000
www.hsa.ie



Waterways Ireland
20 Darling Street, Enniskillen,
BT74 7EW, Northern Ireland
Tel: 048-66323004 (from R.O.I.)
028-66323004 (from N.I.)

What we do:

The government department responsible for safety of life at sea & prevention of pollution from ships.

Responsible for co-ordination & implementation of marine search and rescue operations, pollution control & marine radio communications in Irish waters.

Irish Water Safety is the statutory body established to promote water safety in Ireland. We offer courses nationwide that develop skills in swimming, survival and rescue. We recommend that all members of the public learn to swim.

We are the governing body representing sailing, windsurfing, powerboating and personal watercraft in Ireland. We offer a range of training courses for all types of recreational boaters through our network of affiliated clubs and 'recognised teaching establishments'.

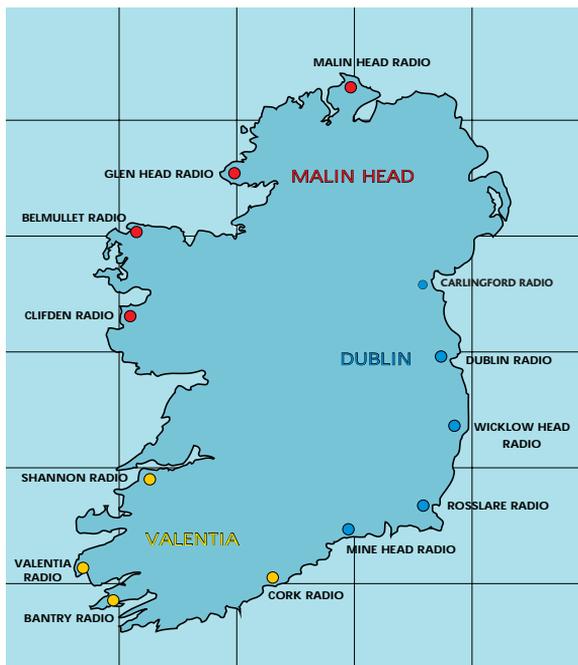
We exist to preserve life from disaster at sea. This is achieved by providing a fleet of lifeboats, with 24-hour cover and crewed by well-trained volunteers. In addition, we work with other national organisations to promote sea safety. We rely on voluntary donations.

We are the principal development agency for the Irish seafood industry and promote safe working practices for the industry which involves Fisheries training for both new entrants and practitioners, developing codes of practice, production of training materials and trials of preventative measures against risk on board fishing vessels.

The Health and Safety Authority promotes and enforces good standards in workplace safety. Working with employer and worker representatives, it seeks to ensure that those in control of workplaces adopt safe working practices, as required by law.

Waterways Ireland is a North/South body responsible for the management, maintenance, development and restoration of inland navigable waterways, principally for recreation purposes. The body has its headquarters in Enniskillen, with regional offices in Scariff, Carrick-on-Shannon and Dublin.

Irish Coast Guard Services



Maritime Rescue Centres and Coast Radio Stations

Dublin MRCC
Irish Coast Guard
Leeson Lane
Dublin 2
Tel: (01) 6620922
Fax: (01) 6620795

Valentia MRSC
Valentia Island
Co. Kerry
Tel: (066) 9476109
Fax: (066) 9476289

Malin Head MRSC
Malin Head
Co. Donegal
Tel: (074) 9370103
Fax: (074) 9370221

How to join the Yacht and Boat Safety Scheme – it's free and could help save your life.

- Complete the enclosed questionnaire in ink and send it to the Irish Coast Guard, Department of Communications, Marine and Natural Resources, Leeson Lane, Dublin 2.
- Enclose a recent photograph of your craft, if you have one.
- Please fill in the information on the section to the left of the form, cut it off and give it to someone ashore who is concerned with your safety.
- If the ownership, name of craft, an address given or the craft's appearance (colour etc.) changes in any way, please inform the Irish Coast Guard.
- This card is valid for three years. If it is not renewed within that time, it will be considered invalid and removed from our records.

Name of craft:

Address of the Maritime Rescue Centre which holds details of this craft:

Dublin MRCC
Irish Coast Guard
Headquarters
Leeson Lane
Dublin 2

Tel: (01) 6620922
Fax: (01) 6620795
Email: admin@IRISHCOASTGUARD.ie

If you are worried about the safety of this craft, please contact the Irish Coast Guard

In an emergency dial 112/999 and ask for the Coast Guard



YACHT AND BOAT SAFETY SCHEME

Name of Craft:		Name of rig:	
How and where is the name displayed:		Speed and endurance under power:	
Type of craft:	Type of rig:	Details of radio:	
Sailing or fishing number:	Speed and endurance under power:	HF MF Trans/Rec:	
Colour of craft:	Speed and endurance under power:	VHF Channels and call sign:	
Hull above water:	Speed and endurance under power:	MMSI No:	
below water:	Speed and endurance under power:	Other equipment:	
Superstructure:	Speed and endurance under power:	Type of distress signals carried:	
Sail:	Speed and endurance under power:	Dinghy type:	
Spinnaker:	Speed and endurance under power:	Colour:	
Length:	Speed and endurance under power:	Life raft type:	
feet:	Speed and endurance under power:	Serial No:	
metres:	Speed and endurance under power:	Are life jackets carried?	
Details of any special identification features:			
Usual base:			
Usual mooring:			
Usual activity (eg fishing, racing etc):			
Usual sea areas:			
Details of owner:		Details of Shore Contact:	
Name:			
Address:			
Tel. No:			
Signature:			
Date:			
Name:			
Address:			
Tel. No:			
Name of club or Association:			

Also available in the Safety on the Water range

Our range of **FREE** Safety On the Water booklets give
the essential safety information that you need
– whatever you do on the water.

Sports and subjects include:

Sailing
Dinghy sailing
Power boating
Windsurfing
Diving
Sea angling

To order any of these booklets, or to find out more about
free water safety advice, contact any of the organisations
listed on page 29



Department of Communications,
Marine and Natural Resources

