

SAFETY
ON THE
WATER



sport diving
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.

Scuba diving is both an exhilarating and challenging sport, but it is not without risk. The Marine Safety Working Group, recognizes the growing popularity of diving and, in liason with the Irish Coast Guard, Irish Underwater Council, PADI, Garda Water Unit, Irish Water Safety Association and Naval Service Diving Section have compiled some simple guidelines to make your diving safer.

www.safetyonthewater.ie

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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 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 dive boat for the job

Be realistic about the size and type of boat you require, as an overloaded boat will perform sluggishly, be harder to manoeuvre, may become unstable or get swamped by waves and is more likely to suffer a man overboard.

- An inflatable boat with inflatable tubes and rigid transom is easy to store and transport. These boats are highly buoyant and stable at rest, but the tubes can make it difficult for divers to get back on board. Lack of rigidity in the flexible hull will detract from the boat's performance and comfort, and space for equipment storage is restricted.
- A RIB (Rigid Inflatable Boat) combines inflatable tubes with a rigid vee hull and central driving position. This creates a safe and versatile boat with superior performance, plus better weight carrying and a more comfortable ride.
- A solid dory or cathedral hull boat is stable and fast, with a larger working deck space than an inflatable or RIB, at the expense of a harder ride. The solid deck and sides are ideal for fitting and securing equipment, but may lack sufficient buoyancy if the boat is flooded.
- Get expert advice if you are buying a boat. An independent survey by a qualified marine surveyor will show if the boat is in good, seaworthy condition and assess the standard of equipment.
- If you hire or charter a boat, make sure it is comprehensively insured with full cover for all crew. Check that the boat is fully equipped with safety equipment and that Inspection Certificates are in date.
- For more advice on buying or charter, call the ISA on [01 2800239](tel:012800239).



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, sea survival, flares, GMDSS and use of liferaft, are available from SEA Check.

- For more information or to arrange a visit, call [freefone 1800 789589](tel:1800789589) or register online at www.rnli.org.uk/seacheck.asp



Master basic skills

Before setting out, you 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.

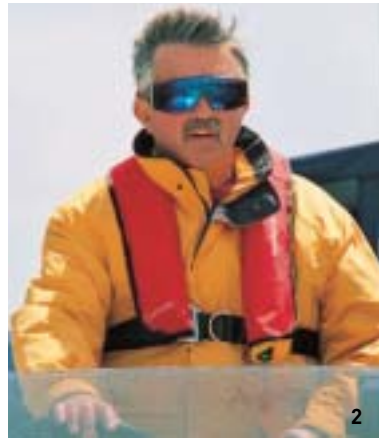
- The ISA National Powerboat Training Scheme provides a comprehensive training programme for those who operate small powercraft suitable for diving. Your sport diving organisation runs courses for divers that are both theoretical and practical.
- It is illegal in Ireland for anyone under the age of 16 to operate or be in control of a fast powered craft.



What to wear

Crew not dressed for diving must stay dry and warm, whatever the weather. They should have suitable clothing, which is functional and helps protect against hypothermia.

- The outer layer should be dedicated marine gear for foul weather use. Breathable fabrics, which transmit sweat to the outside, are likely to provide the best performance. Bright colours and retro-reflective strips are strongly recommended. Chest-high trousers and jacket with high collar, hood and storm cuffs will provide a complete barrier against rain, spray and wind.
- An alternative is to wear a drysuit made from waterproof material with latex neck, wrists and ankles to keep water out. These may be uncomfortable in warmer weather.
- Base and mid layers should be fleece and fibre pile garments, which trap warm air and provide quick drying comfort. Thermal headgear is important in helping to conserve body heat.
- Marine boots and gloves will provide the necessary warmth and protection in poor conditions and against abrasive equipment and injuries. Non-slip soles are vital for managing the boat safely and helping divers back on board.
- Sunglasses filter out bright reflected light on the boat and water, making it easier to spot divers on the surface or hazards. They also provide some protection against wind and spray.



Wearing suitable personal flotation devices (PFDs)

- Irish legislation requires the compulsory carriage of lifejackets or suitable personal flotation devices for all persons onboard a dive boat. In the case of vessels under 7m, these must be worn at all times on an open boat or on deck where the boat has accommodation, except when anchored, moored alongside or when you are intentionally swimming from the boat. Persons under 16 are required to wear their lifejackets or suitable PFDs at all times when not made fast to the shore. Penalties include on the spot fines.
- Commercial dive boats should provide lifejackets or suitable PFDs for all on board.
- Divers should never wear a weight belt in a boat unless they are first wearing a buoyancy control device (BCD) or other lifejacket or suitable PFD.

Understanding personal flotation devices

Buoyancy is measured in newtons – 10 newtons equals 1kg of flotation. There are 4 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.



2. The 100 newton lifejacket 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 those wearing heavy protective clothing.

Suitable personal flotation devices are available with a choice of foam-only buoyancy, air-only buoyancy or air-foam buoyancy.

- Inflatable PFDs 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.

- It is recommended that all PFDs are fitted with a whistle, light and retro-reflective strips and should have crotch straps.

Emergency electronics



VHF

- A VHF radio will enable you to summon help by calling the Coast Guard 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. An active EPIRB also enables lifeboats or helicopters to obtain a direct radio bearing.
- There is a range of Personal Locator Beacons (PLBs) on the market along with suitable waterproof containers.
- For more information about GMDSS, contact the RNLI on 1800 789589, the ISA on 01 2800239 or the Maritime Radio Affairs Unit on 01 6782367.



Radio licensing

Make sure your dive 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.



EPIRB registration

An EPIRB must be 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, which can be contacted on 01 6782367. Do not transfer your EPIRB to another boat without informing the MRAU of necessary changes.



Mobile phones...

Never rely on the use of a mobile phone to replace marine VHF radio for distress and safety calls. It may be impossible to get a signal and the rescue services cannot get a position fix on a mobile phone. It is not a safe or reliable substitute, but may provide back-up in some circumstances. In an emergency, dial 112 or 999 and ask for the Coast Guard.

Training

- It is a legal requirement that at least one member of the crew is qualified to use the radio equipment on board. A boat's skipper should attend a recognised Short Range Certificate (SRC) or Long Range Certificate course. The Department of Communications, Marine and Natural Resources administers the SRC. Courses typically run over two days, covering routine, safety, urgency and distress communications as well as radio voice procedures and techniques. Details available from the ISA on [01 2800239](tel:012800239) or BIM on [01 2841544](tel:012841544).
- Make sure your crew knows how to operate your VHF radio, as there is a risk of setting off a false distress alert due to a lack of training.
- Check the batteries on a hand-held VHF radio and always carry a set of spares in a waterproof bag. Ensure everything is working before you set out by doing a radio check with the Coast Guard.
- Maintain a good radio watch when at sea, using the recommended channels for distress, calling and ship movements. Keep the correct radio distress procedures and your call sign by the radio.



The Marine Safety Working Group produces an *Emergency Radio Procedures sticker* which is free of charge – call the RNLI on [freefone 1800 789589](tel:1800789589) or call the Department of Communications, Marine and National Resources on [1850 392392](tel:1850392392).



Flares



Flares are an essential part of a boat's safety equipment. They must be in date and stored in a suitable waterproof container.

- Distress flares for inshore use provide cover up to five miles from land. An inshore pack includes two red hand flares visible up to seven miles on a clear night, plus two hand held orange smokes visible up to three miles by day, but more visible than red flares in bright sunlight.
- Distress flares for coastal use provide cover up to seven miles from land. A coastal pack has the contents of an inshore pack, plus two parachute rockets visible for up to 30 miles on a clear night.
- Distress flares for offshore use provide cover seven miles from land. An offshore pack has the contents of a coastal pack, two extra parachute rockets and red hand flares.
- Make sure the crew know where flares are stored. Crew must read the instructions printed on the sides prior to setting out – it will be too late in an emergency!
- Never use a parachute or rocket flare in the vicinity of a helicopter.
- 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 National Resources.

The RNLI's engine check list

- The engine plays a vital role in boat safety. It must start every time and be ready to get you out of trouble in an emergency.
- The RNLI produces a free laminated card – ‘Engine Check List’. To request your copy, freefone the RNLI on 1800 789589.
- RYA provides diesel engine training courses.



Engine basics

- Read the engine handbook and keep it to hand.
- Make sure the engine is regularly maintained, as engine failure is the main cause of lifeboat launches to powerboats. Ensure this is done by a reputable service agent.
- Always carry at least 20 per cent more fuel than you expect to use.
- Take extra care if anyone on board is a smoker. Make sure no one nearby is smoking when you refuel.



Kill-cords

Small or high performance dive boats must be fitted with a kill-cord that stops the engine whenever the driver leaves the controls – whether he does so voluntarily or not.

Never operate the boat without the kill switch in place and the cord properly secured to your leg, wrist or lifejacket.

Fire extinguishers

Fire extinguishers must be checked 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. Do not store your fire extinguisher beside your engines or fuel, as this is the most likely area to be on fire.

Diver preparation

- Prepare for a new season with refresher training in the pool, starting with a series of shallow warm-up dives before then “working up to” deeper depths.
- Go back to original training to ensure that key skills such as mask clearing and buoyancy control are still second nature. Diving skills need to be practised regularly to ensure they do not deteriorate.
- All divers must be physically and psychologically fit for the dives they plan to undertake. Ensure all divers have up to date medical certificates. Repeat medicals should be taken every five years to the age of 40, every three years to the age of 50 and annually thereafter.
- Ensure that dive equipment is regularly serviced and working correctly before a full dive. When using new equipment, train with it in a pool or shallow water.



Planning a dive boat expedition

Under international regulations you must have a plan before going afloat. You need to consider weather tides, limitations of your boat and crew, and any 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 or cancel the trip. Remember that Force 3-4 may seem like a full gale to an inexperienced crew in a small boat. Don't frighten your crew – or yourself.



- 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 boat

Be aware of the limitations of your boat. Do not overestimate its speed or ability to deal with difficult conditions. It is better to be pessimistic when estimating the duration of a trip.

- Never overload your boat. Before loading the boat for the first trip of the season, make a thorough check of the boat and engine to ensure everything functions correctly.
- Do your navigation before you set off. Check all relevant charts, tide tables and pilots. Take those that are required on board, along with a steering compass for offshore trips.
- Accept that you may be slowed by strong tide or poor weather. Work out alternative strategies to include safe havens if the weather deteriorates.
- Leave details of your dive plan with a reliable person on shore. This should include dive site and route, expected times of departure and arrival, description of the boat and contact names of all people on board. Keep the shore contact advised of any changes. Accurate records of diver training, dives and expeditions should be kept at all times.
- Inform the Coast Guard of your plans and remember to report your safe return to them.
- Before setting off, ensure your trailer and tow vehicle are properly parked and secured above the high water line.



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.](#)

Dive boat equipment

Minimum requirements for small dive boats in coastal or inland open waters include:

- Kill-cord and spare.
- Lifejackets and dry clothing.
- Boarding ladder.
- Alternative propulsion – paddles or a small, spare outboard engine.
- Anchor and line which must be secured. 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.
- Mooring lines, spare ropes and a heaving line.
- Bucket, bailer or manual bilge pump.
- Air pump and repair kit for inflatables and RIBs.
- Spare fuel and oil which is pre-mixed as appropriate.
- Powder or CO₂ fire extinguisher.
- First aid kit including wound dressings, triangular bandages, survival bag and oxygen.
- Inshore use distress flares.
- Hand-held VHF.
- Navigational aids including compass, charts and GPS.
- Foghorn.
- ‘A’ – alpha flag.
- Fresh water or still juice.
- Radar reflector must be fitted if practicable under international regulations.
- High visibility strip on keel to aid visibility in event of a capsized.

Emergency repair checklist

Engine spares

Spanners

Screwdrivers

Pliers

Waterproof torch

Torch batteries

WD40

Stainless steel knife

Bungs

Heavy duty tape

Spark plugs

Shear pins

Pull cord



Practical tip from the Marine Safety Working Group

Regular servicing of all safety equipment is highly recommended. Keep a checklist or inventory aboard, and always ensure that you have everything you need before you leave harbour. It is no use remembering it after you find that you need it!

on a dive trip



Engine sense

- Always make an engine check when you set off. An outboard must be locked down, with a jet of cooling water flowing from the side. Ensure there is more than enough fuel.
- Never go directly from forward to reverse. Anticipate what comes next and use neutral to manoeuvre or slow down.
- Do not rely on leaving the engine in neutral when coming alongside people in the water. If in doubt, switch off.
- Always change over your fuel tanks when the first has been used up 50%. This will mean that you are guaranteed clean fuel for your journey home. Consider carrying a reserve fuel can.

Safe speed

- Do not drive fast unless you need to. Back injuries are common on small, fast craft.
- Treat any slippery areas with non-skid paint or stick on strips.
- Make sure the crew are ready and holding on securely, with their legs ready to act as shock absorbers, before you accelerate. Check they are comfortable with your speed.
- Slow down when there are waves ahead. Warn everyone when the boat is going to change speed or direction, or is about to hit unexpected waves.
- Ensure all gear including cylinders and weight belts are securely stowed. If a line or painter is secured at one end, ensure it will not foul the propeller if it falls overboard.

Organising the crew

- Ensure the crew is sufficiently prepared for any trip. If you are planning a long passage to and from the dive site, allow for food, drink and sufficient warm clothing.
- Consider the possibility of seasickness. On a larger dive boat, the best treatment for anyone feeling sick is to lie down, wrap up and stay warm.
- Brief the crew on all safety issues and make it an absolute rule that all crew must be seated or holding on when a dive boat is at speed.
- Give the crew specific duties. Provide clear instructions before mooring or anchoring.



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' are available from the ISA. Phone ISA on [01 2800239](tel:012800239) or Department of Communications, Marine and Natural Resources on [1850 392 392](tel:1850392392) 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.
- Abide by speed limits in restricted areas – if your bow is lifting, you are going too fast.



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, not under command, restricted in their ability to manoeuvre or constrained by their draught.
- Do not dive in busy port entrances without permission.
- Do not discard rubbish or spill petrol, oil or paint at sea.

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.



Navigation lights for night or poor visibility

- A powerboat which is underway 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.

Good seamanship

- Watch your wash when passing close to other boats.
- Slow right down when passing through anchorages.
- Keep away from sailing boats, canoes, anglers and other dive boats with divers in the water.
- Avoid all areas with swimmers. Do not approach a bathing beach under power.
- Stay away from buoys, pots and pot markers and check with local fishermen where not to dive.
- Avoid disturbing seal and seabird colonies and comply with seasonal access restrictions.
- Stay on the starboard side of the channel when entering or leaving a harbour.

Drink and drugs

- It is against the law in Ireland to be in control of a fast powered craft whilst under the influence of alcohol or drugs, to the extent that you are incapable of proper control of the craft.
- Alcohol will impair judgement and ability, whether you are driving the boat or diving. Hangovers, dehydration and diving make a lethal cocktail.
- No one should dive when taking prescribed medication, unless cleared by an approved medical adviser.

At the dive site

The International Code Flag ‘A’ should always be flown when divers are down. For small boats, it should be at least 0.5 metres square and must be fully visible in calm conditions. It must not be flown when the boat is on passage to and from the dive site.

- Position the dive boat in a suitable location that will enable you to warn other vessels that divers are down.
- Beware of any change in weather conditions.
- Charts and tidal stream atlases should be used with local tide tables. Tidal strength and direction can change at different depths so you must have a clear understanding of tidal conditions, which will also affect the depth of your dive. It is not safe to dive wrecks in tides greater than 0.5 knots.
- Only allow divers to work in appropriate buddy pairs, with the senior diver in the group elected as dive leader. Brief your buddy on all aspects of the dive including:
 - Undertake a detailed buddy check
 - Check weights release system
 - Monitor depth and time
 - Exchange hand signals and monitor throughout the dive.
- Agree safety checks on all divers before and during your dive – having planned your dive, dive your plan. If you lose your buddy – surface! Use your dive tables and computer in accordance with appropriate guidelines.
- Use surface location aids such as delayed surface marker buoys, flags, strobes, air horns, personal flares and EPIRB/PLB, high visibility hoods and gloves. Sausage surface marker buoys should be used in significant tidal water, or when diving well offshore and in areas of heavy traffic.
- The dive boat must be in attendance at all times. If the engine fails or there are other problems, the divers must be recalled using an emergency divers recall procedure.
- When dropping or retrieving divers, ensure they are well clear of the propeller before starting the engine. A propeller guard provides added protection, but performance of the engine decreases and fuel consumption is greater.
- The dive boat must operate at slow speeds when divers are down. The crew should watch for divers surfacing unexpectedly.
- The Coast Guard must be informed immediately if a diver is lost, overdue or seems unwell.
- On the surface, signal OK; do not wave your arms. Do not give the emergency signal if you are not in difficulty. Stay together, do not swim to the boat – let it come to you and follow the dive boat driver’s instructions.
- After the dive, do a head count. Make sure you take down Flag Alpha/turn off diving lights. Observe divers for any abnormal behaviour/decompression sickness. Clean the site and leave it as you would find it.

Drift diving

Always use a secondary boat, following the divers, to provide immediate back-up if the lead boat encounters problems.

- Absolute reliability is vital. Check that the boats are properly maintained with all relevant safety equipment on board. If in doubt, book an RNLI SEA Check. Make sure the VHF handset is fully charged for use in an emergency and never rely on a mobile phone.
- Use surface marker buoys to show where each diver pair is located.
- Check tide times and tidal flow before you dive.

Shore diving/snorkelling

- Use a surface marker buoy or float.
- When towing a float or buoy, hold the reel in your hand – ensure that if you must attach it to yourself, it has a quick release mechanism.
- Have shore cover and inform a non-diving member of your shore party of your dive/snorkel plan.
- Check tide tables, seek local advice about conditions and thoroughly evaluate the site prior to diving/snorkelling.
- It is unsafe to dive/snorkel in areas of heavy surface traffic.
- Allow for changes in water level due to tides and surf action when selecting entry/exit points.
- Use a BCD. Do not be tempted to dive without one just because you are not using a boat.
- Obey all local bye laws and harbour rules.



Practical tip from the Marine Safety Working Group

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



emergency!

Calling for help

If you are in distress, immediate assistance is required and you are still equipped with conventional VHF radio, put out a call on Channel 16 using normal MAYDAY procedures.



If you have a DSC radio on board, a DSC Distress Alert should be sent, which will then activate alarms in any DSC radios within range. This will alert any radio operators to listen on the distress working channel for your subsequent MAYDAY call. The DSC alert contains your identification number (MMSI) and a current position.

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 MSWG 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 National Resources on [1850 392392](tel:1850392392).



To summon help at hand

- Slowly raise and lower your arms in two big arcs.
- Give a continuous blast on the foghorn.

Engine failure

Most engine failures are due to a lack of fuel, using the wrong mixture or a blockage.

- 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 will cause rapid overheating and is indicated by the lack of a cooling water, tell-tale, increased steam from the exhaust and eventual seizure. Check for blockage and clear as necessary. Check the pump is functioning and for leaks in the system.
- A small dive boat will drift rapidly on wind and tide. If the engine fails, every effort should be made to anchor the boat while the crew attempts to get the engine working. If necessary, use alternative propulsion such as oars or paddles.

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.



Practical tip from the Marine Safety Working Group

In deteriorating weather or with approaching nightfall, no time should be lost in calling for help. Always stay with the boat, which will be much easier for a lifeboat or helicopter to spot than people in the water. Attempting to swim to shore is likely to be a dangerous option.

Man overboard

If a dive boat is driven sensibly there should be little chance of a man overboard (MOB). But if the crew is not secure while the boat is driven at speed over waves, someone may fall over the side. Their first danger is being hit by the propeller, their second is getting left behind and lost.

- If you see someone go over, immediately turn the boat towards the side they are falling from to avoid hitting them with the propeller.
- Keep the MOB in sight and retrieve them with minimum delay. Cold water can rapidly kill if the MOB is not wearing a wetsuit or drysuit.
- Information on cold shock and hypothermia is available on www.iws.ie or www.bim.ie.

MOB action

- Throttle back and shout “Man overboard!”
- Instruct a crew member to watch the MOB and point continuously.
- If possible, note your position. Most nav aids 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 cannot see the MOB, or a recovery looks doubtful, send a distress alert immediately. If a recovery is made, inform the emergency services at once.
- If you can see the person in the water, a simple 180 degree turn is quickest.
- Start your recovery manoeuvre, allowing room for a controlled approach. Beware of loose lines fouling the propeller.

What can the MOB do?

- Remain as calm as possible.
- The greatest threat to survival is cold, which will affect any MOB who is not dressed for diving. Keep your legs together and hold your arms tightly together to restrict movement, prevent cold water flushing through and help prevent loss of heat.
- Raise your arm and use the lifejacket whistle to attract attention.
- In most cases, you should not attempt to swim for the boat as this will promote heat loss and exhaustion. Wait until you can grab a buoy or line thrown from the boat.
- In rough conditions, turn your back to the waves to keep airways clear of spray.



Approaching the MOB

- The approach will vary, depending on weather and sea conditions and the type of boat. If you are in a small boat such as a RIB, approach the MOB slowly from downwind aiming to one side. Use stern power to stop with the MOB just ahead, turning the boat at an angle to the wind so the bow is blown towards them.
- If you are not confident of your boat handling skills close to the person in the water, throw a heaving line as soon as you get within range. You can then pull the casualty alongside for recovery.
- Never allow the propeller to get near the MOB. Ensure the engine is in neutral and stop the engine if it is safe to do so.

Throwing lines

A throwing line is recommended for use in an emergency. 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.

Recovering the MOB

This may be the hardest part of the whole procedure:

- If you have a boarding ladder and the MOB 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.
- The MOB may be suffering from shock and hypothermia. Be prepared to administer immediate first aid. Assess if the MOB needs professional medical attention.
- Lifting gear will need to be improvised if the MOB is exhausted or unconscious. A short strap with a block and tackle can be attached to a strong securing point – on the wheel house, anchor windlass or davits of a larger dive boat – to help lift the casualty on board. A sling using ropes or net can be made to roll the MOB up out of the water.



Dive boat capsize

An inflatable may capsize if it is badly handled with poor weight distribution, or it could be swamped and rolled by heavy seas.

- Count heads and make sure no one is still under the boat.
- Everyone should stay with the boat, holding the handlines along the sides. If you let go, wind and tide may take the inflatable away faster than you can swim. Only consider leaving the boat if it has been driven into shallow water.
- The inflatable can be righted by swimming it into a cross-wind position. Lead the bow line through the middle handline loop on the windward side. With the crew holding onto the downwind tube, pull the bow line until the windward side lifts and the boat rolls back over.
- If you capsize a rigid boat, it may not have sufficient buoyancy to float when righted. In doubt, leave it inverted so that trapped air will help it to float.
- Once righted, a rigid boat may be very unstable until the water is cleared. Bale out most of the water before bringing divers back on board.



Lost diver

Divers lost and missing are a major cause of emergency calls to the rescue services. The emergency is often due to engine failure, with divers and their dive boats becoming rapidly separated by wind and tide. As the distance grows, the divers become more and more difficult for the dive boat to locate.



When you realise that a diver is missing establish his/her last known position and mark it with substantial weight and buoy. Take a GPS reading if possible. Recall all your divers and inform the Coast Guard immediately. If searches in the vicinity are fruitless, have the down tide direction and any possible land egress points checked.

Surface location aids

A diver is very difficult to spot when obscured by waves or poor visibility. The available height on board the dive boat can make a big difference. A spotter trying to stand in a pitching inflatable will get a poor view of the surrounding sea.

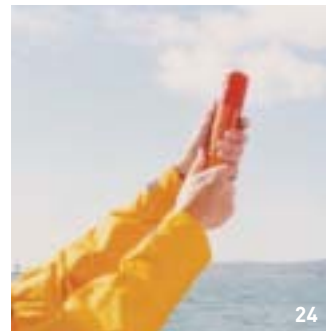
To help guide the dive boat or rescue services to their position, divers should carry highly visible surface location aids which are suitable for conditions at the dive site. The crew of the dive boat must know what colour equipment a lost diver is wearing and what location aids they are able to employ.



- A fluorescent folding flag is inexpensive, simple to carry, easy to deploy and highly visible. Combined with a strobe light on the flag tip, it will provide an effective solution for most conditions. Fluorescent hoods also aid visibility on the surface.
- An EPIRB/PLB provides the rescue services with a pinpoint position for the diver.
- Dye is effective when searching from the air, but difficult to spot from the water.
- Smoke and flares may be difficult to operate with cold hands, may be dissipated by the wind and should only be set off when visible contact is made.
- A reflector is only effective in bright sunlight.
- Suitably marked (diver down) sausage marker buoys, paired polyform buoys and self-inflating decompression markers can be effective in specific situations.

Firing flares

- Familiarise yourself with the firing instructions.
- Always fire flares downwind from the boat so that smoke and debris is blown away. Aim parachute flares well clear of any radio masts or superstructure.
- The RNLI SEA Check service can provide flare demonstrations for clubs and associations. Please call freefone 1800 789589.



Getting a tow

If you need to be towed due to engine failure:

- Have a plan for securing the tow line to your boat, when passed by a lifeboat or other vessel.
- As a lifeboat approaches, the coxswain will inform you of his intentions. Advise him of hazards such as ropes in the water. Follow his instructions – he is the expert.
- Do not secure the tow line to fittings that are not strong enough for the job. If in doubt, back up the tow line using additional ropes.
- Avoid using knots or loops that cannot be released under load. Provide protection to prevent chafe.
- If you accept a tow from a commercial or private vessel, it is wise to check if any fee is expected.



First aid

Dive support vessels are strongly advised to carry an oxygen administration kit. Ensure the equipment works properly and that oxygen cylinders are full before setting off.

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.

- Contact your sport diving organisation for first aid and appropriate oxygen related courses.

If I am concerned about a diver what should I do?

If at sea, call the nearest Irish Coast Guard Radio Station on Channel 16. On shore, dial 112/999 and ask for Marine Rescue.

Dive sense

- Phone the Coast Guard with your dive plan before leaving.
- Always ascend slowly. It is good practice to complete a safety stop after every dive for 3 minutes. Constantly monitor your gauge to avoid 'out of air' situations. Constantly ask yourself 'What if...?'
- Nitrogen becomes increasingly narcotic under pressure, causing disorientation, dizziness or black-outs. Nitrogen narcosis is accelerated by dehydration and poor visibility often found in Irish waters and can occur in water as shallow as 25 metres. The effects can lead to panic and the risk of a lethal accident.
- Carry oxygen on board the dive boat. The administration of pure oxygen may result in less serious injuries following a decompression accident.
- Include an experienced first aider among the crew.
- The dive marshall should go through safety equipment and carry out a pre-dive check, ensuring all divers are adequately trained and prepared for the dive. Divers should be familiar with all their own and their buddy's equipment and able to use it in an emergency without panicking.
- Sausage surface marker buoys should be used in significant tidal water or when diving well offshore and in areas of heavy traffic.
- A fixed shot line should be used for ascents and descents, providing controlled decompression stops. The shot line must be accurately positioned when diving on a wreck. If anchoring to the wreck, use a quick-release buoy that can be let go rapidly should you need to pick up stray divers.
- Dive computers must always be backed up by the use of decompression tables. Remember that neither will make allowance for your age or fitness.
- When planning two or more dives the same day, do the deepest dives first.
- Ensure you carry onboard your dive boat an 'Emergency Action Plan'.

When should I be concerned about a possible diving illness?

You need to be concerned when a diver experiences any form of medical distress up to 24 hours after a dive, particularly if:

- He/she has been breathing compressed air or gas underwater during the previous 24 hours or has a suspicious dive profile/history:
 - The diver made a rapid or abnormal ascent;
 - Decompression stops were not completed;
 - He/She exceeded dive limits.

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.
- Do not touch the winchman, winch wire or weight unless indicated by the winchman. The static electricity can cause severe shocks. Follow the winchman's instructions at all times. Do not tie off any lines passed. If you are asked to maintain a course and speed, do not be distracted by the helicopter's movements.
- Once contact has been made, the pilot will tell you of his intentions. Follow his instructions – he is the expert.
- You must advise the helicopter pilot of any suspected diving related medical incident, such as decompression illness.
- Make sure you understand the pilot's instructions as you will not be able to hear your radio when the helicopter is overhead.
- If possible keep the boat 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.
- Winching from a boat 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.
- 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, use a bucket to collect loose line on deck.



REMEMBER!

Always dive within your capabilities! Only dive to the depths you have 'worked up to' and avoid diving into danger, by going too deep, too soon. Never give in to bravado or peer pressure and remember your personal responsibility to yourself and others.

The emergency services are there to help, but would rather do so before you get into trouble! Free safety advice is always available from the RNLI – freefone 1800 789589.

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@rnli.org.uk
www.rnli.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) 6782324 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



Irish Underwater Council
78a Patrick Street, Dun Laoghaire, Co Dublin

Telephone: (01) 2844601 email: info@scubaireland.com



Irish Dive Centre Association
c/o The Stone House, Baltimore, Co Cork

Telephone: 028 20511 email: idca@aquaventures.ie

EPIRB registration

Maritime Radio Affairs Unit (MRAU)
Department of Communications, Marine and Natural Resources,
Leeson Lane, 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) 6782324
**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'.

The RNLI is a registered charity that saves lives at sea. It provides, on call, a 24-hour lifeboat search and rescue service to 50 miles out from the coast of the United Kingdom and Republic of Ireland and a beach lifeguard service on 57 beaches in the south west of England. The RNLI continues to rely on voluntary contributions and legacies for its income.

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

IRISH COAST GUARD MARINE VHF COMMUNICATIONS NETWORK



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

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: (077) 9370103
Fax: (077) 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.

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



Irish Coast Guard
GARDA COSTA NA hÉIREANN

YACHT AND BOAT SAFETY SCHEME

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

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:

Dinghy sailing
Motorboating
Powerboating
Windsurfing
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



Lifeboats

