Department of **Local Government, Industry Regulation and Safety**

GOVERNMENT OF WESTERN AUSTRALIA

WorkSafe Western Australia

CODE OF PRACTICE

Person overboard: Prevention and response

December 2025

DRAFT FOR PUBLIC CONSULTATION

WHSC WORK HEALTH AND SAFETY COMMISSION

Disclaimer

The information contained in this publication is provided in good faith and believed to be reliable and accurate at the time of publication. However, the information is provided on the basis that the reader will be solely responsible for assessing the information and its veracity and usefulness.

The State shall in no way be liable, in negligence or howsoever, for any loss sustained or incurred by anyone relying on the information, even if such information is or turns out to be wrong, incomplete, out-of-date or misleading.

In this disclaimer:

State means the State of Western Australia and includes every Minister, agent, agency, department, statutory body corporate and instrumentality thereof and each employee or agent of any of them.

Information includes information, data, representations, advice, statements and opinions, expressly or implied set out in this publication.

Loss includes loss, damage, liability, cost, expense, illness and injury (including death).

Reference

Work Health and Safety Commission, Person overboard – prevention and response: Code of Practice, Department of Local Government, Industry Regulation and Safety.

ISBN XXXXXXXXXXX (web)

Further details of work health and safety publications can be obtained by contacting:

Department of Local Government, Industry Regulation and Safety
WorkSafe Western Australia
303 Sevenoaks Street
CANNINGTON WA 6107
Telephone: 1300 307 877
NRS: 13 36 77
Email: WSPublications@lgirs.wa.gov.au

Further details of electrical licensing publications can be obtained by contacting:

Building and Energy
303 Sevenoaks Street
CANNINGTON WA 6107
Telephone: 1300 489 099
NRS: 13 36 77
Email: safety.comms@lgirs.wa.gov.au

Contents

Foreword

A code of practice applies to anyone who has a duty of care in the circumstances described in the code. In most cases, following an approved code of practice would achieve compliance with the health and safety duties in the WHS laws in relation to the subject matter of the code.

Like regulations, codes of practice deal with particular issues and do not cover all hazards or risks that may arise. The health and safety duties require duty holders to consider all risks associated with work, not only those for which regulations and codes of practice exist.

Codes of practice are admissible in court proceedings under the WHS Act and WHS General Regulations. Courts may regard a code of practice as evidence of what is known about a hazard, risk, risk assessment or risk control and may rely on the code in determining what is reasonably practicable in the circumstances to which the code of practice relates.

For further information, see the *Interpretive guideline: How to determine what is reasonably practicable to meet a health and safety duty*.

Compliance with the WHS laws may be achieved by following another method, such as a technical or an industry standard, if it provides an equivalent or higher standard of work health and safety (WHS) than the code.

An inspector may refer to an approved code of practice when issuing an improvement or prohibition notice.

Scope and application

This Code applies to all workplaces covered by the WHS Act and WHS Regulations where a person overboard may occur.

This Code is intended to be read by a person conducting a business or undertaking (PCBU). It provides practical guidance to PCBUs on how to manage health and safety risks associated with working in a marine or freshwater environment.

Under the WHS laws, a person can conduct a business or undertaking as an individual, a partnership, a company whether it is for profit or gain. The person conducting a business or undertaking is called a PCBU.

The duties in the WHS Act extend to all health and safety risks arising from the conduct of a business or undertaking and therefore this Code also includes information about other hazards which may exist that may contribute to risk.

How to use this code of practice

This Code includes references to the legal requirements under the WHS Act and WHS General Regulations. Such references are included for convenience only and should not be relied on in place of the full text of the legislation. The words ‘must’, ‘requires’ or ‘mandatory’ indicate a legal requirement exists that must be complied with. The word ‘should’ is used in this Code to indicate a recommended course of action, while ‘may’ is used to indicate an optional course of action.

The development of this code of practice

This Code is issued by the Work Health and Safety Commission (the Commission) under provisions of the WHS Act. The Commission comprise of representatives from employers, unions and government, as well as experts, and has the function of developing the WHS legislation and supporting guidance material and making recommendations to the Minister for their implementation. To fulfil their functions, the Commission is empowered to establish advisory inquiries and publish and disseminate information.

The Code has been developed through a tripartite consultative process, including input from the Advisory Committee for Public Sector Work Health and Safety Management. The views of employers and unions, along with those of government and experts, have been considered.

1. Introduction

Falling overboard from a commercial vessel operating in a marine or freshwater environment has led to the death of many workers. 'Person overboard' (POB) is a work health and safety issue requiring constant review to ensure the best possible measures are in place to prevent and respond to incidents.

People with responsibilities for the health and safety of workers and other persons on commercial vessels must ensure that there are:

- safe systems of work in place to prevent person overboard incidents
- effective emergency measures in place to minimise the risks of injury, harm or death if POB incidents occur, and
- systematic risk management processes in place to address potential hazards and risks in relation to POB.

Person overboard deaths of skippers and crew in Western Australia

Many workers in Western Australia have died as a result of accidentally going overboard from a commercial vessel. These deaths have included:

- a deck hand who drowned at sea when he left the wheelhouse of a crayfishing boat to urinate over the side. an alarm was raised when he had not returned after several minutes
- a passenger on a charter boat who fell overboard and was not identified as missing until the end of the trip
- a crew member who went missing while on watch with the skipper waking later to find him missing
- a deck hand who went missing after he was last seen at the rear of a fishing boat smoking a cigarette
- a farmer who fell from his dinghy in an aquaculture pond while checking aquaculture ponds alone
- a skipper/owner of a cray boat who drowned when he was washed overboard.

1.1 Work Health and Safety laws

The **laws** which govern work health and safety (WHS) for commercial vessels in Western Australia are:

- *Work Health and Safety Act 2020* (WHS Act)
- Work Health and Safety (General) Regulations 2022 (WHS Regulations)

The **WHS laws** use some terms which have a **specific legal meaning**. The words '**must'**, '**requires'** or '**mandatory'** means you have a **legal obligation** to do this thing. The word '**should'** means a recommended course of action, while '**may'** is an optional course of action.

More information on the topics covered in this section can be found in:

- the 'Glossary' at Appendix 1
- 'Legal duties: WHS Act' in Appendix 2
- 'Risk management: WHS Act' in Appendix 3
- '**Additional information'** on WorkSafe and other documents covering a range of topics is shown in **Appendix 4**.

You should look at the **WHS laws** if you are unsure about anything. Links to these are in **Appendix 4: Additional information**.

Duty of Care

Under the WHS laws, a person can conduct a business or undertaking as an individual, a partnership, a company whether it is for profit or gain or not. The person conducting a business or undertaking is called a **PCBU**.

The WHS Act also stipulates duties for officers, WHS service providers, workers and other persons such as visitors in the workplace.

This Code also has information for those who **design, manufacture, import, sell** and **install** '**plant'** and '**structures**'. Detail on these topics can be found at **Appendix 2 'Legal duties: WHS Act**.

All of the people mentioned above have '**duties'**. A **duty** is a **legal responsibility** under the WHS laws. Failing to comply with a duty can result in a fine or other legal action.

The most important duty for a PCBU is to protect the health and safety of workers who are directed, engaged or influenced by the PCBU and who work at the workplace. This can include contractors and sub-contractors. It also includes visitors to the site. The workplace can be an onshore yard, a co-op, a boat, or any place where work is carried out or is likely to be carried out.

The equivalent of a PCBU under maritime law is generally considered to be the 'beneficial owner' of the vessel. The Australian Maritime Safety Authority (AMSA) usually places responsibility for maritime law on the owner of the boat.

Commercial fishing can have a range of fishing arrangements including share fishing, and leasing boats, licences and quota.

A person can have more than one duty, and more than one person can have the same duty at the same time. **Duties are not transferable** to others. For example, the owner of the fishing or aquaculture operation will always hold a position of being a PCBU, but the legal duties of the PCBU will usually extend to the skipper if that person is not the owner. This is because the skipper has effective control of the 'workplace' (the boat) when work (such as commercial fishing) is being carried out.

A person on a vessel may be an '**officer**' under the WHS Act if they make, or participate in making, decisions, including financial decisions, that affect the whole, or a substantial part,

of the business or undertaking. Under the Act officers "*have a duty to exercise due diligence to ensure the PCBU complies with the WHS Act and WHS Regulations*". For more information, see *The health and safety duties of an officer: Interpretive guideline*.

Workers have a **duty** to take reasonable care for their own health and safety and that of other persons and to follow reasonable instructions.

Crew must be consulted on safety and health matters. The benefit of consulting crew and getting their involvement in the risk management process is that:

- they are most likely to know about risks with their work
- they may see things with fresh eyes and be able to come up with newer and safer ways of doing things
- it may result in crew members' ownership of the safety measures put in place.

Reasonably Practicable

Some aspects of the WHS Act are applied using the guiding term **'so far as is reasonably practicable'.** This allows for some discretion of what is possible in different workplaces and under different conditions. The concept of 'so far as is reasonably practicable' does not give anyone an excuse to disregard the laws, it simply acknowledges that sometimes not all measures are possible to apply in all workplaces.

For further information see the *How to determine what is reasonably practicable to meet a health and safety duty: Interpretive guideline*.

The WHS **laws** also have sections for remote and isolated work, confined spaces, working at heights, high risk work, diving and other activities.

More information on the topics covered in this section can be found in '**Legal duties: WHS Act'** in **Appendix 2**

You should look at the **WHS laws** if you are unsure about anything. Links to these are in **Appendix 4: Additional information**.

1.2 Maritime law and the WHS Act

AMSA is the regulator for Australian Domestic Commercial Vessels (DCV), WorkSafe is the regulator for WHS laws in Western Australia.

As a vessel operator you are required to satisfy both sets of legislation.

AMSA also manages distress signals transmitted by 'emergency position indicating locator beacons' (EPIRB) and 'personal locator beacons' (PLB). AMSA coordinate 'search and rescue' (SAR) for all emergencies at sea.

AMSA manages domestic maritime safety under the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* and details regulatory requirements mainly through issuing marine orders.

Fishing boats, passenger vessels (e.g. ferries and charter), aquaculture vessels, hire and drive vessels, offshore support vessels and tugs in Australia come under the category DCVs under this legislation. One of the main safety documents from AMSA is *Marine Order 504* –

Certificates of operation (MO 504). MO 504 outlines the safety management system requirements for DCVs, including:

- identifying hazards, assessing the risks and managing the risks
- making, maintaining and reviewing a 'risk register'
- providing first aid
- ensuring appropriate crewing levels
- providing induction, training and drills for emergency situations.

Marine Order 503 – Certificates of survey (MO 503) sets out the survey, design, construction and equipment standards that apply to DCV's. MO 503 requires DCV's to meet the applicable standards for safety equipment and EPIRB requirements that apply to the vessel's highest service category in accordance with the National Standard for Commercial Vessels Parts (NSCV) Parts C, F or G or, where permitted by MO503, older standards such as the Uniform Shipping Laws Code (USLC).

Requirements vary with factors such as the:

- vessel length
- distance offshore the vessel will operate in
- types of activities the vessel is involved in.

Survey requirements for safety and communications equipment can include the details for:

- the number and type of life jackets and life rafts to be carried
- the number and type of EPIRBS the boat must have
- requirements for radios and the qualifications for radio operators
- first aid kits and having trained first aid responders onboard
- compasses, plotters and radars
- distress flares
- navigation lights.

There are some overlaps between the AMSA legislation and the WHS legislation. For example, in MO504 the requirements for 'risk assessment', 'vessel induction, familiarisation, drills and training', 'review and revision' may meet the requirements of the following parts of the WHS regulations:

- Duty to identify hazards
- Managing risks to health and safety
- Maintenance of control measures
- Management of risks
- Review of control measures
- Provision of information, training and instruction
- Duty to provide first aid
- Duty to prepare, maintain and implement emergency plan
- Emergency and rescue procedures.

Vessel operators often get their safety information from AMSA rather than WorkSafe but it critical they comply with both AMSA's requirements and those of the WHS Act.

AMSA has developed a 'flipchart' showing the allocation of tasks all people onboard should take in various emergencies, including POB. This is titled '*Domestic Commercial Vessel Emergency Procedures Idea Generator*' and can be downloaded from the AMSA website.

The POB section of this flipchart is discussed in this Code in *Section 5: Response to POB*. The POB page from the flipchart is also shown in the WorkSafe publication *Person overboard:* Templates.

2. Managing hazards and risks

Keeping a workplace safe involves identifying '**hazards',** assessing the **'risks'** which these hazards may cause, and then managing the risks.

A hazard is a situation or thing that could 'harm' a person, including psychological harm. Examples may include noisy machinery such as in the engine room, machinery with moving parts such as trawl winches or pot tippers, electricity, bullying and violence or falling overboard.

A risk is the possibility that harm (death, injury or illness) might occur when someone or something is exposed to a hazard. For example, a trawl winch without a guard over its moving parts is a hazard. The risk is that someone may get their fingers trapped in the winch. The way the winch is set up (e.g. guarding) and the way a person is trained and instructed to operate the winch is the way a vessel PCBU manages that hazard to decrease the risk.

The level of the risk is calculated by looking at the **likelihood** something might happen, and the **consequences** if it did happen. Risk categories range from '**low**' to '**catastrophic**'

The deaths of crew and passengers in Western Australia from accidentally falling overboard have shown that more than one safety issue has played a role, both with the prevention of the fall in the first place and the emergency response. For example, with the death of a deck hand at night off a prawn trawler:

- there was an unsafe work practice, as the deckhand fell when he was trying to reach a lazy line by stepping onto a gunnel at night
- there was an inexperienced worker, the deck hand was a first timer and had been onboard less than a week
- there was inadequate training and supervision
- the search lights were not working
- the vessel failed to complete a standard Williamson Turn and get back close to the original track
- the deck hand was not wearing any inflatable personal flotation device (PFD), which may have helped him float and be visible in the water.

Hierarchy of Control Measures

The WHS laws outline ways to control risks to improve work health and safety. The most important of these is the '**hierarchy of control measures'**. This outlines the types of **control measures** from the highest level of protection and most reliable being '**eliminating the hazard',** and then stepping down through the other control measures for minimising the risk if it cannot be eliminated.

Figure 1 Hierarchy of control measures

Eliminate the Hazard

Eliminating the hazard removes the risk altogether which makes it the most effective type of control measure. For example, you can eliminate the risks which may result from having workers affected by alcohol by having a 'dry boat' with no alcohol allowed onboard.

Substitute the Hazard

Substituting one way of doing something for another, less risky way can also be an effective control measure. For example, you could use a cordless drill instead of an electric drill on a wet deck.

Isolate the Hazard from People

An **isolation** control measure separates the hazard from those in the workplace. For example, having 'no go' areas of the deck when certain activities are taking place.

Engineering Solutions

An **engineering** solution reduces risk by allowing the task to be done in a safer way. For example, having guards around moving parts of machinery such as winches.

Administrative Solutions

An **administrative** control measure is the development of a document or training which instructs how a task or process should be done. This could be a Safety Management System (SMS) including vessel induction for new crew and regular emergency drills at sea. Administrative controls can be less effective as a risk management tool as they rely on the person doing the task to follow the control measure properly.

Personal protective equipment (PPE)

PPE can minimise the risk to health and safety by protecting the body. Examples of PPE include hard hats, steel capped boots, gloves and personal floatation devices (PFD). PPE

can also be less effective as a risk management tool as it relies on the person selecting the right PPE and fitting or using it appropriately.

You must consider any new hazards and risks which might arise from a new control measure or a change in your operations. For example, using battery operated power tools will introduce the need for charging stations which may present a fire risk in the workplace which will need new control measures.

Under both the WHS Act and MO 504, control measures need to be reviewed and updated to make sure they stay effective.

A useful tool when assessing hazards and developing control measures is a '**risk assessment matrix'**. The matrix allows you to assess the hazard and determine how **severe** the risk is. This can guide you on which type of control measure is the most suitable and quickly they should be put in place.

Table 1 Risk matrix

		Likelihood				
		1	2	3	4	5
Consequence		**Rare** The event may occur in exceptional circumstances	**Unlikely** The event could occur sometimes	**Moderate** The event should occur sometimes	**Likely** The event will probably occur in most circumstances	**Almost Certain** The event is expected to occur in most circumstances
1	**Insignificant** No injuries or health issues	Low	Low	Low	Low	Moderate
2	**Minor** First aid treatment	Low	Low	Moderate	Moderate	High
3	**Moderate** Medical treatment. Possible LTI	Low	Moderate	High	High	Critical
4	**Major** Permanent disability or disease	Low	Moderate	High	Critical	Catastrophic
5	**Extreme** Death	Moderate	High	Critical	Catastrophic	Catastrophic

Risk rating:

Low risk	Acceptable risk and no further action required as long as the risk has been minimised as far as possible. Risk needs to be reviewed periodically.
Moderate risk	Tolerable with further action required to minimise risk. Risk needs to be reviewed periodically.
High risk	Tolerable with further action required to minimise risk. Risk needs to be reviewed continuously.
Critical risk	Unacceptable risk and further action required immediately to minimise risk
Catastrophic	Unacceptable risk and urgent action required to minimise risk

Risk Rating for this incident

LOW RISK	MODERATE RISK	HIGH RISK	CRITICAL RISK	CATASTROPHIC
Acceptable with periodic review	Tolerable with periodic review	Tolerable with continuous review	Intolerable	Intolerable

The matrix uses two main indicators, the **likelihood** something might happen, and the **consequences** if it did happen. Risk categories range from '**low**' to '**catastrophic**'.

Some of the higher risks outcomes such as 'critical' and 'catastrophic' might result in work stopping until the risk is controlled by a new management measure. The WHS laws allow for anyone in the workplace to 'stop the job' if they feel the risks are a threat to health and safety.

2.1. Risk register

The results of the risk assessment and management process can be recorded in a risk register. Establishing and maintaining a risk register is an important part of meeting the requirements of both the WHS Act and the Safety Management System as required by MO504. The following is an example of a risk register. Blank templates of this can be found in the WorkSafe publication *Person overboard:* Templates.

Table 2 Risk register

Before					After				
Activity	**Risk**	**Likelihood (without controls)**	**Consequence (without controls)**	**Risk rating**	**Controls**	**Likelihood**	**Consequence**	**Residual Risk Rating**	**Accept Yes / No**
Launching cray pots	Caught in pot line	*Moderate*	*Extreme*	*Critical*	• pot launching procedure • training and induction • lifejackets, sheath knife, locator beacon	*Moderate*	*Minor*	*Moderate*	Yes
General	Person overboard	*Moderate*	*Extreme*	*Critical*	• safety briefing • training and induction • emergency plan - POB procedures • lifejackets	*Moderate*	*Minor*	*Moderate*	Yes
General	Collision with another vessel	*Moderate*	*Extreme*	*Catastrophic*	• safety briefing • charter agreement • competency assessment • emergency plan • lifejackets	*Moderate*	*Minor*	*Moderate*	Yes

3. Emergency safety equipment and Procedures

Some emergency and safety equipment for your boat will be specified by AMSA. The legal survey requirements for emergency equipment will vary depending on the vessel size, crew numbers, activities, and range of operation. This information can be found on the AMSA website.

This section includes generic information with some equipment listed here possibly being above your survey requirements. PCBUs may want to consider incorporating some of this equipment for POB response, and the general safety of the crew and those onboard the boat.

The PCBU should, in conjunction with the vessel crew, develop, write down and practice emergency procedures for the specific operations on your vessel. Procedures need to include alarm systems, who does what when the alarm is sounded and what steps will be taken. A common emergency procedure in a POB situation is to perform a *'Williamson Turn'* to bring the boat back on to the track where the person fell from the boat. Another POB manoeuvre is the *'Anderson Turn'*.

These manoeuvres form part of the learnings for skippers training for the certificates of competency to be in charge of a vessel. Regularly practising these turns at sea with the crew as part of you POB emergency training is an important step to take.

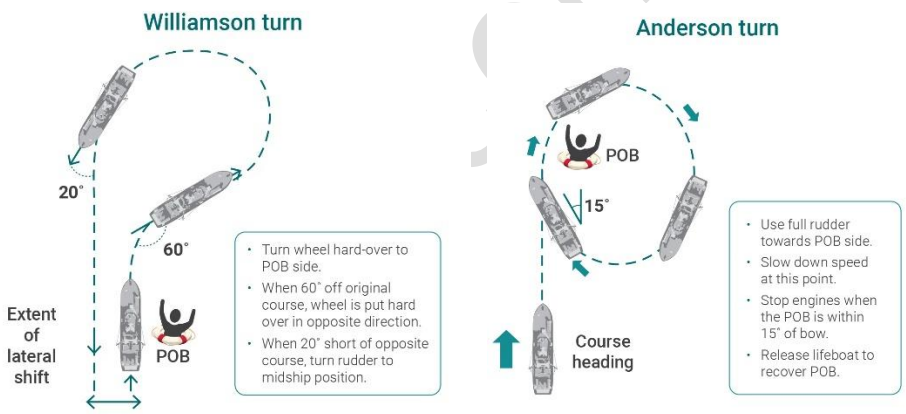


Figure 2 Emergency manoeuvres

3.1 Personal locator beacons

Personal locator beacons (PLB) are a small beacon which can be worn by those on the boat. They are easy to activate and can transmit on more than one frequency at the same time. PLBs will typically transmit on 121.5 MHz and 406 MHz, the channel used by EPIRBs for global search rescue signalling.

Some PLB can also automatically send a radio distress call providing GPS coordinates for vessels responding. PLB can also provide an automatic identification system (AIS) signal which is received on the plotters of nearby vessels giving them a waypoint to steam to and provide assistance and rescue.

IMPORTANT

PLBs are not a substitute for EPIRBs required for vessel survey requirements.

3.2 POB systems

There are a range of POB signalling systems which fall under the category of 'proximity alarms'. These work on a network generated on the boat and a receiver worn by all aboard. Anyone falling off the vessel will soon drop out of the network and the proximity alarm will be activated. Depending on the configuration of the system, one or all of the following can be programmed in:

- a 'dead man's switch' turns off the motor which is especially beneficial if the POB was someone on steaming watch alone
- a 'search and rescue transponder' (SART) alert is received on the plotter
- the vessel automatically performs a 'Williamson Turn'
- an automated radio message is transmitted from the vessel.

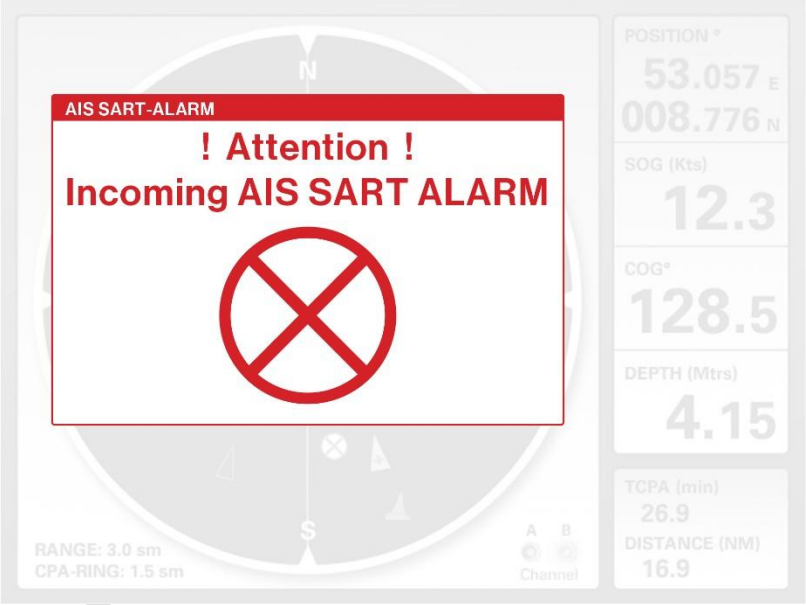


Figure 3 Incoming POB AIS message

IMPORTANT

POB alarm systems and satellite distress beacons must comply with the *Radiocommunications (Emergency Locating Devices) Class Licence 2006.* PLB operating on 406 MHz should comply with Australian and New Zealand Standard, *AS/NZS 4280.1: 2003 - 406 MHz satellite distress beacons: Part 2: Personal locator beacons (PLBs).*

3.3 Life jackets and buoys

The number and types of life jackets you must carry is determined by your vessel's highest service category as stated in your vessel's certificate of survey or non-survey permit issued by AMSA.

Previous industry workshops and surveys show crew raise a number of issues about wearing life jackets while working, such as they:

- are too hot
- restrict movement
- can get caught in vessel gear.

Another common response is that crew often believe they are strong swimmers and could easily swim to shore or back to the boat.

While these points may be true in some cases, a risk-based approach to wearing life jackets will show there are times and places for them to be worn, and for this to be mandatory under the vessel's SMS at the skipper's discretion. These may include:

- going onto the deck alone while the boat is steaming
- while on steaming watch alone
- in rough weather and with large waves occurring
- working near deck doors when hauling a longline
- working at heights on booms or rigging
- working in designated areas of the deck while some activities are being done such as having the trawl cod end overhead after winching up.

Many fishers who drowned after falling overboard were not wearing a life jacket. Studies from around the world have shown that survivability for people falling overboard increases to above 90% if they were wearing a life jacket, even in the cold waters such as the North Atlantic which are similar to Australia's sub-Antarctic waters.

Life jackets and PFD design has progressed significantly over time and can help lower some common complaints of wearing life jackets such as heat, restricting movement and getting tangled in gear.

Some of these newer PFDs are worn deflated and can be manually activated to inflate by the wearer. Others will self-inflate when immersed in water.

Some PFDs can be worn around the waist with the pouch at the back. This allows clearance from vessel gear and reduces heat and discomfort. Once in the water, the POB rolls out the PFD in the water and fits and inflates it.

Self-inflating PFDs will usually have a mouthpiece to enable the wearer to top up the jacket with air. The gas cartridge in a self-inflating PFD must be replaced if the vest has been inflated previously. It is important to maintain your lifejacket according to the manufacturer's instructions as well as undertaking regular checks of your lifejackets, including cartridges for corrosion and other defects. More information on life jackets can be found on the AMSA website.

The number and types of life buoys you must carry is determined by your vessel's highest service category as stated in your certificate of survey or non-survey permit issued by AMSA. It is usual for these stipulations to include features such as a light and a buoyant line.

There are systems to safely stow the buoyant line with the life buoy using weatherproof containers. These can be fitted with other emergency equipment as discussed in Section 3.4.

Figure 4 Life buoy with rope storage cannister

3.4 Light and smoke signals

There are a number of options for distress lights and smoke flares which can float and are activated manually or by immersion in water. These can be fitted to life buoys or deployed by themselves. When deployed without a line, the light or smoke signal provides the approximate location where a person fell overboard and the direction and speed they are likely to have floated. The smoke flare is used in daylight and the emergency light at night.

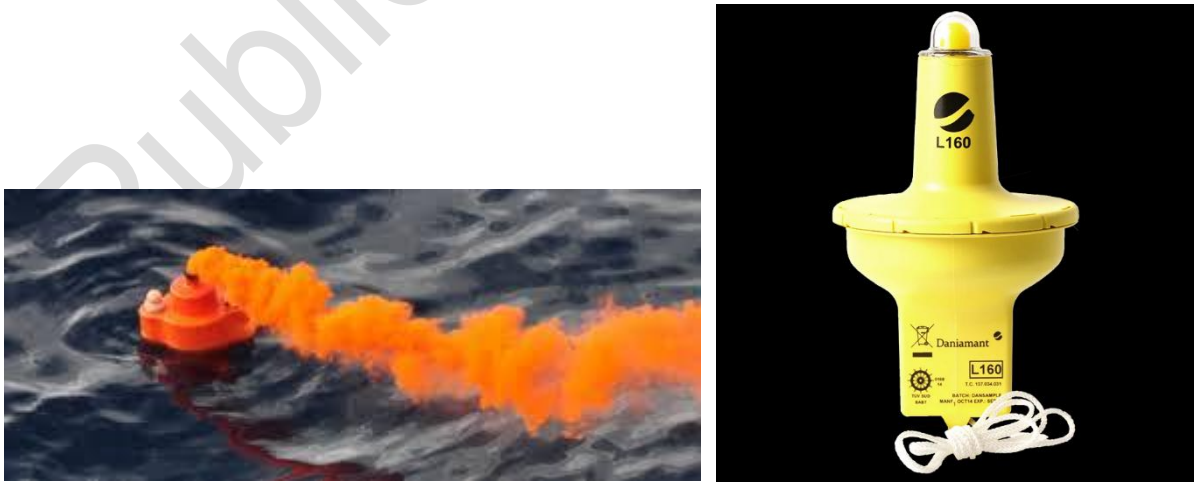


Figure 5 Floating smoke flare and strobe light

The fitting of these devices to life buoys is not always a requirement of the certificate of survey but will add value in locating and assisting the POB during an emergency.

3.5 Other equipment

Retrieval rescue frames

Retrieval rescue frames may be a useful addition to the boat's rescue equipment for retrieving the person who has fallen from the boat, especially if they are unconscious or injured.

One side of the frame is fixed to the boat with a long handle fitted to the other side. The net is manually placed into the water allowing the crew to recover exhausted, seriously injured or unconscious persons from the water by manoeuvring it under the casualty. From there the handle is pulled in by the deck crew safely bringing the POB onboard. In the case of a healthy person being in the water, the frame doubles as a climbing ladder allowing the POB to easily make their way on to the boat from the net.

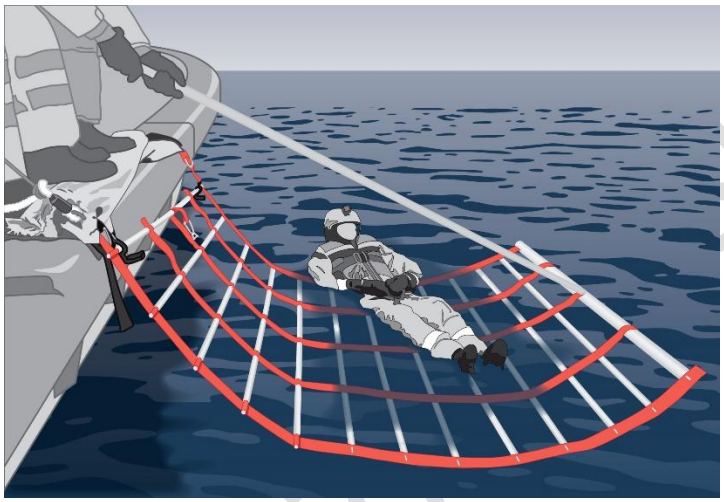


Figure 6 Retrieval frame

Rescue strops

Rescue strops are usually placed under the arms of a conscious POB and used to lift them back onto the boat. These may be useful on larger boats where the distance to water is greater. Rescue strops are also used in helicopter rescue situations.

Figure 7 Rescue strop

Emergency ladders

Emergency ladders are useful for bringing a POB onboard. A boat should have at least one designated retrieval point which has the necessary anchors and fittings for an emergency ladder or other retrieval devices which may be used. Rescue ladders are usually designed to be stowed efficiently and in a manner which limits the potential for damage during vessel operation.

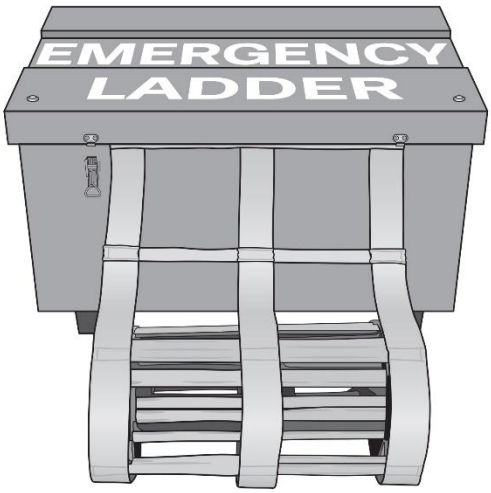


Figure 8 Emergency ladder

4. Preventing POB

4.1 Types of falls

The types of POB incidents on commercial vessels that have led to deaths of crew include:

- falls nobody sees, for example when working alone or on watch, or when on a break
- falls when working or being on deck, which other crew see as they happen.

The potential for both types of falls to occur, and a quick response to them, must be addressed as part of the risk management for vessel emergency planning.

4.2 Safe work practices

Important measures to ensure the safety and health of crew to prevent and respond to POB include:

- ensuring there is a safe system of work for all tasks so crew are not exposed to hazards
- ensuring there are adequate inductions, information, instruction and training on safe working practices provided to all crew. This includes training and drills on emergency procedures. This is especially important every time there is a new crew member joining the vessel
- checking the safe working order of vessel, machinery and equipment
- ensuring that day to day practices do not place crew at risk of falling overboard. This includes standing on bollards, hatches or other raised surfaces or using ladders close to the gunnels or bulwark
- ensuring there is adequate supervision according to each crew member's skills and experience
- consulting and cooperating with crew about safety onboard and the hazards and risks they need to be aware of
- implementing a procedure for reporting hazards, letting crew know about them, working with crew to address the hazard through the risk management process and retraining crew on the new procedures
- where it is not practical to avoid hazards at the workplace, providing crew with adequate personal protective clothing and equipment.

4.3 Induction, training and drills

Training, education and providing information is mandatory under WHS law. Safe work systems should be created in writing, stored, reviewed and regularly updated. Workers must be consulted throughout these processes, and contractors and visitors must be made aware of the safety considerations which affect them.

AMSA MO 504 stipulates that crew should receive an induction and emergency training ‘as soon as practicable’ after joining the vessel and before commencing duties. This includes practising POB emergency drills. Drills are designed specifically to test the ability of each crew member to understand their role and respond rapidly and efficiently in an emergency. Drills are to be performed as often as indicated by the risk assessment of the boat.

Training and induction must be reported and kept for 5 years (i.e. entered in the vessel log). The record should include the date of training, the name and signature of each person getting the training and that of the master.

Drills and training should be reviewed regularly or when:

- the nature of the operations and risk profile of the boat changes
- in the event of a maritime incident such as a POB occurring.

The nomination of individual duties and roles in a POB emergency may need to consider individual characteristics for each crew such as hearing and eyesight, English language competency, the ability to swim or physical strength to distribute lifebuoys, handle flares or retrieve the POB.

5. Responding to POB

With some POB deaths in Western Australia, nobody has known immediately that the crew member has fallen overboard. These deaths have included a crew member on watch found missing later by the skipper when he awoke, and a deckhand who went missing after he was last seen smoking at the back of the boat.

5.1 Raise the alarm

A procedure or system to immediately alert the skipper and crew that a person has fallen overboard is an important part of a vessel's emergency system to ensure falls overboard are quickly detected and the person only remains in the water for a short period of time.

The longer a person is in the water the harder it will be to locate them, affecting their chances for survival.

5.2 Individual roles

If the POB alert is from another crew member seeing them fall that crew member should be instructed to keep the POB in sight.

The immediate task for the skipper, after receiving the alarm, is to mark a waypoint on the navigation plotter. Depending on the time of day, a floating light or smoke flare should be thrown overboard. The light or flare should not be attached to the boat. The partly submerged light or flare will drift in the water along a similar track to the POB.

From this point, the POB emergency procedure is initiated. The components of the emergency procedure will vary from boat to boat.

A good practice is to place a crew member on the roof of the boat suitably. This person should be wearing a life jacket or PFD and, where necessary for safe work, be wearing a fall restraint harness. If the POB is not spotted, that crew member should keep their eyes on any free-floating lifebuoys, light or smoke beacons which have been deployed.

If at night another person should be tasked to deploy a strong deck torch, train the light on the POB if they can be located and keep the POB in sight.

Emergency services and boats in the vicinity should be alerted and the POB coordinates transmitted to them.

All gear and equipment in the water must be retrieved immediately and any manoeuvres necessary to get back to the waypoint put in place.

Depending on the boat configuration, engine noise may need to be lowered to assist in hearing calls from the POB. This may include putting the boat into neutral, temporarily shutting off engine room fans or turning off the motor itself.

If the POB is spotted a tethered life buoy can be thrown to them.

Tasks allocated to other crew may include retrieving a first aid kit and lowering a portable ladder at the assigned retrieval point.

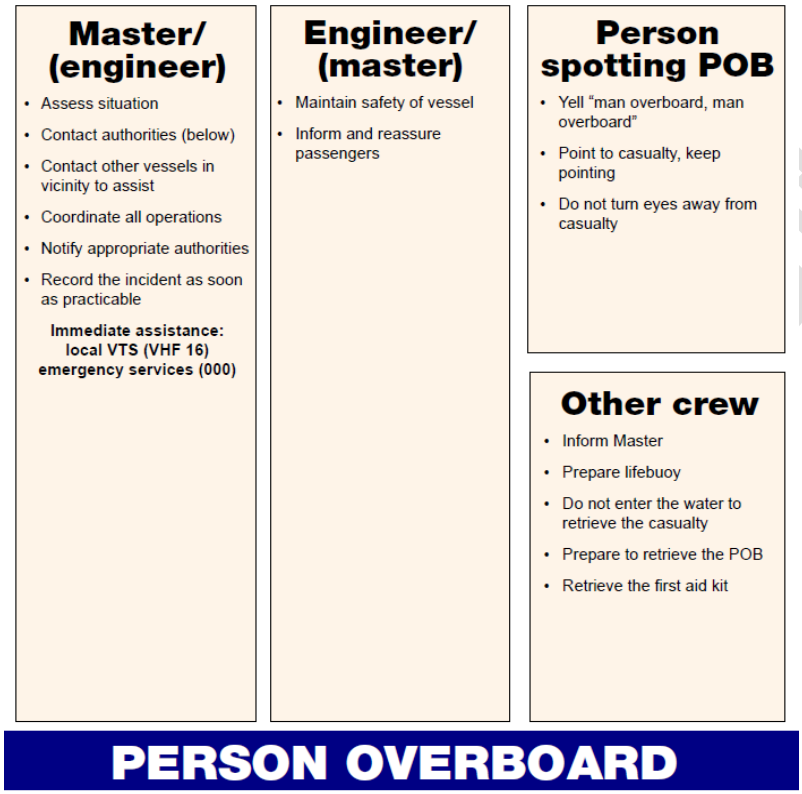
IMPORTANT

No crew should enter the water to assist retrieving the POB.

The skipper or a designated crew member must maintain the safety of the vessel at all times.

The following diagram is taken from AMSA's 'Domestic Commercial Vessel Emergency Procedures Idea Generator' which is available for download from the AMSA website. This may be used to tailor a flip chart book specific to your boat.

Table 3 Example POB response poster



Other emergency templates in the book include:

- Fire
- Smoke – no fire
- Collision or grounding
- Flood
- Abandon ship
- Pollution
- Passenger/crew injury
- Incident reporting.

5.3 Mandatory reporting

All POB incidents must be reported to AMSA and the Western Australian Department of Transport (DoT). AMSA must be notified of the POB incident as soon as possible after becoming aware of a marine incident with a separate detailed report to also be submitted within 72 hours. There are online forms for both notification and reporting to AMSA.

DoT also have an online form for reporting POB.

A POB incident that results in death or serious injury will also need to be reported to WorkSafe. Types of injuries which need to be reported to WorkSafe include an injury which requires immediate inpatient treatment at a hospital or urgent transfer from a remote location, or treatment for:

- amputation
- serious head or eye injury
- serious burns
- separation of skin from underlying tissue (degloving)
- spinal injury
- loss of a bodily function
- serious lacerations
- an injury which is likely to cause a person not to be able to work for 10 days in the opinion of a doctor.

Information on reporting to WorkSafe can be found on the WorkSafe website.

All person overboard incidents, even minor ones, must be reported.

A POB incident triggers a review of the vessel's safety procedures in the SMS under MO 504, and of control measures under WHS Regulations

Appendix 1 — Glossary

Term	Description
Competent person	A person who has acquired through training, qualification or experience the knowledge and skills to carry out the task.
Duty holder	Any person who owes a work health and safety duty under the WHS Act including a person conducting a business or undertaking, a designer, manufacturer, importer, supplier, installer of products or plant used at work (upstream duty holder), officer or a worker.
Hazard	A situation or thing that has the potential to harm a person. Hazards at work may include: noisy machinery, a moving forklift, chemicals, electricity, working at heights, a repetitive job, bullying and violence at the workplace.
May	'May' indicates an optional course of action.
Must	'Must' indicates a legal requirement exists that must be complied with.
Officer	An officer under the WHS Act includes: an officer under section 9 of the *Corporations Act 2001* (Cth) an officer of the Crown within the meaning of section 247 of the WHS Act, and an officer of a public authority within the meaning of section 252 of the WHS Act. A partner in a partnership or an elected member of a local authority is not an officer while acting in that capacity.
Person conducting a business or undertaking (PCBU)	PCBU is an umbrella concept which intends to capture all types of working arrangements or relationships. A PCBU includes a: company unincorporated body or association, and sole trader or self-employed person. Individuals who are in a partnership that is conducting a business will individually and collectively be a PCBU. A volunteer association (defined under the WHS Act, see below) or elected members of a local authority will not be a PCBU.
Plant	Plant includes machinery, equipment, appliance, container, implement and tool components or anything fitted or connected to those things. Plant includes items as diverse as lifts, cranes, computers, machinery, conveyors, forklifts, vehicles, power tools, quad bikes, mobile plant and amusement devices. Plant that relies exclusively on manual power for its operation and is designed to be primarily supported by hand, for example a screwdriver, is not covered by the WHS Regulations. The

Term	Description
	general duty of care under the WHS Act applies to this type of plant. Certain kinds of plant, for example forklifts, cranes and some pressure equipment, require a licence from the regulator to operate and some high-risk plant must also be registered with the regulator
Risk	The possibility harm (death, injury or illness) might occur when exposed to a hazard.
Risk control	Taking action to eliminate health and safety risks so far as is reasonably practicable, and if that is not possible, minimising the risks so far as is reasonably practicable. Eliminating a hazard will also eliminate any risks associated with that hazard.
Should	'Should' indicates a recommended course of action.
Worker	Any person who carries out work for a person conducting a business or undertaking, including work as an employee, contractor or subcontractor (or their employee), self-employed person, outworker, apprentice or trainee, work experience student, employee of a labour hire company placed with a 'host employer' or a volunteer.
Workplace	Any place where work is carried out for a business or undertaking and includes any place where a worker goes, or is likely to be, while at work. This may include offices, factories, shops, construction sites, vehicles, ships, aircraft or other mobile structures on land or water.

Appendix 2 — Legal duties: WHS Act

Who has health and safety duties in relation to person overboard?

Duty holders who have a role in managing the risks at sea include:

- persons conducting a business or undertaking (PCBUs)
- designers, manufacturers, importers, suppliers and installers of plant, substances or structures, and
- officers.

Workers and other persons at the workplace also have duties under the WHS Act, such as the duty to take reasonable care for their own health and safety at the workplace.

A person can have more than one duty and more than one person can have the same duty at the same time.

Early consultation and identification of risks can allow for more options to eliminate or minimise risks and reduce the associated costs.

Person conducting a business or undertaking

WHS Act section 19

Primary duty of care

A PCBU must eliminate risks at sea, or if that is not reasonably practicable, minimise the risks so far as is reasonably practicable.

The WHS Regulations include more specific requirements for PCBUs to manage the risks of safety in the workplace including the provision of training and information, and the provision of personal protective equipment.

PCBUs have a duty to consult workers about work health and safety and may also have duties to consult, cooperate and coordinate with other duty holders.

Designers, manufacturers, importers and suppliers of plant, substances or structures

WHS Act Part 2 Division 3

Further duties of persons conducting businesses or undertakings

Designers, manufacturers, importers and suppliers of plant or substances must ensure, so far as is reasonably practicable, the plant or substance they design, manufacture, import or supply is without risks to health and safety. This duty includes carrying out testing and analysis as well as providing specific information about the plant or substance.

To assist in meeting these duties, the WHS Regulations require:

- manufacturers to consult with designers of the plant
- importers to consult with designers and manufacturers of plant, and
- the person who commissions construction work to consult with the designer of the structure.

Officers

WHS Act section 27

Duty of officers

Officers, for example company directors, have a duty to exercise due diligence to ensure the PCBU complies with the WHS Act and WHS Regulations. This includes taking reasonable steps to ensure the business or undertaking has and uses appropriate resources and processes to eliminate or minimise risks from hazards. Further information on who is an officer and their duties is available in the *Health and safety duties of an officer: Interpretive guideline*.

WHS service provider

WHS Act s. 26A

Duty of persons conducting businesses or undertakings that provide services relating to work health and safety.

Any WHS service provider must, so far as is reasonably practicable, ensure that the WHS services are provided so that any relevant use of them will not put at risk the health and safety of persons who are at the workplace.

For further information, see the *How to determine what is reasonably practicable to meet a health and safety duty: Interpretive guideline*.

Workers

WHS Act section 28

Duties of workers

Workers have a duty to take reasonable care for their own health and safety and to not adversely affect the health and safety of other persons. Workers must comply with reasonable instructions, as far as they are reasonably able, and cooperate with reasonable health and safety policies or procedures that have been notified to workers. If PPE is provided by the business or undertaking, the worker must so far as they are reasonably able, use or wear it in accordance with the information and instruction and training provided.

Other persons in the workplace

WHS Act section 29

Duties of other persons at the workplace

Other persons at the workplace, like visitors, must take reasonable care for their own health and safety and must take care not to adversely affect other people's health and safety. They must comply, so far as they are reasonably able, with reasonable instructions given by the PCBU to allow that person to comply with the WHS Act.

What is involved in managing person overboard?

WHS Regulations Part 3.1

Managing Risks to Health and Safety

This Code provides guidance on how to manage the risks associated with person overboard (POB) in the workplace using the following systematic process:

- Identify hazards—find out what could cause harm.
- Assess risks, if necessary—understand the nature of the harm that could be caused by the hazard, how serious the harm could be and the likelihood of it happening. This step may not be necessary if you are dealing with a known risk with known controls.
  - Eliminate risks so far as is reasonably practicable
- Control risks—if it is not reasonably practicable to eliminate the risk, implement the most effective control measures that are reasonably practicable in the circumstances in accordance with the hierarchy of control measures, and ensure they remain effective over time.
- Review control measures to ensure they are working as planned.

Further guidance on the risk management process is available in the *How to manage work health and safety risks: Code of practice*.

Consulting workers

WHS Act section 47

Duty to consult workers

A PCBU must consult, so far as is reasonably practicable, with workers who carry out work for the business or undertaking and who are (or are likely to be) directly affected by a health and safety matter.

This duty to consult is based on the recognition that worker input and participation improves decision-making about health and safety matters and assists in reducing work-related injuries and disease.

The broad definition of a 'worker' under the WHS Act means a PCBU must consult, so far as is reasonably practicable, with employees, contractors and subcontractors and their employees, on-hire workers, outworkers, apprentices, trainees, work experience students, volunteers and other people who are working for the PCBU and who are, or are likely to be, directly affected by a health and safety matter.

Workers are entitled to take part in consultations and to be represented in consultations by a health and safety representative who has been elected to represent their work group.

Health and safety representatives must have access to relevant information such as noise exposure and emission data and potential control options. If you have a health and safety committee, you should engage the committee in the process as well.

Consulting, cooperating and coordinating activities with other duty holders

WHS Act section 46

Duty to consult with other duty holders

The WHS Act requires a PCBU to consult, cooperate and coordinate activities with all other persons who have a work health or safety duty in relation to the same matter, so far as is reasonably practicable.

There is often more than one business or undertaking involved in managing the risks of hazardous noise, who may each have responsibility for the same health and safety matters, either because they are involved in the same activities or share the same workplace.

In these situations, each duty holder should exchange information to find out who is doing what and work together in a cooperative and coordinated way so risks are eliminated or minimised so far as is reasonably practicable.

Further guidance on consultation is available in the *Work health and safety consultation, cooperation and coordination*: Code of practice.

Information, training, instruction and supervision

WHS Act section 19

Primary duty of care

WHS Regulation 39

Provision of information, training and instruction

The WHS Act requires that a PCBU ensure, so far as reasonably practicable, the provision of any information, training, instruction or supervision that is necessary to protect all persons from risks to their health and safety arising from work carried out as part of the conduct of the business or undertaking.

The PCBU must ensure that information, training or instruction provided to a worker is suitable and adequate having regard to:

- the nature of the work carried out by the worker
- the nature of the risks associated with the work at the time of the information, training and instruction, and
- the control measures implemented.

The PCBU must also ensure, so far as is reasonably practicable, that the information, training and instruction are provided in a way that is readily understandable for the person to whom it is provided.

Workers must be trained and have the appropriate skills to carry out a particular task safely. Training should be provided to workers by a competent person.

In addition to the PCBU's general duty to provide any supervision necessary to protect all persons from work health and safety risks, the WHS Regulations also impose specific duties to provide supervision necessary to protect a worker from risks to health and safety in certain circumstances, for example where the worker:

- uses, generates or handles hazardous chemicals
- operates, tests, maintains, repairs or decommissions a storage or handling system for a hazardous chemical
- is likely to be exposed to a hazardous chemical.

Personal protective equipment (PPE)

WHS Regulation 44

Provision to workers and use of personal protective equipment

If PPE is to be used at the workplace, as the PCBU you must ensure, so far as is reasonably practicable, the equipment is selected to minimise risks to health and safety, including by ensuring that the equipment is:

- suitable for the nature of the work and any hazard associated with the work
- suitable size and fit and reasonably comfortable for the worker who is to use or wear it
- maintained, repaired and replaced so that it continues to minimise risk to the worker who uses it, including by ensuring that the equipment is clean and hygienic, and in good working order.

If you direct the carrying out of work, you must provide the worker with information, training and instruction in the proper use and wearing of PPE, and the storage and maintenance of PPE.

A worker must, so far as reasonably able, use or wear the PPE in accordance with any information, training or reasonable instruction and must not intentionally misuse or damage the equipment.

Appendix 3 — Risk management: WHS Act

The risk management process

Identifying the hazards

The first step in the risk management process is to identify all hazards associated with service at sea. This involves finding things and situations which could potentially cause harm to people. Hazards generally arise from the following aspects of work and their interaction:

- physical work environment
- equipment, materials and substances used
- work tasks and how they are performed
- work design and management.

Hazards may be identified by looking at the workplace and how work is carried out. It is also useful to talk to workers, manufacturers, suppliers and health and safety specialists and review relevant information, records and incident reports.

Inspect the workplace

Regularly walking around the workplace, talking to workers and observing how things are done can help you identify hazards that may expose workers to risk. As the PCBU, you should take immediate action to control risks where this is possible, for example inspect PFD regularly.

Review available information

Designers, manufacturers, importers and suppliers have duties to provide information about the noise emission of plant and you should obtain this information from them.

Information and advice about hazards and risks relevant to particular industries and work activities is also available from regulators, industry associations, unions, technical specialists and safety consultants.

Assessing the risks

When should a risk assessment be conducted?

A risk assessment involves considering what could happen if someone is exposed to a hazard and the likelihood of it happening. A risk assessment can help you determine:

- how severe a risk is
- whether any existing control measures are effective
- what action you should take to control the risk
- how urgently the action needs to be taken.

Hazards have the potential to cause different types and severities of harm, ranging from minor discomfort to a serious injury or death.

Many hazards and their associated risks are well known and have well established and accepted control measures. If after identifying a hazard you already know the risk and how to control it effectively, you may simply implement the controls.

Controlling the risks

Hierarchy of control measures

The WHS Regulations require duty holders to work through the hierarchy of control measures when managing certain risks; however, the hierarchy can be applied to any risk. The hierarchy ranks control measures from the highest level of protection and reliability to the lowest. Further guidance on the risk management process and the hierarchy of control measures is in the *How to manage work health and safety risks*: Code of practice.

Eliminating the risk

As the person conducting the business or undertaking (PCBU), you must always aim to **eliminate the risk**. The most effective control measure is to eliminate the hazard.

If eliminating the hazards and associated risks is not reasonably practicable, you must minimise the risk by one or more of the following:

- **Substitution**—minimise the risk by substituting or replacing a hazard or hazardous work practice with something that gives rise to a lesser risk. For example, changing work practices and not allocating tasks which result in having workers alone on the deck
- **Isolation**—minimise the risk by isolating or separating the hazard or hazardous work practice from any person exposed to it. For example, guarding machinery and plant
- **Engineering controls**—engineering controls are physical control measures to minimise risk. For example, higher rails on the gunnels.

If risk remains, it must be minimised by implementing **administrative controls**, so far as is reasonably practicable. Any remaining risk must be minimised with suitable **personal protective equipment (PPE).**

Administrative control measures and PPE do not control the hazard at the source. They rely on human behaviour and supervision and used on their own tend to be the least effective in minimising risks.

Maintaining and reviewing control measures

Control measures must be maintained so they remain fit for purpose, suitable for the nature and duration of work and be installed, set up and used correctly.

The control measures put in place to protect health and safety should be regularly reviewed to make sure they are effective. If the control measure is not working effectively it must be revised to ensure it is effective in controlling the risk.

As the PCBU, you must review and as necessary revise control measures so as to maintain, so far as is reasonably practicable, a work environment that is without risks to health or safety. For example:

- when the control measure does not control the risk so far as is reasonably practicable
- before a change at the workplace that is likely to give rise to a new or different risk to health and safety that the measure may not effectively control
- a new or relevant hazard or risk is identified
- the results of consultation indicate a review is necessary, or
  - a health and safety representative requests a review if that person reasonably believes that:
  - a circumstance in any of the above points affects or may affect the health and safety of a member of the work group represented by the health and safety representative

– the control measure has not been adequately reviewed in response to the circumstance.

Common review methods include workplace inspection, consultation, testing and analysing records and data.

You can use the same methods as in the initial hazard identification step to check control measures. You must also consult your workers and their health and safety representatives and consider the following:

- Are the control measures working effectively in both their design and operation?
- How accurate is the risk assessment process?
- Have new work methods or new plant made the work safer?
- Have instruction and training provided to workers been successful?
- Have new requirements or information indicated that current controls are no longer the most effective?
- Is an alteration planned to any structure, plant or process that is likely to result in a worker being exposed?

If problems are found, go back through the risk management steps, review your information and make further decisions about risk control.

Appendix 4 — Additional information

Legislation

Work Health and Safety Act 2020

Work Health and Safety (General) Regulations 2022

Overview documents

Overview of the *Work Health and Safety Act 2020*

Overview of the Work Health and Safety (General) Regulations 2022

WorkSafe Interpretive Guidelines

How to determine what is reasonably practicable to meet a health and safety duty

The health and safety duties of an officer: Interpretive guideline.

Incident notification

Relevant Work Health and Safety Commission codes of practice

Confined spaces

Managing the risk of falls at workplaces

First aid in the workplace

Hazardous manual tasks

POB Templates and checklists

Link to be added following consultation

Australian Maritime Safety Authority

Emergency beacons

Life jackets