

Safety Guidelines for commercial swimming operations

This guideline supports operators of commercial vessels involved in swimming operations to develop safety management plans



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1. Introduction

1.1 Purpose

This guidance provides information for operators of commercial vessels involved in swimming operations, to assist them with the development and implementation of safety systems and to deliver their activities safely. They have been developed with input from operators and associated professionals.

Good safety practice consists of:

- operating to an acceptable safety standard
- complying with applicable legislation
- continually improving safety systems, including keeping up to date with current practice.

This guidance sets out recommended methods of achieving components of what Maritime New Zealand (MNZ) considers to be an acceptable safety standard. Unless otherwise expressly stated in these guidelines, MNZ expects to see these methods, or comparable methods that can be shown to produce the same safety outcomes, reflected in an operator's Maritime Transport Operator Plan (MTOP) developed under Maritime Rule Part 19. Consistency with this guidance will be assessed for the issue of a Maritime Transport Operator Certificate by considering whether an operator has implemented the specific recommendations or has developed an alternative approach that the Director of Maritime New Zealand (the Director) considers is likely to produce an equivalent outcome.

Operators should note, however, that this guidance is of a general nature and does not cover all possible things that MNZ expects to see in any particular safety system. Safety systems will be assessed as a whole, taking into account all relevant issues, including the implementation of this guidance material.

Disclaimer

This guidance provides information and explanations about the requirements set out in the maritime rules, but it is not a substitute for the rules themselves, which are the law. The maritime rules can be found at:

[maritimenz.govt.nz/rules](https://www.maritimenz.govt.nz/rules)

This guidance is intended to provide activity-specific safety information for operators of commercial vessels involved in swimming operations and operate alongside MNZ's health and safety guidance for work on board vessels, and where vessels are a place of work. This can be found on our resources page:

www.maritimenz.govt.nz/hswa

1. Overview (continued)

1.2 Intended audience

This guidance is intended for all operators of commercial vessels involved in swimming operations. This includes, for example, operators of commercial vessels involved in swimming with marine mammals; recreational swimming from a commercial vessel, including in a net; or entering the water from a commercial vessel to view fish, a reef or wreck, or to spear fish or collect shellfish.

In a broad sense this guidance covers information that is appropriate for operators involved in recreational SCUBA diving, however SCUBA activities are covered under the Health and Safety at Work (Adventure Activities) Regulations 2016. Guidance for operators who conduct SCUBA diving can be found on Support Adventure's website on the Good Practice page:

www.supportadventure.co.nz

1.3 Relationship to legislative requirements

As an operator of a commercial vessel involved in swimming operations, you have obligations under legislation such as the Maritime Transport Act 1994 (MTA), Maritime Rules, and the Health and Safety at Work Act 2015 (HSWA). Operators should make themselves especially familiar with the requirements of this legislation.

In general, the MTA and the rules made under that Act focus on vessel-related safety, while HSWA focuses on the safety of people at work. However, there is a degree of overlap, and Maritime Rule Part 19 focuses on whole maritime transport operations.

Maritime Rules and Marine Protection Rules are legal tools made by the Minister of Transport under the MTA. While the MTA specifies broad principles of maritime law, the rules contain detailed technical standards, requirements and procedures.

In addition, HSWA provides for the safety of people in the workplace, including by requiring persons conducting a business or undertaking (PCBUs; including employers and others) to take all practicable steps to ensure that no person is harmed in a place of work or through its activities. Vessels involved in commercial swimming operations are places of work. All practicable steps, in this context, will depend on the specific circumstances of the operation's activities. Officers (e.g. company directors), workers and others also have duties under HSWA.

1.4 Maritime rules

Nothing in these guidelines releases operators from their responsibility to meet their full obligations under the law and to ensure that their operations are managed safely.

Maritime Rule Part 19.42(1)(b) states that:

A maritime transport operator must develop and document a maritime transport operator safety system in the Maritime Transport Operator Plan that is consistent with safety guidelines and other safety information provided by the Director of Maritime New Zealand and best practice information contained in relevant industry codes of practice.

1. Overview (continued)

This guidance is provided by the Director. For this reason, operators operating under Rule Part 19 will need to ensure that their safety system is consistent with the information presented here. For operators operating under a deemed Maritime Transport Operator Certificate (see section 2.1), compliance with this guidance is voluntary, but operators are strongly encouraged to give this guidance full consideration.

1.5 Health and Safety at Work Act 2015 (HSWA)

HSWA places a duty of care on a person conducting a business or undertaking (PCBU) to ensure, as far as is reasonably practicable, the health and safety of its own workers (including employees and others, e.g. contractors), and any workers that it influences or directs. The PCBU must also ensure that other people who could be put at risk, such as customers and visitors are not put at risk by its work.

HSWA requires you to ensure that your workers are adequately informed, trained and supervised to perform their duties without exposing people to health and safety risks arising from the work carried out. HSWA further requires PCBUs to take a coordinated approach to the management of hazards, including identifying and assessing the significance of hazards, as well as implementing management strategies and processes that either eliminate, isolate or minimise hazards. Hazards in this case are all factors that have the potential to cause harm to people.

1.6 Health and Safety at Work (Adventure Activities) Regulations 2016

Commercial vessels involved with swimming operations are not covered by the requirements of the Health and Safety at Work (Adventure Activities) Regulations 2016. This is because they are covered by a maritime document (see clause 4(2)(a)).

However, there may be aspects of your operation that are covered by the Adventure Activities Regulations or other legislation, and you should ensure that you are aware of and comply with any legal requirements that apply. More information about adventure activities can be found on the WorkSafe NZ website:

<https://www.worksafe.govt.nz/>

1.7 Other legislation relevant to your operation

This guidance is developed solely for the safety of people and does not replace or discharge operators' broader responsibilities under legislation managed by other agencies such as the Department of Conservation and regional councils.

For example, matters relating to marine mammal welfare are managed by the Department of Conservation under the Marine Mammals Protection Act 1978 and the Marine Mammals Protection Regulations 1992. Permits are issued pursuant to these regulations, and, where appropriate, separate codes of practice are developed specifically for the management of marine mammal welfare. For more information on permits required under the Marine Mammals Protection Regulations, go to the Department of Conservation website at www.doc.govt.nz and search for 'permits'.

Disclaimer

Relevant legislation, including the Maritime Transport Act 1994, Maritime Rules and the Health and Safety at Work Act 2015, are amended from time to time and we intend to update these safety guidelines to reflect such amendments if necessary. However, the onus is on operators to check that they are operating to the latest Maritime Rules and other legislation and they should not rely on these guidelines for currency. The reader should check Maritime New Zealand's website (maritimenz.govt.nz – search for 'guidelines') to ensure they have the most current version of these guidelines.

2. Minimum operating requirements

It is your responsibility to ensure that your Maritime Transport Operator Plan (MTOP) is up to date and appropriate for your operation. You must also ensure that all the vessels in your operation are safe.

2.1 Safety management system

No person may operate a commercial vessel without a valid Maritime Transport Operator Certificate. The Maritime Transport Operator Certificate is a maritime document for the purposes of the MTA. The Director is responsible for assessing an operator's MTOP in accordance with the process outlined in Maritime Rule Part 19.

2.2 Certificate of survey

All commercial vessels involved in your operation must have a valid certificate of survey in force at all times, applying to the vessel and its equipment in accordance with Maritime Rule 44.41.

2.3 Audits

The Maritime Operator Safety System (MOSS) audits look at how the operation is performing against the MTOP under the Maritime Transport Operator Certificate. These audits will determine whether the plan is:

- being implemented effectively
- suitable to achieve the safety management system objectives
- compliant with the applicable requirements of Maritime Rule Parts 19 and 44.

More information about MOSS and MOSS audits is available here:

maritimenz.govt.nz/MOSS

3. General harm prevention

As well as being aware of specific hazards and having effective safety systems to manage them, there are a range of general steps that can be taken to reduce risks during operations where swimmers are involved.

Maritime transport operators have duties under both maritime law and health and safety law. They must meet their responsibilities under both sets of laws. MOSS is based on Maritime Rules made under the MTA and requires operators document and operate to a safety plan. Other aspects of harm prevention are covered under the HSWA. MNZ's guidance on HSWA and the associated regulations for work on board vessels, and where vessels are a place of work, can be found in 'A Guide for Mariners' on our resources page:

www.maritimenz.govt.nz/hswa

3.1 Operating areas

Commercial vessels must operate within the operating limits assigned to them in accordance with Maritime Rule Part 20 (Operating Limits). In general this is likely to be within inshore limits.

3.2 General operating restrictions

Operators should have clear parameters and procedures in the operation's safety system to identify when operations will cease due to increased risk to passengers from any external influences, such as dangerous sea or lake conditions.

3.3 Fitness to take part in an operation

A screening process should be in place to ensure that skippers, crew members, other staff and passengers are mentally and physically fit to undertake their duties. The process should be sufficient to ensure that skippers, crew members, other staff and passengers do not participate in the operation when, in the opinion of the operator, they are impaired by fatigue, medical conditions, frailty or by the consumption of alcohol or drugs to a degree that they may be a risk to the safety of themselves or passengers. Before the passengers begin the trip:

- check that they have provided the information you require for your records
- ask if they are confident in water
- check that they are not impaired by drugs or alcohol
- check that their age and physical ability is suitable for the trip.

3. General harm prevention (continued)

3.4 Safety briefings and information

Clear and comprehensive briefings and safety information should be provided to passengers and swimmers both in relation to the trip and the swimming. Ensure that every passenger is told verbally of the risk(s) and if the passenger is a minor, then a responsible adult guardian should be told. This should include:

- verbal briefing at the start of the trip (and at subsequent passenger pick-up points, if any), with relevant parts repeated immediately before each swim
- written material, stylised visual displays, and clear and comprehensive safety signage in languages or pictorial forms designed to be understood by as many passengers as reasonably possible.

3.5 Equipment

All equipment should be fit for purpose (including suitable for the conditions).

All snorkel equipment, including wetsuits and buoyancy aids, should be fitted, inspected, maintained, replaced and used in accordance with the manufacturers' specifications, or to a higher safety standard if it is necessary to maintain safety.

No equipment should be used by any person if the operator knows or suspects the equipment is unsafe. An example of unsafe equipment is when equipment may have been weakened by ultraviolet light or damaged, or is ill fitting or incorrectly sized for the user.

All equipment should be listed in the operation's maintenance plan to ensure the equipment's condition is routinely inspected, and any repairs or replacement of equipment should be recorded.

3.6 Emergency response plans and procedures

Appropriate emergency response plans and procedures should be in place for emergency situations that may arise, even if these emergencies are unlikely to occur. All crew should be familiar with and trained in emergency response and procedures, including undergoing regular drills. Operators should ensure that on each trip, all crew and passengers are aware of what to do in an emergency.

Emergency situations that should be addressed include capsizing; damage or engine failure of the ship; injury, illness or incapacity of a swimmer; lost swimmer; shark attack; drowning swimmer; and hypothermia in a swimmer or passenger. Emergency response plans should also include a record of emergency equipment carried on board, and provide for the equipment being regularly checked and maintained.

3.7 Crewing ratios

Maritime Rules establish required crewing ratios and these must be complied with. However, there may be aspects of your operation that mean a higher ratio of crew and other staff would be appropriate for safety purposes. The ratio of crew and other staff to swimmers should be appropriate for the circumstances, taking into account the weather conditions, age and experience of the swimmers, and any other relevant factors.

3. General harm prevention (continued)

3.8 Recommended training, skills and experience

All crew should be familiar with and appropriately trained in safety procedures and be able to address the potential risks of providing or enabling swimming from a commercial vessel. The paramount consideration should be safety, so the training, skills and experience must be sufficient and appropriate to ensure that the operation can be conducted safely.

The operator or the skipper (if a different person) should hold the maritime qualifications relevant to the type of vessel and limits they operate in, and be adequately trained. The operator/skipper and other crew, if any, should also be adequately trained to address the potential risks when operating swimming activities off a vessel. This training should at least include:

- vessel positioning around swimmers
- manoeuvring around swimmers
- safe transfer of swimmers into and out of the water
- safety and swimming briefings
- knowing the signs of hypothermia and how to manage it
- lifesaving and first aid
- passenger care
- maintaining a lookout
- swimming at sea
- use of equipment
- passenger counts
- use of dive flags
- minimum staffing levels
- retrieving swimmers in windy conditions
- dealing with sharks
- lost swimmer procedures
- retrieving distressed swimmers
- recognising hand signals (such as international dive signals) or other suitable communication methods the operation uses should any passenger or swimmer need help in the water
- what to do in an emergency.

All crew should have a current first aid certificate, and if a vessel carries oxygen for emergencies (or any other specialised equipment, such as a defibrillator), at least one crew member on each trip should be trained in its use.

Swimming should not take place without a staff person being present who is appropriately trained and skilled. At least one crew member should be designated to render assistance to any swimmers that encounter danger or to recognise when a swimmer may be drowning.

3. General harm prevention (continued)

A written or electronic record should be kept of the relevant qualifications, training and experience of each staff person involved in conducting or enabling the swimming operation.

3.9 Effective communication

It is critical that operations have methods to ensure there is effective communication between skippers, crew and passengers at all times when swimmers are in the water, or entering and exiting from it. Ineffective communication between skippers, crew and passengers has resulted in serious accidents. It is recommended that there be “closed loop” communication between crew and passengers; for example, if the crew member or passenger is asked to do something by the skipper, then that person reports back to the skipper directly.

3.10 Periodic reviews

An internal review of procedures should be undertaken at least every 12 months and as soon as practicable after every incident, accident or mishap to check that:

- the operation’s MTOP is being followed
- correct and full safety training is being provided to crew
- a clear and comprehensive safety briefing is being given to passengers
- any poor practices are identified and improved procedures are implemented as soon as possible.

Reviews should also determine what could be learnt when accidents happen among other operators or new knowledge about risks or equipment becomes available.

3.11 Notifying accidents, incidents and mishaps

Under the MTA and HSWA there are obligations to report accidents, incidents or mishaps involving serious harm, death or risk of serious harm. Under the MTA, the master of a New Zealand ship (or a foreign ship in New Zealand waters) must report these matters to MNZ as soon as practicable. Other people may also be required to report under Maritime Rules. Under Section 56 of HSWA, a PCBU must report notifiable events (including serious harm or accidents involving a ship as a place of work) to the Director of MNZ as soon as possible after they become aware of the occurrence. Further information on the requirement to report can be found under ‘safety’ at:

maritimenz.govt.nz/commercial (go to safety then accidents and reporting)

The practices of the skipper should be periodically peer reviewed. The reviews should be of a sufficient scope and frequency to ensure that the skipper is adequately trained, current and proficient for their duties. Where a review identifies any adjustments needed to safety measures, those adjustments should be carried out as soon as practicable.

4. Specific identified hazards

4.1 Propeller strike

Moving propellers are a significant hazard, with the potential to inflict very serious or fatal injuries to swimmers if the risks are not adequately managed. It is therefore imperative that your safety system, including any individual safety device, is effective in ensuring that people in the water are protected from moving propellers at all times.

Operators should consider a range of preventive measures as part of management of this hazard. These include:

- where practicable, not using the engine when swimmers are entering and exiting the water
- propulsion alternatives (for example, water jet propulsion, as the risk of injury to swimmers from the boat's propulsive unit is lower when water jet propulsion is used)
- propeller guards (of durable material and construction, and designed so that a swimmer cannot contact the propeller)
- ensuring that swimmers are kept at a safe distance from the propellers at all times, taking into account water and vessel movement
- providing swimmers with a safety briefing on the location and danger of propellers
- systems to control and monitor swimmers exiting and reboarding the vessel
- keeping an adequate lookout of swimmers' positions relative to the vessel
- ringed propellers
- cut-off switches
- interlocks
- sensors
- anti-feedback steering.

When assessing the risk to swimmers in your operation, you should also think about non-routine situations the vessel may operate in, such as rescues or recovering incapacitated swimmers from the water, and ensure your procedures are appropriate to those circumstances. Non-routine situations should not increase risks to safety (for example, if manoeuvring the vessel is the only means to collect a swimmer, it must be conducted without increasing the danger to the swimmer or other swimmers from propeller strike or being run over by the vessel).

4.2 Passenger crowding

Commercial vessels involved in swimming operations may be especially vulnerable to passengers crowding at a single place on the vessel, for example, to view marine mammals. Crowding on one side of the vessel may cause instability. Crowding at any point on the edge of the vessel may result in a passenger falling overboard, which could be particularly dangerous if it happens from the bow while the vessel is making way or if a passenger is out of sight of the crew and other passengers (for example, a small child).

4. Specific identified hazards (continued)

Strategies you may wish to consider to reduce the risk and possible consequences of passenger crowding include:

- having a procedure in place to minimise the risks from people moving as a group to one side of the vessel, if it would affect the vessel's stability
- taking other steps to reduce the risks of passengers falling overboard
- denying passengers access to the bow section while the vessel is making way at more than 5 knots
- designating a crew member to manage crowds and/or restricting entry points into the water until the skipper deems it safe to do so.

4.3 Drowning or losing a swimmer

A significant risk for commercial vessels involved in swimming operations is to lose a swimmer because they have disappeared below the surface, drowned, or by departing from the swimming location without the full complement of swimmers on board. Reasons why a swimmer may be at greater risk of drowning include medical conditions, such as heart disease. The risk of losing a swimmer may be heightened when other swimming operations are being conducted in the same area. Strategies to consider include:

- pre-screening swimmers for fitness and ability to participate, and not offering the activity to those who could not safely participate
- ensuring that swimmers know how to use equipment safely, including snorkels and ladders
- ensuring that adequate crew supervision and management of the swimming operation takes place, including maintaining visibility of all swimmers while they are in the water, clear responsibilities for maintaining a watch over swimmers, including accommodating the presence of nervous swimmers, head counts and other appropriate monitoring
- identifying and communicating to swimmers any hazards the swimmers need to be aware of
- not allowing swimming to take place if the water or weather conditions are dangerous. For example, waves will start or have started to break over the heads of swimmers, currents are strong, winds are high, or visibility is low.
- having clear parameters and procedures in the operation's safety system to identify when operations will cease due to increased risk to swimmers from any external influences
- teaching swimmers a simple set of hand signals, such as international dive signals, or other suitable communication methods to use if any passenger or swimmer needs help in the water
- ensuring that swimmers are easily distinguishable from other swim or dive operations in close proximity. For example, through colour-coded suits, caps, etc.
- advising swimmers that swimming may put people suffering from medical conditions at heightened risk of harm. For example, stress from sudden exposure to cold water, panic, or the strenuous nature of swimming aggravating heart disease, which could result in cardiac arrest and possibly death

4. Specific identified hazards (continued)

- ensuring that your operation's website, crew and passenger safety briefings and passenger information sheets discuss the importance of disclosing medical conditions. This could involve swimmers completing a medical questionnaire
- recording any medical conditions that swimmers have identified and sensibly managing them during the trip
- discouraging swimmers from entering the water if they are seasick, never pressuring a swimmer to enter the water, and allowing them to enter the water in a controlled manner to reduce anxiety (note that controlled entry allows for slow deep breaths to reduce diaphragm contraction from cold water shock)
- having throw bags available from the swimming area of the vessel at all times, with buoyancy aids also recommended to aid swimmers if required
- having policies in place describing how you intend to ensure that any particularly young or elderly swimmers, or people with physical limitations or conditions that potentially put them at higher risk, are kept safe
- ensuring that your vessel has a high level of manoeuvrability to quickly and safely recover swimmers from the water, including being able to hold a stationary position near the swimmers
- ensuring swimmers can enter and exit the water easily and safely by having well designed swim ladders and platforms extending below the surface of the water, and having swimmers keep clear of each other when using them in case anyone falls from the ladder
- ensuring that swim ladders and platforms are clearly visible from the vessel's helm, using a camera to achieve this if necessary
- ensuring that swimmers know how to conduct themselves safely in the water
- having on board a list of the names of passengers/swimmers.

4.4 Cold sea and air temperatures

Swimmers are at risk of hypothermia in cold seas. To reduce the risk, you should have available for use wetsuits or dry suits in suitable sizes, and of a length and gauge appropriate for the local conditions and proposed time in the water, plus gloves, boots and hoods if operating in particularly cold seas. Other strategies you should consider include having spaces that provide shelter from the weather and mitigate wind chill for all of the swimmers on board.

Appropriate equipment for treating mild hypothermia should be carried on board, such as hot packs, thermal blankets, showers or warm water containers, or other methods of applying heat.

Crew and other staff delivering or enabling the swimming operations should know how to treat hypothermia and administer treatment in an emergency, but professional medical help should be sought as soon as possible.

4. Specific identified hazards (continued)

4.5 Other vessels in the area

Swimmers are at risk of being hit by other vessels. Dive flags must be employed while swimmers are in the water and 'Restricted Ability to Manoeuvre' day shapes may be displayed at the discretion of the skipper. Communication with other vessel masters in the immediate vicinity should also be maintained where practicable.

4.6 Sharks and other sea creatures

Commercial vessels involved in swimming operations should carry an appropriately stocked trauma kit capable of dealing with severe, life-threatening bleeding, and appropriate first aid equipment for jellyfish and other sea creature stings (note that vinegar is no longer recommended for treating jellyfish stings because it may make things worse by activating unfired stinging cells).

It is recommended that a supply of oxygen to provide victims with supplementary oxygen support is also available on board for use until professional medical aid can be accessed.

5. Where to get further information

- Health and Safety at Work Act 2015 (go to www.legislation.govt.nz)
- Health and Safety at Work (Adventure Activities) Regulations 2016: Guidance for operators (go to the Worksafe New Zealand website at www.business.govt.nz/worksafe and search for 'Adventure Activities Guidance')
- Marine Mammals Protection Act 1978 (go to www.legislation.govt.nz)
- Marine Mammals Protection Regulations 1992 (for a complete list of conditions prescribing behaviour around marine mammals) (go to www.legislation.govt.nz)
- Maritime Transport Act 1994 (go to www.legislation.govt.nz)
- Maritime Transport Rules (go to www.maritimenz.govt.nz and click on 'Rules')
- Sharing our coasts with marine mammals (Department of Conservation) (go to www.doc.govt.nz and search for 'marine mammals protection')
- 'Support Adventure', the website for the adventure tourism and outdoor commercial sector (for assistance to develop your safety system for your swimming operation, go to www.supportadventure.co.nz)

6. Contact us for help

Maritime NZ

If you need more information about safety management systems, visit the following section of our website:

maritimenz.govt.nz/commercial/safety

If you can't find the information you need, send us an email:

enquiries@maritimenz.govt.nz

Tell us what you need help with and remember to include your contact details (email address and phone numbers).