



CODE OF PRACTICE FOR RECREATIONAL USERS

Newhaven Port Authority

www.newhavenportauthority.co.uk

Introduction

This booklet is intended as a general guide for the recreational user. It provides details on navigation and an introduction to the relevant regulations that potentially affect harbour users. Those taking to the water should brief themselves carefully on the Harbour Byelaws and General Directions, both of which are published by Newhaven Port Authority on the website at www.newhavenportauthority.co.uk or available upon request.

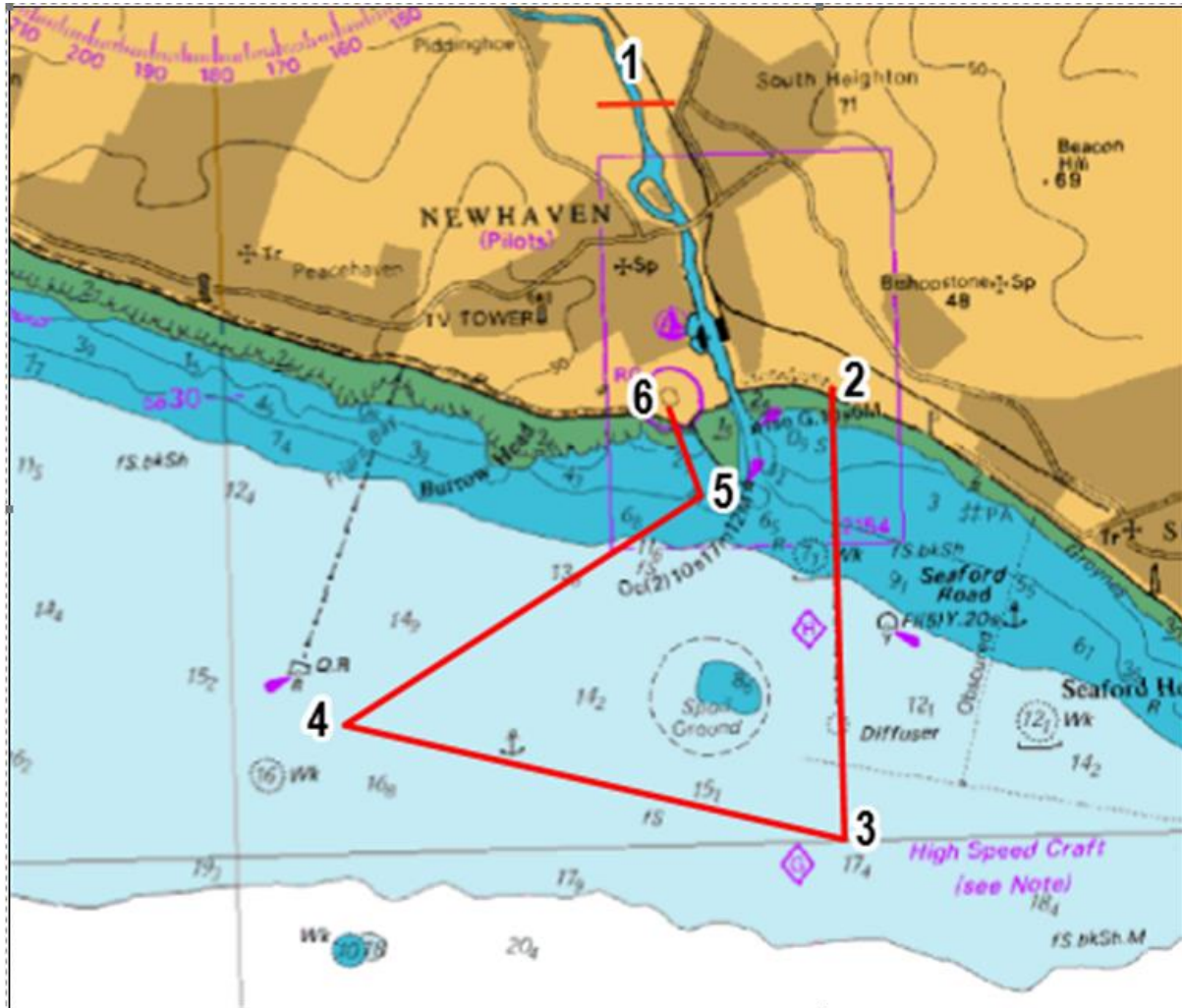
Please remember that Newhaven Port is a commercial port with a variety of vessels. It is important that all those using the river for pleasure clearly understand the constraints under which commercial vessels have to operate and manoeuvre.

Always better to be safe than sorry!

Respect the water, Yourself and others!

Harbour Master
Capt. Dave Collins-Williams

Map of Newhaven Port area of Jurisdiction



Point	Latitude	Longitude
1	50 48.20'N	n/a
2	50 46.95'N	000 04.10'E
3	50 45.00'N	000 04.10'E
4	50 45.55'N	000 00.75'E
5	50 46.50'N	000 03.20'E
6	50 46.88'N	000 03.00'E

General description of Navigational rules

All vessels, small boats and fishing boats navigating in the Newhaven Harbour limits must comply with the International Regulations for Preventing Collisions at Sea (COLREG)

They must also to comply with the General Directions and Byelaws for Navigation in Newhaven Harbour and the latest Notice to Mariners published by Newhaven Port Authority on the web site www.newhavenportauthority.co.uk

It is the user's responsibility to ensure that they are familiar with all the regulations specified above but the following are of particular relevance to pleasure users.

- There is a 5 knots speed limit in the Inner Harbour.
- There is 8 knots speed limit in the Outer Harbour.
- Newhaven Harbour is controlled by a system of signal lights.
- All recreational craft are strongly advised to call Port Control (Callsign Newhaven Radio) on VHF Channel 12, regardless of the signal lights, and request permission to enter or depart.
- All Jet Skies launching into the harbour are strongly recommended to use Simpsons Marine Slipway as the only safe and controlled slip for their entry and exit within the harbour.
- All Jet Ski owners must complete a registration form.
- Port Control Officers have the delegated authority of the Harbour Master to regulate and direct vessels and port users to facilitate the safe operation of the port and to uphold the Harbour Legislation.

General Information for Users of Newhaven Harbour

Newhaven Port has a regular Car Ferry service to Dieppe; in addition, there is frequent cargo ship activity at East Quay and regular cargo ship movements to the North Quay, because of this, all Masters and owners/users of vessels are required to take note of the following:

The Outer Harbour

The West Breakwater is 705m in length and provides good protection from the prevailing SW'ly winds.

The lighthouse at the end of the breakwater has characteristics Oc(2)10s17m12M and is painted white with a red base. On the seaward side is sign written "Port of Newhaven, VHF Ch.12". The lighthouse was completely refurbished in July 2009.

The East Pier is 320m in length and is lattice constructed and so gives little protection from the wind but does prevent the invasion of silt into the channel.

The East Pier Light has characteristics Q Fl G 12m 5M and is a white pole with green horizontal bands.

The Inner Harbour

The width of the inner harbour varies between 69m and 149m. The Inner Harbour channel is also dredged to 6m.

On the West side is a large Marina with 285 berths, owned and operated by Newhaven Marina Ltd.

On the East side is Rampion Quay with 125m of pontoons, **East Quay Commercial Terminal** with 195m of berth frontage, dredged to 5m, and **No.1 RoRo berth** with a length of 187m, dredged to 6m.

North of No.1 RoRo the channel width reduces from between 50m to 90m.

North of here and up to the Swing Bridge, the depths are approx at chart datum (0m). On the West side are stages for the lifeboat and fishing fleet. On the East side is the old Railway Quay with underwater hazards of sheet piling and remnants of an old gridiron. Steel pile beacons are spaced at 30m intervals and mark the eastern boundary of the navigable channel.

The Swing Bridge channel is 17.3m between the timbers and leads to North Quay Channel, which is approx 38m wide and a depth on average of 1.5m below datum. Clearance under swing bridge is 8.10m – Gauge Reading.

On the East side of North Quay are four commercial aggregate and scrap berths (2 are in use and 2 are derelict) and on the West side is Denton island and the approaches to the Old Arm of the river, where leisure boat moorings are provided by various boatyards on drying berths. The Old Arm approaches to the moorings dries at 4m above chart datum.

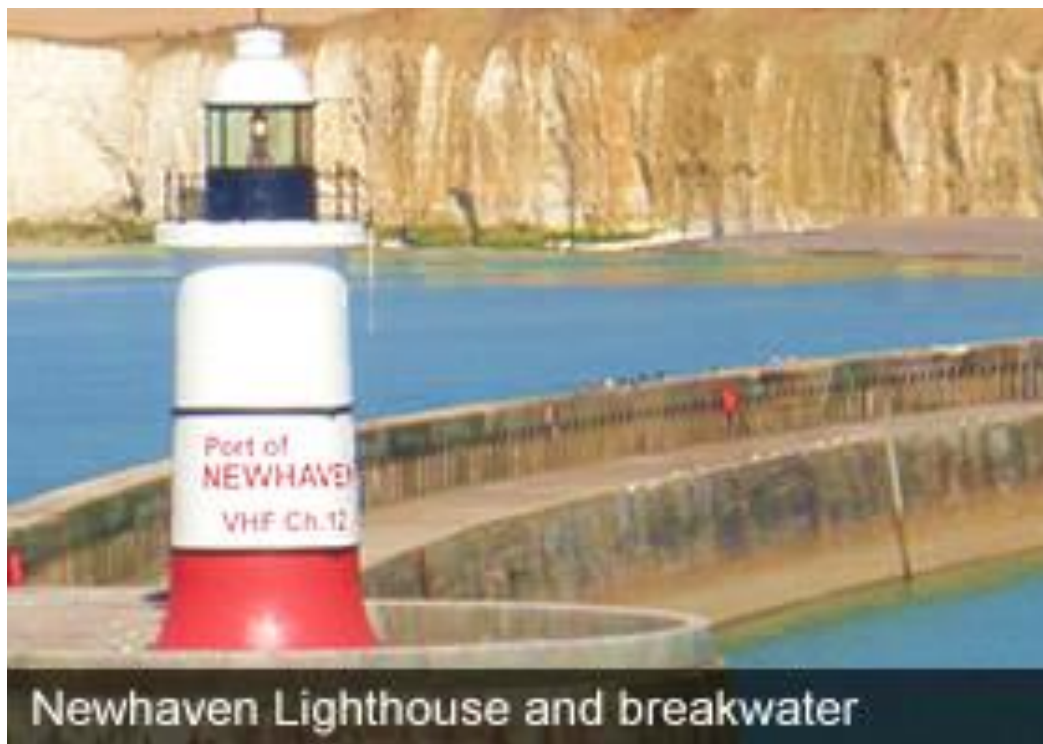
Maximum tidal range at Newhaven is -0.3m to 7.3m.

Spring tidal range is 0.5m to 6.6m.

Neap tidal range is 1.9m to 5.2m.

Port Signals and VHF Radio:

Vessel movement within the Newhaven Harbour limits is controlled by Newhaven Port Authority – call sign “**Newhaven Radio**” on VHF channel 12. Entry to, and exit of, Newhaven Harbour is controlled by a system of signal lights located at the West Pier corner, opposite Newhaven Marina, No2 Ro Ro Pontoon and at the southern side of the A259 Swing bridge. These entries and exit signals **must be obeyed by all vessels and craft, irrespective of size and without exception.** A laminated reference card detailing all the signals is available free of charge on request from the Port Authority and all Marina’s and boatyards. Fishing boats, small vessels and yachts in particular, are advised to check with Newhaven Radio that it is clear to proceed to sea, prior to leaving any berth, mooring or slipway.



Port Control

Newhaven Harbour Port Control, callsign “Newhaven Radio”, is situated at the southern extremity of East Quay. They are contactable 24 hrs a day on VHF ch.12 and on Tel: 01273 612926. They co-ordinate all traffic in and out of the port and have the Harbour Master’s authority to direct traffic as circumstances dictate.

The port operates an IALA Traffic Light system to regulate traffic. The lights are situated at the West Pier. Mariners should familiarise themselves with these signals.

Speed Limit:













A speed restriction of 8 knots is in force from the Breakwater end to the West Pier corner. In the Harbour area, north of the West Pier corner and the River Ouse beyond, the speed restriction is a maximum of 5 knots. These restrictions are in place primarily to prevent damage to the river bank and small vessel moorings, but more importantly, for the safety of all Harbour users.

Vessel Traffic Signals – Newhaven Harbour

Mariners are hereby reminded that their continued use of Newhaven Harbour is dependent upon their compliance with the Harbour Byelaws/Directions, instructions issued to them by Port Control “Newhaven Radio” and the Vessel Traffic Signals detailed below.

Persons not complying are liable to prosecution.

West Pier – Signal Station: Position: 50° 46'.91N., 0° 03'.43E.

Red  Red  Red 	Flashing	Serious Emergency All vessels/craft to stop or divert according to instructions issued by 'New haven Port Control' VHF Ch.12.
Red  Red  Red 	Fixed	No vessels/craft, either pleasure or commercial, shall proceed contrary to this signal.
Green  Green  White 	Fixed	Small vessels/craft may proceed. Two way traffic.
Green  White  Green 	Fixed	A vessel may proceed ONLY when it has received specific orders, from 'New haven Port Control', to do so. All other vessels/craft must keep clear of the navigable channel.

Newhaven East Quay: Position: 50° 47'.21N., 0° 03'.38E.

When red lights are showing on signal mast, situated at the East Quay (southern end of Ferry Berth), **NO VESSEL** may leave any part of Newhaven Marina. (Picture 1)

N°2 RoRo Berth (North end): Position: 50° 47'.38N., 0° 03'.25E.

When red lights are showing on signal mast, situated at the North-West corner of N°2 Ro-Ro Pontoon, **NO VESSEL** may proceed South past these lights. (Picture 1)

Newhaven Swing Bridge: Position: 50⁰ 47'.69N., 0⁰ 03'.14E.

Call sign – “Newhaven Bridge Control” VHF Ch.12 [\(Picture 1\)](#)

Red ● Red ● Red ●	Flashing	The Swing Bridge is operating. ALL vessels must keep clear.
Green ● Green ● Green ●	Fixed	Vessels MAY proceed.
Red ● Red ● Red ●	Fixed	Vessels MAY NOT proceed.

Commercial vessels under Pilotage navigating through the Swing Bridge have the right of way in **ALL** circumstances. **ALL OTHER VESSELS MUST KEEP CLEAR OF THE NAVIGABLE CHANNEL.**

At times of Swing Bridge openings, no vessel should attempt to pass through the Swing- Bridge without permission from Bridge Control on VHF Ch.12. Vessels not equipped with VHF radio must keep clear until Commercial vessels have passed

through. Only then may they proceed in accordance with the Bridge Control Tower light signals.

Owners of small vessels can ascertain Swing Bridge opening times by contacting “Newhaven Radio” VHF Ch.12 or telephone 01273 612926.

The maximum speed limit within the Harbour is 5 knots.

Swing bridge Procedures:

The **clearance** under the A259 swing bridge is 8m minus the tide gauge reading. Vessels considering transiting under the bridge therefore need to measure their air draft to calculate whether they can safely navigate under the bridge.

Fishing vessels, larger cruisers and yachts will probably require the swing bridge to be **opened** to allow transit.

Masters/Skippers requiring a bridge opening should **contact** Newhaven Port Control (*Callsign Newhaven Radio*) on VHF channel 12 or by phone on 01273 612926, preferably 12 hours in advance. The absolute minimum notice required to book a bridge opening is 3 hours.

If a **commercial vessel** is due to manoeuvre through the bridge on the next high-water period, then any other vessel must utilise the bridge times set by the Pilots and advertised on the Port Website at www.newhavenportauthority.co.uk

Bridge times are also advertised at the **Bridge Control Hut** as soon as they are known or can be obtained by contacting Port Control as above.



If there are no commercial traffic openings, then a **single opening** can be arranged with Port Control for the next predicted **high-water** time. All vessels will then transit the bridge at the same opening time, abiding by the Collision Regulations, i.e. keeping to the starboard side of the channel.

Once the bridge times are known, Port Control will **notify** interested parties by email and will ensure that the Ambulance and Fire Control Centres are advised in sufficient time. The East Sussex County Council Duty Swing bridge Engineer is also informed and will normally attend daylight openings and be on call for night-time openings in case of technical problems.

The Swing bridge is owned and maintained by East Sussex County Council, but operated by trained NPP staff. Their callsign is "**Bridge Control**".

Bridge Control will be in position at the Bridge Control Hut 10 minutes prior to the scheduled opening time and will be listening on VHF channel 12.

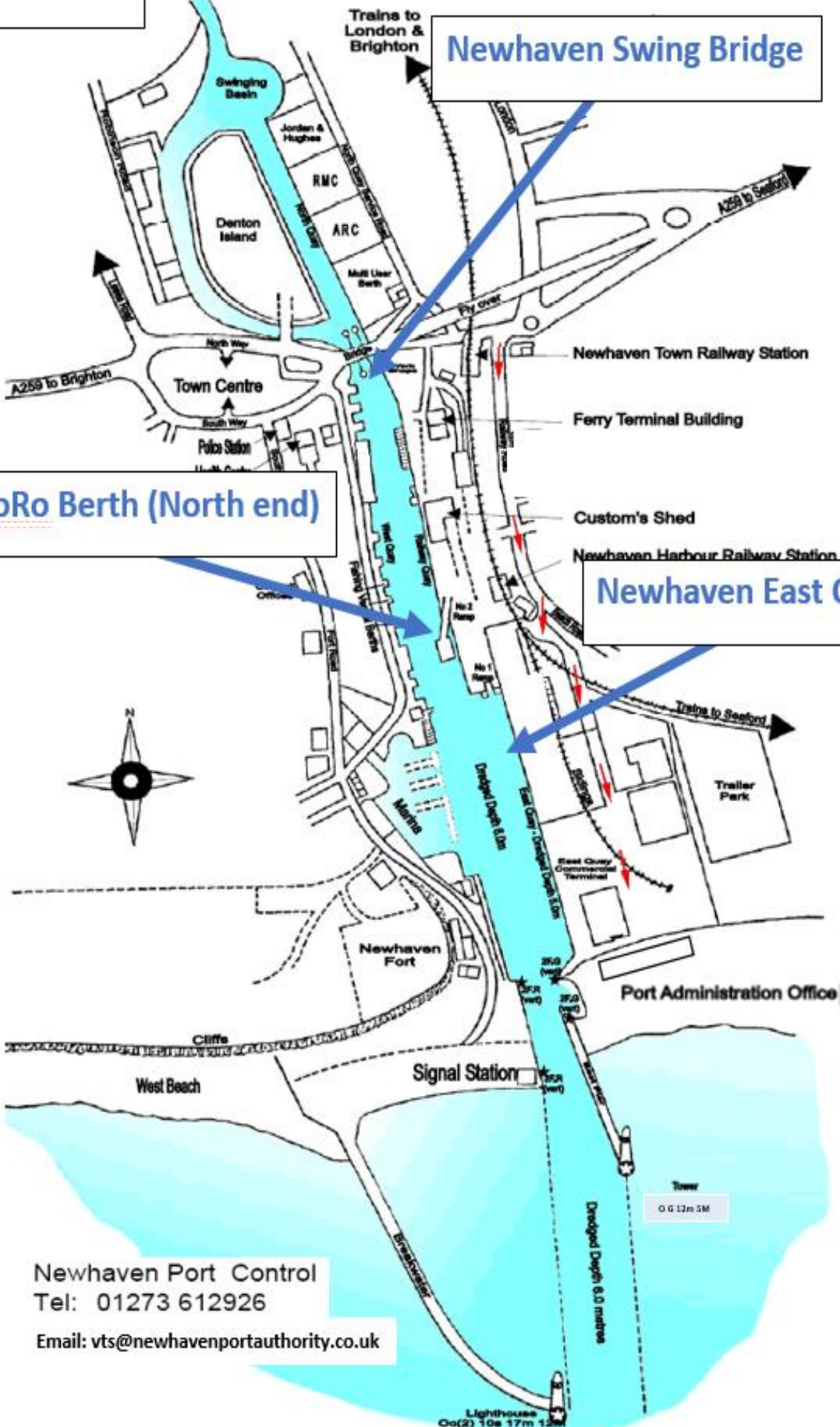
All vessels transiting the bridge are strongly advised to be listening on **VHF Channel 12** in case Bridge Control needs to contact them.

Bridge Control will open the bridge at the **scheduled time** and keep it open for the shortest time possible to allow safe transit. Vessels should be ready to transit at that time. Any vessel not sufficiently closed up to the bridge area and ready to transit may find the bridge will be closed again before they arrive and they will have to rebook a bridge opening for the next high water. This is due to the A259 being a busy road and the longer the bridge remains open, the larger the queued road traffic becomes, causing serious disruption.

Vessels shall not navigate through the bridge channel until the bridge is fully open. The signal lights will show green to confirm the bridge is fully open. This procedure is in place to avoid the possibility of a collision between a vessel and the bridge in the unlikely event that the opening sequence fails to complete.

Picture 1

River OUSE



Newhaven Swing Bridge

N°2 RoRo Berth (North end)

Newhaven East Quay

Newhaven Port Control
Tel: 01273 612926
Email: vts@newhavenportauthority.co.uk

All recreational craft are strongly advised to call Port Control (Callsign Newhaven Radio) on VHF Channel 12, regardless of the signal lights, and request permission to enter or depart.

Visiting recreational craft bound for the Marina must call Newhaven Marina on VHF Channel 80 to request a berth (unless booked in advance). If they are unable to raise the Marina, the Port Control Officer may be able to assist in communications by radio or telephone 012173 513881

JET SKIES/PWC's

Jet Skies/PWC's must keep to the speed limits within the harbour and not cause a nuisance to other port users with their speed, wash, or noise. They must abide by all rules and regulations applicable to all other port users and obey the traffic signals.

All Jet Skies launching into the harbour are strongly recommended to use Simpsons Marine Slipway as the only safe and controlled slip for their entry and exit within the harbour.

All Jet Ski owners must complete a registration form and be on a database which was compiled and is maintained by a joint initiative comprising of the Port Authority, Simpsons Marine and individuals from the Jet Ski community. An example of the form is shown below. [\(Picture 2\)](#)

Failure to comply with the rules will result in:-

1st Offence – Verbal warning from Simpson Marine staff/Port Authority staff.

2nd Offence – Verbal warning from Port Authority staff/Harbour Master.

3rd Offence - Written notice from the Harbour Master and you will be barred from the harbour and may face prosecution.

Notwithstanding any of the above, the Harbour Master reserves the right to prosecute any port user if the offence committed warrants such action. This means a summons to the Magistrates Court, following which, a successful prosecution will result in the offender having a criminal record, in addition to a fine.

The most serious offences may be dealt with by the MCA and the offender liable to imprisonment.

It is strongly recommended that all jet skiers wear floatation devices and carry some form of communication such as a mobile phone or a marine band VHF radio listening on channel 12.

Picture 2

Newhaven Jet Ski Register

Personal Details

Name:
Address:

Ski Details

Make:
Model:
Colour Seat:
Hull:

Mobile No:





Data Tag Number:

Do you carry a VHF radio on channel 12 ? YES / NO

Harbour Rules

The speed limit in the harbour is **5 KNOTS = 6 MPH**

Outer harbour limit between the east and west pier is **8 KNOTS = 9 MPH**

Red Red Red	 Flashing	Serious Emergency - All vessels/craft to stop or divert according to instructions issued by 'Newhaven Port Control' VHF Ch.12.	Once you have been launched please respect other harbour users, by proceeding straight out to sea, unless you are waiting for the harbour signals to change. If so please keep your wash minimal and do not be a nuisance to other harbour users at any time.
Red Red Red	 Fixed	No vessels/craft, either pleasure or commercial, shall proceed contrary to this signal.	
Green Green White	 Fixed	Small vessels/craft may proceed. Two way traffic.	
Green White Green	 Fixed	A vessel may proceed ONLY when it has received specific orders, from 'Newhaven Port Control', to do so. All other vessels/craft must keep clear of the navigable channel.	

Beach Rules

Inside the yellow marker buoys **8 KNOTS = 9MPH**

Respect beach users and swimmers, please go straight into the beach and straight out.

Consequences of not complying with these rules

1st - Verbal Warning from Simpson Marine/Port Authority Officers

2nd - Verbal Warning from Port Authority Officers/Harbour Master

3rd - written notice from Harbour Master and you will ceased to be launched from Newhaven Harbour and may be prosecuted

Signed

Date

Newhaven Harbour Byelaws

The Harbour Byelaws were enacted in 1931 but are still legally binding now. Below are listed the most relevant and important byelaws Port users should be aware of. Contravening the byelaws is an offence liable to prosecution, result in a criminal record. Copies of the full version are available to view upon request to the Harbour Master.

- 1.** All vessels will obey the Port Traffic Signals and directions given by the Harbour- Master or his assistants and will only berth or moor as directed.
- 2.** No vessel will be operated within port limits without a competent Master or Pilot in charge.
- 3.** All vessels must provide a declaration on arrival if requested to do so.
- 5.** No vessel to delay or disrupt the operation of the Ferry.
- 6.** Speed limit of 8 knots south of the East Pier Light and 5 knots north of the East Pier Light.
- 7.** All vessels shall be sufficiently manned, have sufficient moorings and working anchors.
- 8.** Vessels will only berth, moor, anchor, load or unload in a place as directed and will shift if required as directed. Vessels shall not then move without permission.
- 10.** Vessels not designated as a tug will not operate as such without permission.
- 14.** Vessels will only moor using the bollards, posts and rings provided.
- 15.** There must be enough qualified and competent persons available at all times to tend the moorings and shift a vessel if required.

- 17.** No vessel will obstruct the free passage of any part of the harbour.
- 27.** No vessel will depart until all dues and charges have been paid.
- 29.** No road vehicle to obstruct or impede the use of any quays or port land.
- 31.** All goods landed must be removed from the quayside within 48 hours.
- 41.** No dangerous materials allowed without permission.
- 42.** No construction materials to be deposited in the river without permission.
- 43.** No pollution allowed.
- 44.** No dumping or discarding of rubbish, refuse, disused boats, gear or any other material.
- 45.** No removal of sand, shingle, gravel, earth or any other material without permission.
- 51.** Anybody within the harbour without lawful business to be there may be removed from it.
- 54.** No person shall obstruct, impede, molest or interrupt the Harbour Master or any Port Authority employee during the execution of their duties.
- 57.** No person will interfere with lights or signals.
- 58.** No person will damage or deface port property.
- 59.** No person will damage or deface port notices.
- 60.** No person shall exhibit notices without permission.
- 61.** There shall be no public or general meetings or addresses within the port without permission.
- 62.** No person will be a nuisance within the harbour.
- 65.** No person will enter port property without permission.
- 66.** No person will be intoxicated, use bad language, be riotous or indecent.

68. No fishing within the harbour limits without permission.
No swimming or bathing within the harbour limits.

69. No stone or missile throwing. No firing guns or fireworks without permission.

71. Dogs to be under control.

73. No selling of merchandise or touting without permission

Guidance Note for Events in Newhaven Harbour Limits

Notification and Standard Event Planning

The DfT (Department for Transport) Port Marine Safety Code requires all harbour authorities to ensure that risk assessments are carried out to identify and minimise risks which may result in personal injury, or damage to property or the environment.

Although many clubs are now familiar with undertaking appropriate risk assessments for their activities, for some a formal risk assessment is still an abstract concept. The purpose of this guidance note is to facilitate the process for those less familiar with undertaking risk assessments by providing standard forms and procedures.

If an event is to be held within the Newhaven Harbour Limits an **Event Notification Form** is to be submitted and approved by the Harbour Master (HM) prior to the event being held. Depending on the size of the event, a **formal risk assessment and an Event Procedures Plan** will probably be required and a **Notice to Mariners** will be issued.

HM definition of “event”: Any vessels, vehicles or persons participating in an organised gathering or scheduled activity that may affect the safety of navigation or impact directly or indirectly on any other port users in Newhaven Harbour, or members of the public in the vicinity, or be considered a threat to the environment.

Submission:

All HM documentation e.g. Event Notification Form, risk assessments, event procedures plans etc for the proposed event should be submitted to HM direct via the email:

harbour.master@newhavenportauthority.co.uk

THIS DOCUMENTATION IS REQUIRED 21 DAYS PRIOR TO THE EVENT DATE

3 Key points that should be recognised by organisers and/or designated persons:

1. The primary responsibility for the safety of participants lies with the participants themselves. Beyond that, the organiser/ club/ group are likely to have a duty of care and must ensure that the event is managed as safely as reasonably possible. A submitted event notification form or risk assessment approved by the HM **does not** eliminate the responsibility of the organiser/ club/ group to ensure the safety of all their participants.

2. The Harbour Authority has the power of General Direction and “Byelaws”. These are in force and may impact on the setting of courses and other aspects of an event. Organisers/ clubs/ groups and their participants all need to be aware of these. It is imperative that organisers/ clubs/ groups clearly indicate the location/s that the event/s will be held. Organisers/ clubs/ groups should take all reasonable steps to promulgate Port Rules and restrictions to their participants

3. Potential conflicts between different Organisers/ clubs/ groups should be addressed between the Organisers, in advance. All events will be prioritised on a “first in” basis.

RISK ASSESSMENT GUIDANCE NOTE

Newhaven Port Authority defines events being held in the Harbour limits as MAJOR or MINOR.

MAJOR:

This is an event that will have a significant and potentially disruptive impact on the operation of the Harbour. This event will require special arrangements agreed in advance with the HM. The Event Procedures Plan and the Risk Assessment will need to be prepared in consultation, where appropriate, with the emergency services and stakeholders.

Newhaven Port Authority criteria for a MAJOR event includes one or more, but not limited to;

- Multiple participating vessels/ craft,
- An expected large spectator fleet,
- An event where an exclusion zone is requested by organiser or imposed by HM,
- An event that will attract large numbers of the public.

PLEASE NOTE MAJOR event organisers will need to submit an “**Event Procedures Plan**” as well as the **Risk Assessment**.

The **Event Procedures Plan** includes, but is not limited to:

- An itinerary of each day’s scheduled activities on and over the water.
- Where and when participating vessels will arrive and leave race location.

- An on-water management plan for marshalling.
- A complete communications plan and how each relevant authority is included.
- An Emergency management plan.
- Contingency plans in case of adverse weather.
- Details of the refuelling procedures.
- Complete lists of main players and safety vessels/vehicles and marshals.
- As much other information as relevant.

PLEASE NOTE MAJOR event organisers will need to submit the **Event Procedures Plan and Risk Assessments** for consultation with the following:-

- HM Newhaven Port Authority
- MCA Maritime & Coastguard Agency
- Sussex Police, Ambulance and Fire & Rescue
- Lewes District Council Emergency Planning
- East Sussex County Council Emergency Planning

MINOR: This is an event having little impact on the overall operation of Newhaven Harbour and has minimal risks to participants and non-participants. For this category of event the **Event Notification Form** must still be completed and the Harbour Master will decide if a formal risk assessment is still required. A **MINOR** event may not require the in-depth review that the **MAJOR** requires.

The first step in the process is to submit the **Event Notification Form to the Harbour Master.** The form is produced below and can be downloaded from www.newhavenportauthority.co.uk



Newhaven Port Authority Event Notification Form



Event name:	Event organiser/organisation names, address, phone, email and website:
Dates and times:	
Location/s:	
Brief description:	Main Contact Person for the event (1):
Event Route from launching/arrival/start to recovery/departure/finish. <i>(Plan to be attached):</i>	Secondary contact for the event (2):
	Mobile Tel (1):
	Mobile Tel (2):
	Email (1):
	Email (2):
How many vessels/vehicles/persons participating in each location:	
Type or design and size of the vessels/vehicles participating:	
How many Spectators expected and where:	
Fueling/refueling details if applicable (location, quantities, frequency, type, fire/safety/pollution control measures and procedures:	

Details of Safety Vessels/Vehicles/Marshals - types/numbers/locations/communication methods and callsigns:

Any other information:

Organisers need to provide evidence they have considered the hazards, including, but not limited to; collision, contacts, grounding, capsizing, sinking, flooding, pollution, fire or explosion, adverse weather, restricted visibility, drowning, personal injury, floating or submerged debris, fouled propellers, tidal streams. Organisations will have to submit formal risk assessments and procedures for larger events at the discretion of the Harbour Master.

As well as potential conflicts between participating vessels and other small craft, it should be well noted that Newhaven has frequent ferry, cargo vessel, fishing vessel and workboat activity, which will take priority over event vessels.

The primary responsibility for the safety of participants lies with the participants themselves, unless those participants are children. However, the organising club/main organiser owes a duty to ensure that the event is reasonably safely managed.

The Port Authority is under a statutory duty to manage safety within its jurisdiction and has rules and procedures in place that organisers need to be aware of and they need to ensure the participants are aware of. The Harbour Master's assistants, which include Port Control Officers and Pilot Vessel crews, have the delegated authority of the Harbour Master to regulate and direct vessels and port users to facilitate the safe operation of the port and to uphold the Harbour Legislation. The Port Authority wish this to be an enjoyable and successful event, but the safety of all is paramount.

Newhaven Port Control is a 24/7 operation and the main contact during the event / in emergencies:

VHF channel 12: callsign "Newhaven Radio".

Phone: 01273 612926

Email: vts@newhavenportauthority.co.uk

This form and all pre-event communications, including plans and risk assessments to be sent to the Harbour Master: harbour.master@newhavenportauthority.co.uk

Tel: 01273 612900 / 01273 612926 / 07969 106548



Newhaven Port Authority Event Risk Assessment Form



Event Name:		Organisation names:	
Address:		Phone:	
Email		Website:	

LIKELIHOOD OF OCCURRENCE	Highly likely = 3	3	3	6	9
	Likely = 2	2	2	4	6
	Unlikely = 1	1	1	2	3
	Likelihood of Occurrence x Risk Consequence = RISK FACTOR		1	2	3
			First Aid only/ Minimal Damage to asset = 1	Paramedic or ambulance/ Repairable Damage to asset = 2	Serious Injury or Death/ Total Write- Off of asset = 3
			RISK CONSEQUENCE		

=1	=2	=3	=4	=6	=9
Minimal Risk	Minimal Risk	Moderate Risk (consider further control measures required to keep risk as low as reasonably possible)	Moderate Risk (further control measures are required to keep risk as low as reasonably possible)	High Risk (considerable further control measures required before HM approval)	Unacceptable Risk (Event Cannot Proceed)

Hazards, including, but not limited to;

	Hazard	Description of the Hazard	Your Control Measures	Consequence	x	Likelihood	=	Risk Factor
1	Collision	Participating vessel with another participating vessel						
		Participating vessel with spectator boat						
		Participating vessel with other boats						
		Participating vessel with commercial vessel						
		Participating vessel with ferry						
		Spectator boat with other boats						
		Spectator boat with ferry or commercial vessel						
2	Contact	Participating vessel with berthing pontoon or other port infrastructure						
		spectator boat with berthing pontoon or other port infrastructure						
3	Grounding	Poor Navigation						
		Result of equipment failure						
		Crew unknowledgeable on local information						

4	Capsizing	Result of collision, contact or grounding				
		Multihull capsize				
		Boat participating in the event overloaded or with poor stability				
		Insufficient crew experience				
5	Sinking	Result of collision, contact or grounding				
		Boat participating in the event damaged during the launch/recovering procedure				
		Boat participating in the event overloaded or with poor stability				
6	Pollution	Result of collision, contact or grounding				
		Bunkering operation				
7	Fire or Explosion	Result of collision, contact or grounding				
		Lack of maintenance from the Boat participating in the event				
		Bunkering operation				

8	Adverse Weather	Weather; Wind; Waves; restricted visibility; affecting the event				
9	Tidal Streams	Tide affecting the Event				
		Tide affecting the launch/recovering operation				
10	Restricted Visibility	Fog or mist affecting the event				
11	Personal Injury	Man overboard				
		Drowning				
		Fatigue				
		Body injury				
		Bunkering operation				
12	Spectator	Crowd Management Dry/Wet Audience				
		Evacuation Routes				

		Medical assistance				
		Wet Audience unknowledgeable on local information				
13	Other Hazards	Floating or submerged debris				
		Ship/Ferry movements				
		Engine failure impacting on other traffic				
		Medical Evacuation				
		Communication internal and external of the event				

Safety Boats		
Vessel Name	Coxswains Name	Telephone Number

Risk Assessment Prepared by:		Date		HM/AHM Approved:		Date	
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Small Vessel Fire Safety

There is little fire resistance in a boat – timber, plastics and fibreglass all burn readily and furiously – once a fire has started it will spread very rapidly.

How to make your boat safer:

- Fit a smoke detector and a carbon monoxide detector suitable for marine use.
- Ensure furnishings and (foam) insulation are fire retardant.
- Run wiring looms through conduits to avoid chaffing.
- Contain and vent battery boxes.
- If you must use matches, ensure they are safety matches.
- Treble check that cigarettes are properly extinguished and preferably only smoke on deck.
- Use an approved container for carrying and storing petrol.
- Carry Fire Extinguishers.
- Carry VHF Radios.
- Carry Lifejackets.

When Refuelling:

- Stop the engine.
- Turn off all heating and lighting appliance and extinguish all cigarettes and naked flames.
- Use a funnel when decanting.

- Ensure tanks vent directly overboard and that fuel lines have a direct shut off valve that works.
- Do not overfill the tank and always mop up any overspills.
- Secure cap tightly.
- Ensure that there is no leakage or spillage.
- Before starting the engine, first ventilate the boat throughout.
- Store spare fuel in suitable containers on the open deck or in a compartment reserved for fuel.

Using Gas Cylinders:

- Fit a gas detector.
- Secure cylinder in a weatherproof container with low-level atmospheric vents.
- Use approved piping.
- Isolate cylinders when not in use.
- Ventilate thoroughly any compartment which has not been used for some time.
- Regularly hand pump bilges to remove potential low-lying vapours.
- Do not leave a cooker or any other appliances unattended if there is a danger of a draught extinguishing the flame.
- Hatches and portholes should always be opened sufficiently to maintain essential ventilation (where prevailing weather condition permits).
- Check that the valve on the empty cylinder is turned off before disconnecting.

- Do not turn on the valve of the full cylinder until it is securely connected.
- LPG – propane or butane – is heavier than air. If it leaks it will sink to the bottom of the boat and spread along the bilges, probably diffusing to form an explosive mixture which will readily ignite by a small spark.

Recommended Minimum Firefighting Equipment:

- Dry Powder Extinguisher 2kg capacity, regularly serviced and fixed on brackets.
- Bucket with lanyard.
- Fire Blanket.

Cooking Fire Safety:

- Never leave your cooking unattended – turn it off until you return.
- Always use a proprietary spark type gas lighter, not a naked flame.
- Keep the cabin well ventilated to avoid build-up of poisonous carbon monoxide.

Electrical Safety:

- Always check for the British or European safety mark when buying electrical goods.
- Use a trained marine electrician to install and service electrics onboard.
- Do not overload adaptors, keep to one plug per socket and use correct fuses/breakers.

Action to be taken in event of fire:

- Call the coastguard on VHF channel 16.
- Use distress signals – flares, rockets.
- If the boat is moored, call the Fire & Rescue Service on 999 and notify local Harbour Authority.
- Tackle the fire (if safe to do so) but think of your own safety first.
- Put life jackets on.
- Isolate petrol and gas if possible.
- Avoid and alert other craft.
- Prepare an emergency 'grab bag' and life raft.
- Keep calm.

Boat Petrol Safety

Ten Essential Petrol Safety Tips for Boats:

All boaters using petrol, and especially anyone new to boating, should appreciate the nature of petrol vapor especially in the context of the bucket-like quality of a boat cabin and hull.

The fundamentals are that petrol, when spilt or exposed to open air, can vaporize quickly and the vapor can be ignited easily by any spark, flame, cigarette, etc.

Even a small spill of petrol will create a large amount of vapor. Likewise, when it is being poured and when a tank is being filled, the vapor in the 'empty' tank is displaced by the new liquid fuel.

Escaping vapor will sink to the lowest level of its surroundings, accumulating at low level in places such as cabin floors, lockers, bilges and other 'still-air' spaces.

Even if the concentration of vapor is too rich to ignite immediately, it will dilute creating the potential for a serious fire and/or an explosion, even though, given enough ventilation, it may dissipate to a safe level eventually.

These are ten petrol safety essentials that will help keep you and your crew safe:

1. Before starting out, use all senses to check the fuel system and engine for petrol leaks or any signs of damage or deterioration. Have any problems sorted out first.

2. Do not switch on the electrical supply or turn the ignition key if there's a strong smell of petrol. Stop immediately if there's a strong smell of petrol after you start.
3. Keep vapor out of the boat! Before refueling, close all windows, hatches, doors and awnings; also turn off all cooking appliances and any other ignition sources.
4. Double check before you start pouring, that you are using the correct filling point.
5. Afterwards, clean up any spills straight away. Be sure to re-secure the filler cap.
6. Avoid decanting petrol from containers, but if you have to, use anti-spill containers, spouts or nozzles to allow, clean and easy, no-spill refueling.
7. Don't carry spare fuel, unless it is needed and then it must be in cans specifically designed for petrol. Always keep within the legal capacity limits.
8. Containers should never be filled completely and must be stowed securely upright, away from intense heat and out of direct sunlight to prevent pressurization.
9. Refuel any portable engine or tank ashore and safely away from any sources of ignition. Always follow marina / mooring rules on petrol refueling and handling.
10. Never use any bowl, bucket, or other open container to carry or transfer petrol or mix in 2-stroke oil.

For more detail go to

www.boatsafetyscheme.org/petrolsafety

Carbon monoxide Safety

...what's the risk? Recognise the signs!

If you are asleep, you may not notice any symptoms as they develop



Even if you are awake, early symptoms of CO poisoning can easily be mistaken for the flu, food poisoning, a hangover or general tiredness.

Listed some of the common symptoms, but not everyone suffering CO poisoning will have all of them

Common symptoms include: -

- Headache and bad temper
- Feeling sick and dizzy
- Feeling tired and confused

Stomach pains and being sick

The greater the amount of CO there is in air or the longer you are breathing in CO, the worse your symptoms may get

- Drowsiness, lethargy, extreme tiredness, difficulty concentrating
- A feeling of general weakness, difficulty in walking or moving
- Loss of balance and sight and memory problems

...and with very high CO levels

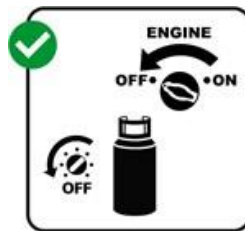
- Chest pains
- Increased heart rate
- Difficulty breathing, breathlessness
- Seizures



Collapse, unconsciousness and death.

If you think you are suffering – ACT QUICKLY

If you suspect you have carbon monoxide poisoning or the CO alarm activates, you need to act fast! Get all people and pets out to fresh air as quickly as you can. Stay in the fresh air. If you can, on your way out, turn off appliances and engines...



...also leave doors, windows and awnings open to allow fresh air to flow through the boat

Don't delay, see a doctor and say you may have suffered carbon monoxide poisoning. If other crew members, or pets, are feeling ill or have the symptoms, they need medical help too

Anyone with severe symptoms needs to get to hospital as quickly as possible!



Severe CO poisoning needs immediate medical treatment

CO poisoning can only be tested shortly after exposure as its traces begin to disappear as soon as you start breathing clear air

If CO poisoning is confirmed - get a properly qualified person to find and fix the appliance or engine before it is used again

More useful information can be found at:

www.boatsafetyscheme.org

**At the above website, the following booklets can be found;
these are well worth downloading:**

- [“Fire Safety on Boats” Booklet.](#)
- [Boat Petrol Safety - Ten Essential Petrol Safety Tips for Boats.](#)
- [“Carbon Monoxide Safety on Boats” Booklet.](#)

Port Authority Telephone Numbers 01273 612926/612900.

Newhaven Radio VHF Ch.12

email: vts@newhavenportauthority.co.uk

www.newhavenportauthority.co.uk

The Port Authority does not supply bunkers. Marine Gas Oil (diesel) is available for smaller vessels, up to 20m LOA, from Newhaven Marina Fuel Jetty and Newhaven Fish & Flake Ice Society Stage, both located on the West Quay. They must be contacted directly for information and charges.

Emily's Code

Emily's Code aims to prevent accidents at sea by highlighting key safety messages and leaves a legacy in memory of 14-year old Emily Gardner.



On 2nd May 2015, Emily drowned in a boating accident due to an ill-fitting buoyancy aid snagging on the cleat of a capsized speedboat. Emily's Code highlights some of the hazards that contributed to Emily's accident.

Emily's parents are launching the Code with the support of the Royal Yachting Association (RYA), HM Coastguard, British Water Ski and Wakeboard, and the RNLI to raise awareness for small boat owners and users.

Emily's parents Clive and Debbie Gardner said: "Many parents like us have no awareness of recreational boating safety guidelines and have never used a boat before. When Emily went on a day trip with her friends, we were reassured that safety was paramount and that the equipment was top notch.

"If just one family sees this and takes action to protect their children on the water, then Emily's Code will have succeeded and Emily's name will live on. Something as easy as checking that your lifejacket or buoyancy aid fits properly can save your life. So be smart and follow Emily's Code."

EMILY'S CODE



WEAR A SUITABLE LIFEJACKET OR BUOYANCY AID

SERVICE EQUIPMENT

GET TRAINED

MAKE A PLAN

KNOW YOUR LIMITS

CARRY DISTRESS SIGNALS

USE THE KILL CORD

KNOW YOUR BOAT

HAVE A RADIO

CHECK THE WEATHER

Supported by



HM Coastguard



RNLI

FOURTH EDITION / MAY 2017

SAFETY ADVISORY NOTICE

www.rya.org.uk

RYA

INTRODUCTION

EACH YEAR, THE RYA DRAWS ON THE KNOWLEDGE IT GAINS FROM INCIDENTS AND ACCIDENTS TO BRING TOGETHER THE MOST IMPORTANT LEARNING POINTS. SOME MIGHT NOT BE IMMEDIATELY OBVIOUS, OTHERS ARE FUNDAMENTAL AND MERIT REPETITION.

These learning points supplement our key safety messages: look after yourself, have a plan, keep in touch and know your limits. Together they underpin our ethos of self-reliance and responsibility for safety on board.

We hope that this, the fourth edition of the Safety Advisory Notice, will add to your knowledge and inspire you to think about your own actions and abilities. The advice in this Safety Advisory Notice is free to all who wish to read it and the information it contains is supported by considerable amounts of advice on the RYA website and through our RYA Training courses and publications.

Our purpose is simple: to promote and protect safe, successful and rewarding British boating; a safe mind set and learning from others are vital if this is to be achieved.

All of us at the RYA hope that your time spent boating is both safe and enjoyable.



HOW TO COMBAT CARBON MONOXIDE

GET WISE, GET ALARMED, GET OUT

Understand the sources of Carbon Monoxide and the risks associated with it, know how to recognise the symptoms of poisoning and fit a suitable alarm.

In 2014 we reported on the hazards of Carbon Monoxide (CO) poisoning - an ever-present risk whenever carbon based fuel is used for propulsion, heating, lighting or cooking. This followed a double fatality in the Lake District which was investigated by the MAIB. Despite considerable publicity about the dangers of Carbon Monoxide, 2016 saw a couple die on the Norfolk Broads and another owner died on his motor boat in Cardiff later that year. All were poisoned by CO produced by the boats' petrol engines.

CO, often called the silent killer, is an invisible odourless gas which cannot be detected with the human senses and is produced any time a fuel containing carbon is burnt such as petrol,

natural gas, oil, propane, coal or wood. CO can overwhelm quickly; less than 2% of CO in air has an immediate effect and can kill in 1-3 minutes. For that reason CO detectors activate an alarm at very low concentration levels to give a person time to react before being overcome. Regrettably it appears that these are often mistaken as false alarms rather than an early warning of the danger and are switched off or worse still disconnected from a power supply.

At low concentration levels of CO, the symptoms of poisoning are similar to flu or food poisoning. Headaches, nausea and dizziness are common. As the concentration of CO increases, you may suffer chest pains and breathlessness leading to seizure or unconsciousness. If the levels are high enough, CO will kill you. Carbon monoxide poisoning can be especially dangerous for those who are sleeping or intoxicated.

The message is quite clear – understand the dangers of Carbon Monoxide and recognise the symptoms of Carbon Monoxide poisoning. Fit an alarm that complies with BS EN50291-2:2010 and if it sounds get out of the boat and into the fresh air immediately – get wise, get alarmed, get out.

Finally it is worth remembering that even if you do not have anything on your boat that might produce Carbon Monoxide; you are not immune from CO sources nearby. There may be a petrol engine at idle up wind of your mooring.

More information on the dangers of Carbon Monoxide can be found at rya.org.uk/go/co

CARBON MONOXIDE (CO) POISONING



CAN'T BE SEEN



CAN'T BE SMELLED



CAN'T BE HEARD



CAN BE STOPPED



THE SHOCKING TRUTH

COLD WATER

Cold Water Shock is a cause of death that many people fail to appreciate. Adequate clothing and a lifejacket will help you to survive long enough to be recovered.

When the body is suddenly immersed in cold water it experiences a number of physiological responses that can rapidly incapacitate and even kill. The sudden lowering of skin temperature is one of the most profound stimuli that the body can encounter. As blood vessels contract, increases in heart rate and blood pressure may result in cardiac arrest even in people who are in good health. At the same time a "gasp" response may result in water being inhaled into the lungs and your breathing rate may increase by as much as tenfold.

This is a condition known as Cold Water Shock (CWS), it causes involuntary body reactions that can be as swift as they are deadly. The ability to swim well has no impact on these responses. It is far deadlier than Hypothermia, yet far less understood by boaters in general.

Hypothermia kills over time as heat is conducted away from the body leading to a gradual decline in body core temperature and loss of swimming ability, unconsciousness and ultimately death. Conversely, most people who are susceptible to CWS die in the first minute of immersion. Sudden cold water immersion drastically reduces your ability to hold your breath typically from a minute or so to less than 10 seconds. Cold water in your ears can cause vertigo resulting in disorientation.

CWS is a danger in water below 15°C; that's more or less the summertime average around the coast of the UK. It is therefore important to think carefully about the clothing you wear and protection from the cold – a dry suit will provide additional protection, particularly in very cold water. CWS coupled with the shock of going over the side may well contribute to a feeling of panic as you struggle to stay afloat; this will be far easier to overcome if you are wearing a lifejacket. The key to surviving cold shock is being alert to the symptoms and acting quickly to protect your airway and conserve your strength.

If you ever recover someone from the water, they may seem okay, but might be susceptible to secondary drowning where any water entering the lungs can cause a condition called pulmonary oedema. This can happen within 1 to 24 hours after an incident in the water. Symptoms to look out for are coughing, chest pain, troubled breathing, tiredness and irritability. A close eye may need to be kept on the person after an incident in case of delayed symptoms.

More information on looking after yourself can be found at rya.org.uk/go/coldwatershock

CLIP ON INTELLIGENTLY

Think carefully before clipping on. The optimum length of your safety line will vary dependent on the size of the boat and where you need to attach it for the task in hand.

A safety line connects your safety harness (often integrated into a lifejacket) to a strong point on your boat. Safety lines (sometimes called tethers) have been the focus of some attention recently following a number of fatalities where crew were not clipped on, however, even when clipped on, accidents can still happen if you do not do so intelligently.

Safety lines are only intended to give reasonable assurance that you will remain attached to the boat; prevention from actually falling into the water is clearly dependent on where you attach it and the length of the safety line.

Movement must be balanced with the risk of falling overboard. Safety lines need to be long enough to let you move around the boat or to carry out the task at hand, but not so long that it will allow you to fall overboard. If you are expecting to change headsails on the bow of a sailing boat where the deck is narrow then you might well need to clip on with a short safety line or the odds are that you will end up over the side if you trip, fall or are hit by a wave. Similarly, in such a situation it's better to clip on to the high side of the boat rather than the low side, thus minimizing the fall distance.

A common solution that provides a choice between longer and shorter safety lines is a mid-point hook. This combination also allows the user to change the clip-on point without being detached from the boat and it provides a shorter safety line to hand when one is needed.

There are a number of safety lines available on the market with a mid-point hook: our advice is to think about where you intend to clip on and choose the right length of safety line. In the event that a crew member does go overboard whilst still attached be sure to bring the boat to an immediate stop to prevent the casualty from drowning.

More information on safety lines can be found at rya.org.uk/go/safety-lines



GETTING KNOTTED

Consider carefully the type of rope used for specific tasks. Knots, hitches and splices in High Modulus Polyethylene (HMPE) rope will reduce its strength, possibly by up to 80% of the maximum breaking strain.

HMPE rope such as Spectra® and Dyneema® has a high tensile strength for its weight and good resistance to chemicals and Ultra Violet light – all of which make it great for boating but there is a drawback, HMPE does not tolerate tight bends which reduce the strength of the rope. Knots, hitches and splices, although unavoidable, reduce HMPE strength more than other type of rope, and a simple overhand knot which produces a very tight curve typically reduces it by as much as 80%.

There is no easy answer to this. If you have purchased 10mm HMPE rope with a breaking strain of 5000Kg then you might be surprised if it fails under a load of 1750Kg at the point where you have tied a knot or bent the line around a fixing point. The advantages of buying something that is lightweight and strong might simply not be up to the task you bought it for once you have put a knot in it.

The industry uses a formula to express the tightness of the curve called the D/d ratio based on the diameter of the fixing around which the rope is bent (D) and the rope diameter (d). Typically a D/d ratio in the region of at least 8:1 is required to maintain 100% of its strength. The D/d in a recent incident involving HMPE was 0.89:1 or a little over 10% of that required to maintain maximum strength.

If you are going to buy HMPE for sheets, halyards and control lines then it is inevitable that you will need to fasten it to something such as a shackle. It is worth seeking advice from a rigger to discuss your intentions and remember

when buying shackles etc. that at a D/d of 2:1 the breaking strength is typically 65% of the maximum. At a D/d of 1:1 the breaking strain reduces to 50% of maximum.

Either use oversized rope to achieve the strength required or increase the diameter of the fixing point to which it is to be attached. Finally, splices should be used for HMPE in preference to knots.

More information on personal safety can be found at www.rya.org.uk/go/safety



SAFETY HELMETS

Wearing a sailing helmet may be beneficial in reducing the risk of blunt trauma head injury in a high performance environment but for the less experienced, it could lead to a greater chance of injury if the hazards are not understood.

Safety equipment has evolved over time to deliver optimal performance. ISO standards have been developed to ensure equipment performs as it should, but that is not true for all equipment and we all need to be aware of the dangers of using equipment which has not been specifically designed and tested for a specific purpose.

The use of helmets in sport is common place; cricketers, rugby players, cyclists, skiers, kayakers and F1 drivers all wear them. However, crucially, these helmets are specifically designed and tested according to the impacts of different types of sports, so a rugby cap is not intended to be worn by a cyclist or kayaker.

America's Cup sailors don crash helmets, in addition to body armour and oxygen, to protect them from high speed capsizes. However, each competing boat is also followed closely by chase boats carrying scuba divers, doctors and support personnel to provide immediate assistance in case of capsize.

At the moment there is no specific standard for sailing helmets. If you use a helmet that is inappropriate you may expose yourself to injury in other ways that detract from the original purpose of wearing it in the first place. In case of inversion, there is a possibility that a helmet could increase the risk of entrapment or increase any disorientation experienced by a sailor in trying to free themselves. Dinghy sailors mostly wear buoyancy aids that do not support the neck and head when unconscious in the water. An unconscious sailor in the water may be more prone to floating face down.

Whilst a helmet may not reduce visibility, it may impinge on the situational awareness of the sailor and could subsequently add to an increased risk of an accident. There also is potential for neck strain if there is a sudden deceleration of the boat even without an impact; whiplash could be exaggerated by the weight of the helmet.

More research is required on this rapidly evolving issue within our sport. However, as with any aspect of boating it is important that if you feel a helmet may be appropriate for the boating you are doing you should first assess what it is that you are trying to achieve, whether the intended helmet is fit for purpose and what other measures may be appropriate either instead of or as well as a helmet. Boom heights, the potential speed of the craft and conditions in which you will be sailing are examples of factors you need to consider.

More information on personal safety equipment can be found at www.rya.org.uk/go/safety



RYA SAFETY ADVICE AND INFORMATION

LOOK AFTER YOURSELF AND YOUR BOAT AND KEEP IN TOUCH

Nearly 25% of all lifeboat call-outs are to machinery failure, lack of fuel and to fouled propellers. Only 10% of lifeboat call-outs are to people in distress and just over 3% of launches are because of adverse weather. Mechanical failure is the single biggest cause of rescue call-outs to sailing and motor cruisers and accounts for nearly 20% of all lifeboat launches. If you know how to fix common problems and how to carry out basic maintenance and engine care, you can avoid becoming part of this statistic.

Most engine problems can be avoided by taking simple precautions which do not require detailed mechanical knowledge or training. The RYA Diesel Maintenance Course is designed to help you look after your boat and to give you the confidence to become more self-reliant. The course teaches you how your engine works, how to keep it healthy by using basic checks and maintenance procedures, and how to get it started again in the event of a breakdown. Whether you sail a yacht with an auxiliary diesel engine or are a motor cruising enthusiast, the course could not just save you money, but one day could save your life.



We are still concerned that many boaters do not tell anyone where they are going, what time they plan to get there or who is on board. In the majority of cases, things work out as intended but occasionally they do go wrong: Estimated Times of Arrival are missed and quite possibly you might need rescuing. Without an idea of what your intentions are, the search in search and rescue becomes a real challenge.

Telling someone what you are doing used to be a challenge for any small boat user, canoeer, kayaker, wind or kite surfers; contacting the Coastguard in the event of distress was equally problematic. For that reason we have introduced RYA SafeTrx. The App is free to download and there is no charge to use it. RYA SafeTrx records your details, ETA and tracks your trip. The app will automatically alert a nominated contact if the trip goes overdue and your sail plan will be available to the Coastguard if search and rescue has to be activated. The app contains a considerable number of useful functions and useful port and marina information. As absolute minimum, make sure someone ashore knows where you are going and when you plan to be back before going afloat.

More information about RYA Diesel Maintenance Courses, RYA SafeTrx and a whole range of safety topics is easily accessible at rya.org.uk/go/safety; we review and update the information frequently.

RNLI 2015 Operational Statistics (2016 edition still being compiled at the time BAN 2017 went to print).



CHOOSE IT WEAR IT

The RNLI guide
to lifejackets and
buoyancy aids



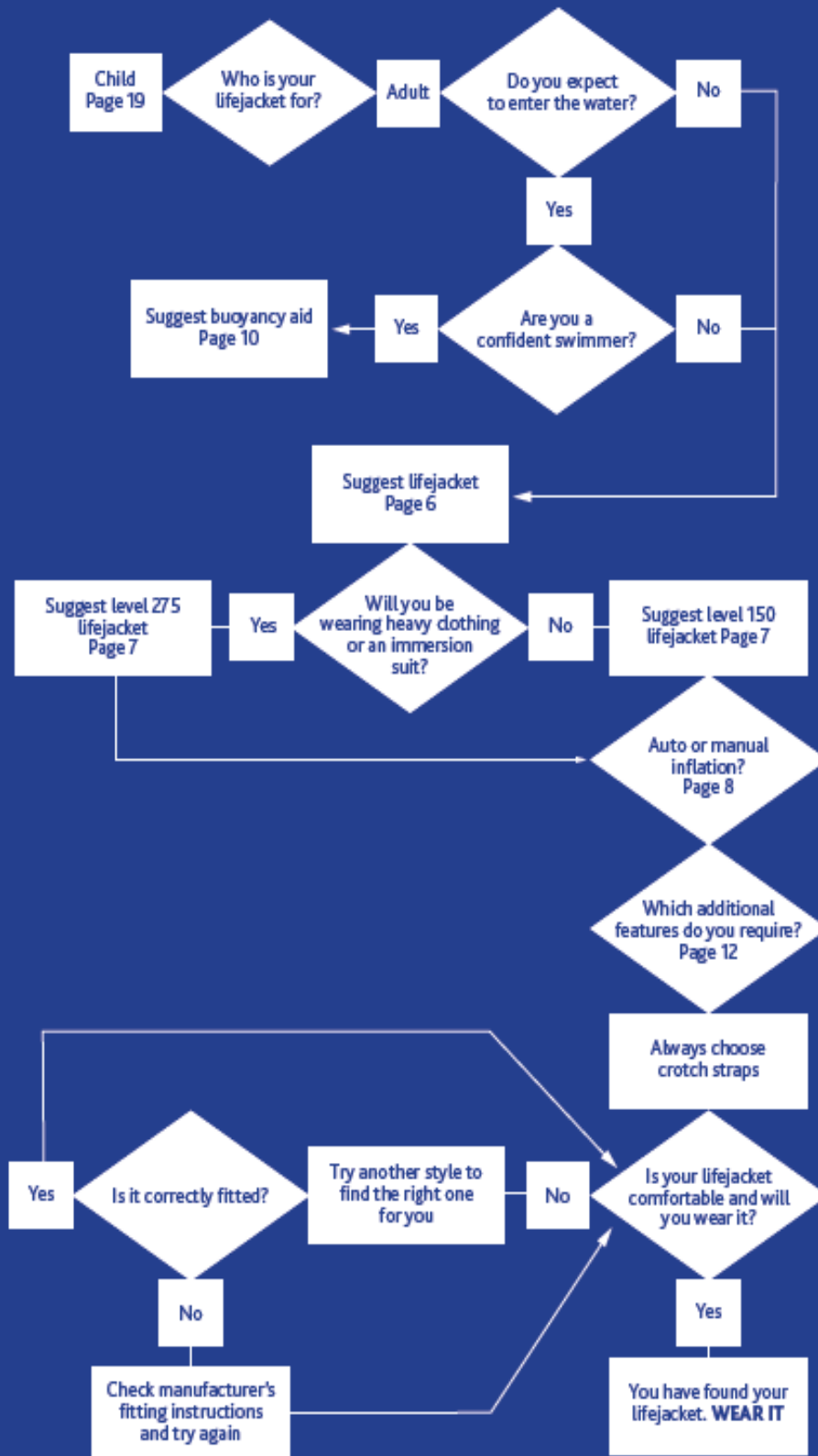
RESPECT
THE WATER


CHOOSE YOUR LIFEJACKET



Lifeboats

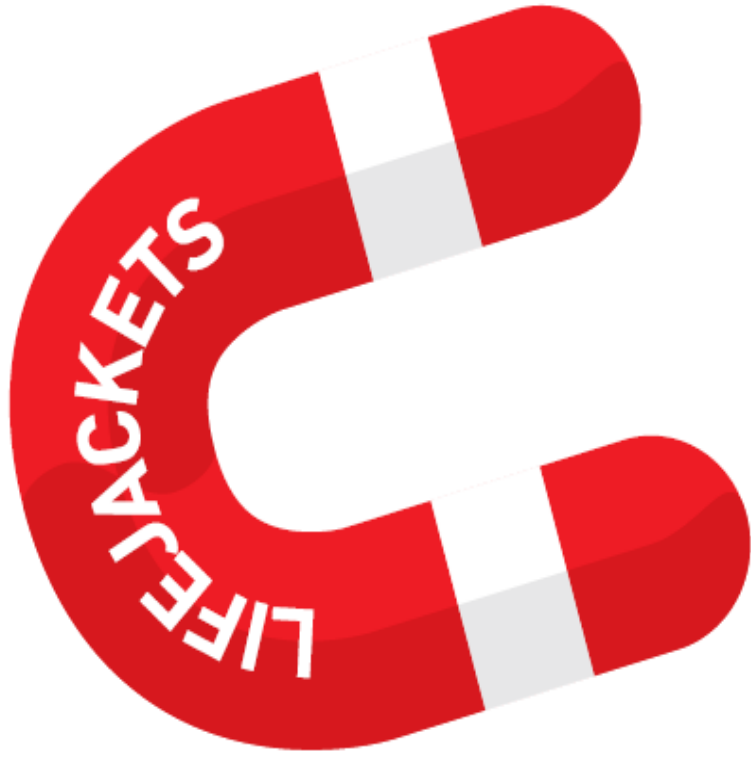
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SAP CODE XXXXX

The RNLI is the charity that saves lives at sea
Royal National Lifeboat Institution, a charity registered in England and Wales (209 603)
and Scotland (SC0377 36). Registered charity number 20003326 in the Republic of Ireland





Useless
unless worn

RNLI.org/RespectTheWater



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THE IMPORTANCE OF WEARING YOUR LIFEJACKET



Why wear one?

Every year, around 200 people drown in the coastal waters around the UK and Republic of Ireland. These tragedies happen to people taking part in a wide range of water-based and waterside activities.

Research has proven that wearing a lifejacket can increase your chances of survival by up to four times if you're immersed in cold water. *

Whatever your activity, wearing a well-fitted, well-maintained and suitable lifejacket or buoyancy aid could save your life.

Source: * Professor Mike Tipton 2012.

Best option – don't fall in!

If you fall over the side and are not attached to your boat, you can rapidly become separated from the vessel. This will greatly increase the difficulty of rescue, especially at night, and so decrease your chances of survival.

Staying on, or near, your boat is always going to be the best option. At the very least, make a policy of clipping on to suitable points around the boat at night, when alone on deck, or in rough conditions. Ensure you have a harness line with a hook at both ends. Clipping on is particularly important on sailing boats, where the motion and angle of heel can be unpredictable.

Whenever possible, use a lanyard that is sufficiently short to prevent you from falling over the side. If someone falls overboard while attached to a safety lanyard, stop the boat immediately – being dragged through the water alongside a vessel can be life threatening.



Motorboats and fast vessels

On a motorboat, it's advisable to clip on when you leave the cockpit to perform a task on deck such as anchoring. Clipping on is not advised on fast motorboats or fast sailing boats when travelling at speed, because it may result in the clipped-on person being dragged through the water if they fall overboard.

Irish legislation

In the Republic of Ireland, the law requires that an appropriate lifejacket or buoyancy aid must be carried for everyone onboard all vessels. If the craft is under 7m, personal flotation devices must be worn at all times on an open vessel or on deck on a vessel with accommodation. Anyone under the age of 16 must wear a personal flotation device at all times on an open boat or on deck if the vessel has accommodation, irrespective of the size of the vessel.

Cold water shock

Cold water shock is the uncontrollable reaction of the body when it is first submerged in cold water (15°C or lower). In initial submersion, the body will experience a gasp reflex, which is a rapid intake of air. This is followed by a fourfold increase in breathing rate and associated increases in heart rate and blood pressure, making some people susceptible to heart attacks. These symptoms will last up to 3–5 minutes during which even the fittest person is unable to swim or to focus on breathing. Wearing a lifejacket with the correct buoyancy is vital to survival.

During the initial stages of cold water shock, try to stay calm and let your lifejacket keep you afloat. The clothing you are wearing, the fitting and features of your lifejacket and the amount of energy you expend will all be critical factors to survival from this point onwards.

Without a lifejacket even the most competent swimmer will suffer from 'swim failure' after around 30 minutes of swimming in cold water. If you are wearing a well-fitting lifejacket with crotch straps, there is no need to swim and you can concentrate on keeping warm, conserving energy and making yourself visible.

In a group, form a huddle by using one hand to hold on to the person next to you while the other is protecting your airway. If you are on your own, cross your ankles, put your knees together and bring your arms around your body and float in the Heat Escape Lessening Position (HELP), pictured below.



HELP reduces heat loss



Gasp reflex caused by cold water shock



With crotch straps



A huddle can be seen more easily



Without crotch straps

CHOOSING YOUR LIFEJACKET



What size?

Most level 150 and level 275 inflatable lifejackets are produced in one size suitable for all adults weighing over 40kgs (6 stone 4lbs). The only limiting factor can be the length of the waist/chest belt, which can vary between makes.

Because of their buoyancy, all adults, regardless of their size, have a net weight of about 5kg when immersed in water. You do not need a lifejacket or buoyancy aid with more buoyancy just because you're big.

Buoyancy aids and level 100 lifejackets, however, come in a range of sizes from baby to adult:XXXL. Make sure you get one that fits properly.

A good fit

Take time to find a style of lifejacket that is comfortable to wear and suits your needs – the best lifejacket is one you will wear.

When in the shop, try on a few different options and think about what it'll be like to wear it, doing your watersport. Is it a good fit? Is it comfortable? Do you like it? Picking the right one for you may take time, but it will be time and money well spent. If you are buying online, think about finding a way to try on the style of your choice first; do you have friends or family with the same jacket?

Lifejacket standards

All new lifejackets sold in the UK, Republic of Ireland and elsewhere in Europe are required to meet the International Standards Organisation standard ISO 12402. Older lifejackets may carry the CE mark. This is numbered from EN393 to EN399, depending on the amount of buoyancy provided.

Buoyancy aid – level 50



Buoyancy aids at level 50 are recommended for use by swimmers in sheltered waters or by those doing water-sports where help is close at hand. However, they do not have sufficient buoyancy to protect a person who is unable to help themselves. They are not designed to turn a person from a face-down position in the water.

Lifejacket – level 100



The level 100 lifejacket is recommended for use in sheltered and calm waters. It may not have sufficient buoyancy to protect a person who is unable to help themselves and may not roll an unconscious person on to their back.



Lifejacket – level 150



The level 150 lifejacket is for general use on coastal and offshore waters where a high standard of performance is required.

It should turn an unconscious person on to their back and requires no subsequent action by the wearer to keep their face out of the water. Its performance may be affected if the user is wearing heavy and/or waterproof clothing.



Lifejacket – level 275



The level 275 lifejacket is recommended for offshore use, primarily for extreme conditions and for those wearing heavy protective clothing that may adversely affect the self-righting capacity of lesser lifejackets. As with the level 150, this lifejacket is designed to ensure that the wearer is floating in the correct position with their mouth and nose clear of the surface of the water.

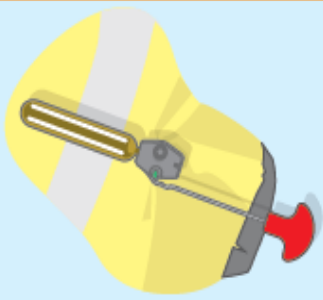


AUTOMATIC OR MANUAL



There are three inflation methods of gas-only lifejackets. Choose one that best suits your activity. Most inflatable lifejackets are inflated by piercing a bottle filled with carbon dioxide (CO₂) attached to the firing head. Orally-inflated-only lifejackets (ones without a gas cylinder) are not recommended for everyday use.

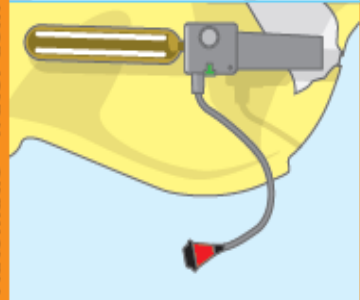
Manual



Manually inflated lifejackets are operated by pulling a cord, which pushes a firing pin into the CO₂ bottle, which inflates the lifejacket. Manual activation prevents the possibility of false activation, which can be caused by a damp automatic mechanism or the wearer being hit by a large wave.

Of course, manual activation will not work if you are unconscious, or suffering from the effects of cold water shock.

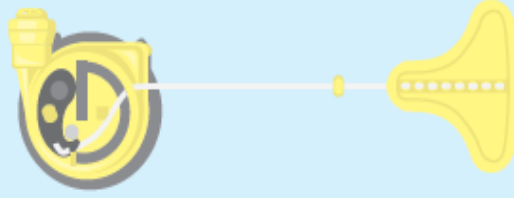
Automatic – water activated



Water activated automatic firing heads have a small pellet or bobbin that holds back a powerful spring. When the pellet/bobbin contacts water it dissolves very rapidly, releasing the spring which pushes the firing pin into the gas bottle.

Due to the effects of cold water shock, most people choose a lifejacket that will inflate automatically if they enter the water.

Automatic – pressure activated



Hydrostatic (Hammar) lifejackets work the same way as an automatic lifejacket (with a dissolving pellet) but the pellet is protected by a case that only lets water in once it is a few centimetres under water. It won't fire unless fully submerged.

Choose this type of lifejacket if you take part in an activity where you are regularly soaked by waves or excessive spray.

CO₂ bottles in hydrostatic lifejackets are less likely to suffer from corrosion.

Automatic lifejackets always have a means to manually activate the CO₂ bottle as well as a mouthpiece to allow oral inflation.

The primary means of inflating a lifejacket should always be the pull cord. Always aim to inflate your lifejacket before entering the water.

Newer lifejackets may have indicators to show if gas bottles are empty or if automatic firing systems have been triggered.



CHOOSING YOUR BUOYANCY AID



What suits your activity – lifejacket or buoyancy aid?

Choose a buoyancy aid if you are a competent swimmer taking part in an activity where you expect to end up in the water and are preferably wearing clothing that will already provide you with some extra buoyancy (such as a wetsuit or a dry suit). Buoyancy aids are vital when learning a new watersport.

A buoyancy aid has integral foam buoyancy. But it is not designed to turn a person the right way up, and so would not support an unconscious person in the water.



Kayaking buoyancy aid

Kayaking and canoeing

Buoyancy aids for kayaking are cut away around the shoulders and the arms; they need to be comfortable for paddling and swimming. They should have a belt or a drawstring to pull them tight around the chest. Choose a brightly coloured one that can be easily spotted.

Touring, sea kayaking and sit on top kayaks

Choose completely cut away arms to allow for comfortable paddling over long periods, and multiple pockets to store safety, navigation and fishing equipment.

Whitewater

These have more buoyancy to keep you afloat in fast-flowing water and so are bulkier. The fronts are often cut high to allow the wearer to lean forward easily.

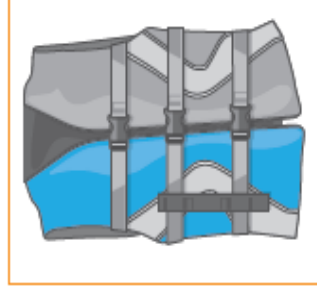
Your jacket must secure tightly to ensure it will not be ripped off by water pressure, must have at least one pocket for calling-for-help/rescue equipment and have a 'clean', snag-free exterior.



Dinghy sailing buoyancy aid



Anglers vest style inflatable buoyancy aid



An impact vest for water skiing

Dinghy sailing

Dinghy sailing buoyancy aids tend to be slimmer to allow freedom of movement around the boat. They are high cut to allow bending and room to wear a trapeze harness. Choose a jacket that has few pockets and belts to keep a 'clean' exterior that will not catch on rigging. Carry a knife to avoid entrapment in the event of a capsized.

Angling

There is a diverse range of lifejackets specifically designed for anglers, from fishing vests with integral gas inflation to slim-line fly fishing horsehoe jackets. Choose a jacket that best suits your type of angling.

If you are wading, high-cut jackets are better. If you cast a lot, choose something less bulky. Flotation suits and vests will protect from the cold and can offer buoyancy in addition to your lifejacket. However, they are not designed to turn an unconscious person face-up in the water and may be too loose to provide proper support, so are not recommended as a primary aid.

Other watersports

Buoyancy aids do not have to be sport-specific; just comfortable, the right level of buoyancy and the right size for you. If you choose a dual-function jacket, such as a water-skiing impact jacket or a flotation jacket, then double check the item has a minimum of level 50 buoyancy.

LIFEJACKET FEATURES



There are several features on a lifejacket that can greatly enhance your chances of survival if you end up in the water. Though not all these features come as standard with every jacket, they can be easily fitted afterwards. Make sure you know what your lifejacket comes with when choosing which one to buy.

Crotch straps



Crotch or thigh straps stop the lifejacket from rising up. They also keep your mouth and nose slightly higher, thereby reducing the chances of water inhalation. Depending on the lifejacket design, either one or two straps may be fitted.

Spray hood



Even with a level 150 lifejacket you may be subjected to waves in your face. A spray hood will keep wind-blown spray and breaking waves away from your airways making it easier to breathe and reducing the risk of drowning. The spray hood will also help to reduce heat loss from your head and make you a lot more visible in the water. A good spray hood will have air vents at the side.

Light



A fixed or flashing light attached to your lifejacket makes you much easier to find at night or at times of poor visibility. Lights can be easily retrofitted if your jacket does not already come with one.

Whistle



A whistle comes as standard on a lifejacket but, not on a buoyancy aid. The attachment of a whistle, even on a non SOLAS-approved flotation device, will increase your chances of being detected while you're floating on the water's surface. It is a low cost addition to your personal safety kit.

Personal Locator Beacon (PLB) or AIS MOB devices

Fitting a PLB or AIS device will help raise the alarm and tell rescuers where you are.



PLBs are manually operated. They have worldwide coverage and transmit a signal via satellite to the emergency services.



AIS MOB devices use a VHF signal to alert local vessels (able to receive AIS signals) of a man overboard. They can be fitted to operate automatically when the lifejacket inflates.

FITTING YOUR LIFEJACKET

Once you have a lifejacket that suits your needs, it is vital that you fit it correctly.

Crotch straps must be secured and all other straps correctly adjusted. Unless the lifejacket belt is securely fastened to the wearer, the lifejacket will simply float up above the shoulders when in the water.

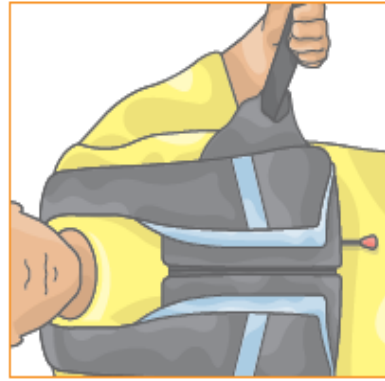
Buckles need to be easy to use and effective to ensure that the belt does not slack. There are several methods to tighten different lifejackets so take some time to become familiar with the one you are wearing. Try fitting it properly in the shop before you buy.

Side fastening

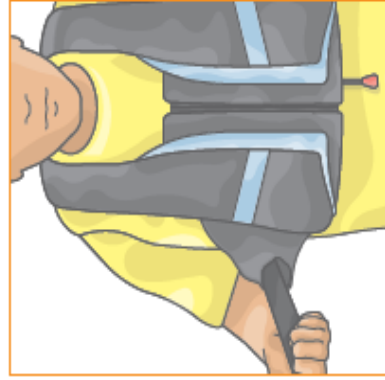


Adjust either while wearing or before you fit

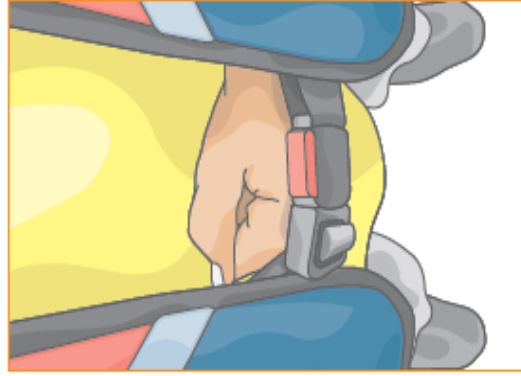
Pull to fit



The straps are 'rocked' forwards and backwards to obtain a tighter fit



Fit

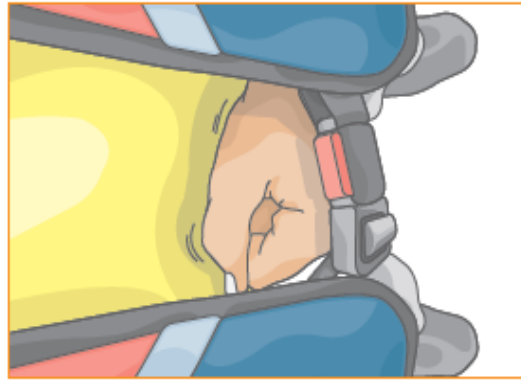


Good fit

Once your lifejacket is tightened, test the fit by placing your fist underneath the buckle. If there is a gap between your fist and your clothing then the lifejacket is a little loose. If your fist will not fit then you may wish to loosen your jacket for comfort.

Newer designs of lifejackets do not require as much room beneath the chest strap. Always check manufacturers' fitting guidelines. Some make allow you to adjust the back strap to reduce chafing to your neck.

Bad fit



Some manufacturers now produce extremely compact 3d lifejackets, which many users find comfortable to wear. Because these jackets are difficult to repack correctly, they should be returned to a service agent for repacking as soon as possible after they've been inflated. They should only ever be repacked by an approved service agent.

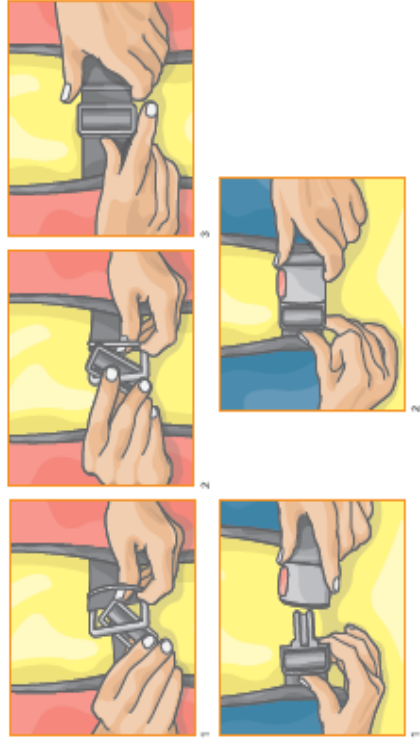
Before buying a lifejacket, try it on in the shop. Make sure you find it comfortable, easy to fasten and easy to adjust. Everyone is different so pick the right style for you.

FASTENING YOUR LIFEJACKET



Fitting your lifejacket may seem a simple task, but it can still challenge the most experienced. Here we look at putting on your lifejacket, and different methods of securing it.

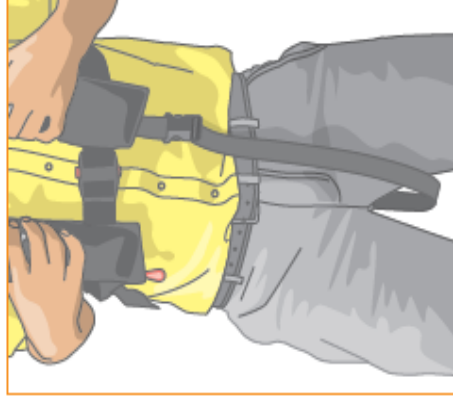
Buckles



Zips



Crotch straps



Crotch strap too loose



Crotch strap correct

To prevent snagging, crotch straps should be done up and not left hanging. Well-adjusted crotch straps will be as short as possible while still allowing comfortable movement.

In the event of entering the water, crotch straps need to be tightened fully to stop the lifejacket from riding up. You should be able to reach your crotch straps easily to be able to tighten them in the water.

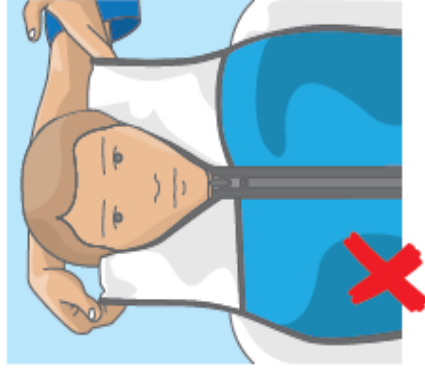
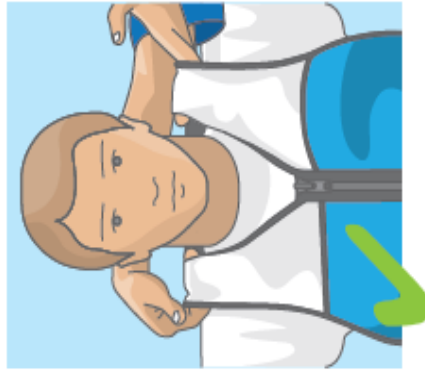
FITTING AND MAINTAINING YOUR BUOYANCY AID

LIFEJACKETS FOR CHILDREN



Lifeboats

Fitting



A good way to tell if a buoyancy aid is the right size is to fit and adjust the jacket then lift from the shoulders. It should not be possible to move the jacket. If it slides up, try a smaller size or tighter fit.

Maintaining your buoyancy aid

Regularly check the foam in your buoyancy aid for visible signs of deterioration. Over time, the foam will become compressed and so lose buoyancy. When this happens it is time to replace the jacket.

Levels of buoyancy can be checked by measuring the jacket's displacement in water. Refer to ISO 12402 standards to find the correct weight to test your jacket.

Visually check the outer material, webbing, stitching, zips and buckles for signs of damage or wear.

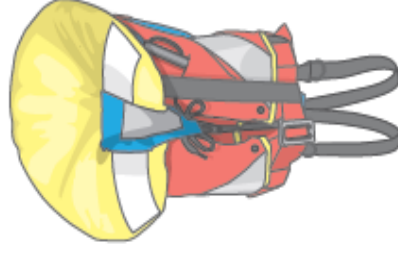
Children's lifejackets may rely on foam, air and foam, or CO₂ only to provide buoyancy.

Air and foam and CO₂-only lifejackets meet the requirements of a level 150 lifejacket and are suitable for offshore use. Normally, foam lifejackets provide level 100 buoyancy and are suitable for inshore use.

Air and foam lifejackets provide level 100 buoyancy when deflated, and can be up to level 150 when inflated. These lifejackets are usually bulkier, but they provide inherent buoyancy. They may also help to keep the child warm and provide a degree of protection in the case of a fall.

CO₂ lifejackets tend to be smaller, lighter and more comfortable to wear; but this type of lifejacket does not provide any buoyancy when not inflated. So if you choose an inflatable lifejacket, you must assess whether your child would be able to activate it if they fell into the water.

Air and foam



Pros	Cons
Can be used both inshore and offshore	Must remember to orally inflate tube when going offshore
Less bulky than foam-only jackets	

LIFEJACKETS FOR CHILDREN



Foam-only

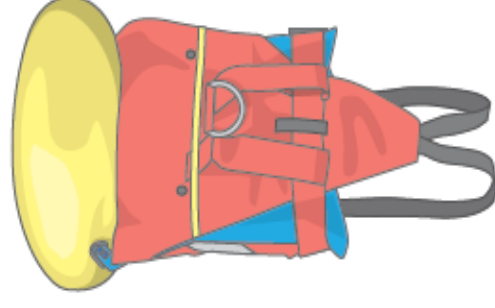


Pros	Cons
Warm and provides protection from falls	Bulky
Gives immediate buoyancy if the child falls in	

Features

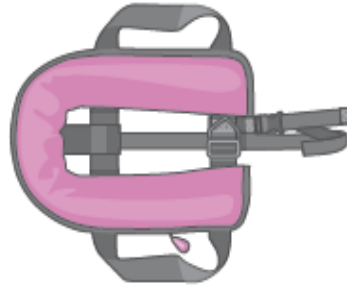
Children's lifejackets are supplied with a whistle to attract attention, and crotch straps as standard that **must** be worn at all times to prevent the jacket slipping off in the water or during rescue.

Many children's lifejackets also have a built-in safety harness with a D-ring attachment at the rear of the jacket. This is particularly suitable for younger children who can be attached to a suitable adult either onboard, or at the water's edge. For older children on a sailing vessel, the child may be harnessed to the boat. Children should never be harnessed to a vessel travelling at high speed as there is a risk they will be dragged along under the water if they fall overboard.



D-ring safety harness fitting

CO₂ only



Pros	Cons
Smaller, lighter, more comfortable to wear	Provides no buoyancy when not inflated
	Child must be able to activate the manual override, even when frightened or suffering from cold water shock

Size and fitting

All children's lifejackets state a maximum weight and chest size, which must not be exceeded. However, it is equally important not to purchase a jacket that is too large.

If it is too large, the child could slip out of the jacket or the jacket could float high in the water, leaving the child's mouth and nose submerged. Refer to page 18 for fitting instructions.

MAINTAINING YOUR LIFEJACKET



Lifejackets do not last forever, so regularly inspect yours for wear and tear. Whatever type of lifejacket you use it will need basic maintenance to keep it working properly. The RNLI recommends you regularly inspect your own lifejacket, according to the manufacturer's instructions and in conjunction with an annual service. Modern 3d lifejackets can be difficult to repack correctly. If in doubt, take the jacket to the manufacturer's recommended service agent for checking and repacking.

Remember: a lifejacket can only save you if you're wearing it.

Monthly checks

Visual



Check the webbing and the stitching that holds the webbing together. Lifejackets with a coloured thread, which strongly contrasts with the webbing, make it much easier to spot worn stitching. Also check zips, buckles and other fastenings.

Gas bottle

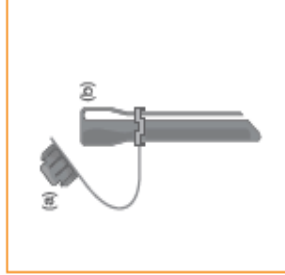


Screw-in CO₂ bottles in lifejackets can work themselves loose and should be checked for tightness every month.
Always carry re-arming kits for each type of lifejacket you have onboard. If a lifejacket is accidentally inflated, you will be able to get it ready for use again straight away.



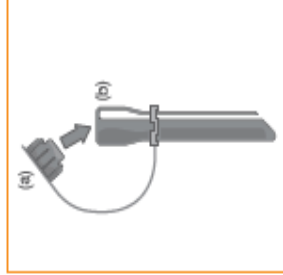
Check the CO₂ bottle for corrosion. A heavily corroded bottle should be replaced. Also check any areas of material that were in contact with a rough cylinder – the fabric may have been damaged.

Oral inflate



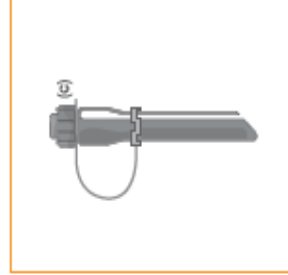
Regularly inflate the lifejacket orally. Leave it inflated for 24 hours in a dry environment to ensure there are no leaks or damage. Repack the lifejacket according to the manufacturer's folding instructions.

The lifejacket must be deflated by reversing the cap (a) on the oral inflation tube and inserting it into the end of the tube (b); hold the cap in the end of the tube during the deflation process. **Never use anything other than the cap to deflate the lifejacket.** Once the lifejacket has been deflated, replace the cap over the end of the oral inflation tube (c). This will prevent dust or particles entering the valve. Using any other method of deflating the lifejacket can result in damage to the oral tube valve, preventing the lifejacket from holding air, which will not be discovered until the lifejacket is used during drills or in an emergency.



Annual service

Every 12 months it is highly recommended that you return your lifejackets to the manufacturer or a qualified service agent for a full service. Wear and contamination from salt spray, sand and dirt will all contribute to decreasing the life expectancy of your lifejacket. **If you look after your lifejacket, it will look after you.**



RNLI lifejacket clinics

The RNLI runs free lifejacket clinics where our trained volunteers will inspect your lifejacket and show you how to carry out your own checks.

To find out about a clinic near you, or to book a clinic for your club or group, email community_safety@rnli.org.uk.