

# 21

## What is a Hazard

Hazard management – identifying hazards and then making sure their potential or actual impacts are either eliminated, isolated or minimised - is an important way of meeting the obligations of the Health and Safety in Employment Act (HSE Act). It is also a legal requirement.

This section provides an overview of the process which needs to be gone through to ensure that you're customising the management of hazards to your particular boat and operation.

### 21.1

#### What is a Hazard

A hazard is any activity, situation or substance that can cause harm. This includes a situation where a person's behaviour may be an actual source of harm to themselves or others. Hazards can:

- Be actual or potential
- Be physical, biological or behavioural, including temporary conditions that can affect a person's behaviour, such as fatigue, shock, alcohol or drugs
- Arise or be caused within or outside a place of work

Hazards also include events that cause crew to be at a greater risk of causing themselves or others on board harm. These events could occur in the on board or elsewhere ashore. Examples of these events are:

- The design of shifts and rosters
- Jobs with inherent stress or pressure
- Seasonal peak workflows
- Jobs that regularly include long days because of travel before, after or during work
- Being part of, or witness to, an accident
- Physical or mental fatigue, drugs, alcohol and traumatic shock are specifically mentioned in the HSE Act as hazards

There is a legal definition of a significant hazard. A significant hazard is one that is an actual or potential cause or source of one or more of –

### **Serious Harm**

The definition of serious harm is as follows:

- Any of the following conditions that amounts to or results in permanent loss of bodily function, or temporary severe loss of bodily function: respiratory disease, noise-induced hearing loss, neurological disease, cancer, dermatological disease, communicable disease, musculoskeletal disease, illness caused by exposure to infected material, decompression sickness, poisoning, vision impairment, chemical or hot-metal burn of eye, penetrating wound of eye, bone fracture, laceration, crushing.
- Amputation of a bodily part.
- 3. Burns requiring referral to a specialist registered medical practitioner or specialist out patient clinic.
- Loss of consciousness, or acute illness requiring treatment by a registered medical practitioner, from absorption, inhalation or ingestion of any substance.
- Loss of consciousness from a lack of oxygen.
- Any harm that causes the person harmed to be hospitalised for a period of 48 hours or more commencing within 7 days of the harm's occurrence.

### **Harm, the severity of which may depend on how often or how long a person is exposed to the hazard**

This harm must be “more than trivial” and includes such things as occupational overuse syndrome.

### **Harm that cannot be detected until a significant time after exposure**

This includes diseases caused by exposure to hazardous substances, such as asbestosis, neurotoxicity, emphysema, and other occupational diseases.

This definition is important as significant hazards are required to be managed in a set way. Hazards that aren't significant need to be noted and re-examined in the future as necessary, to re-assess whether they have become significant as time has passed. They also need to be managed as appropriate - if there are easy or obvious things that can be done to reduce the hazard, you should do them.

Assessing if a hazard is significant is a matter for the judgement of the employer (and should involve discussion with the crew and others on board the boat). If you identify a hazard and then decide it isn't significant, you should record the reasons why you believe it is not significant. You should also write down when you will re-look at the hazard to ensure it hasn't become significant over time.

## 21.3 Hazard Identification

Hazard identification means working out and then writing down the hazards on your boat.

Everything on the boat and that happens when working on the boat needs to be looked at as a potential hazard. A regular process for hazard identification needs to be followed. The process must be systematic and thorough. How you have identified and assessed hazards should be written down and kept as a record in your SSM manual to show you are meeting your obligations. Ways of identifying hazards include:

- Going around and inspecting the boat and equipment
- Analysing the work that needs to be done on the boat and how it's being done
- Reviewing previous accidents (including near misses) and looking at what happened and why (see also section 4).

The HSE Act requires employers to give employees (e.g. the skipper and crew) reasonable opportunities to be involved in all parts of the hazard management process, including identification of hazards.

You need to review your hazard identification methods regularly to make sure they're effective – for example, if an accident happens as the result of a hazard you hadn't identified, think about why your system didn't pick it up and how you can make sure there isn't anything else that hasn't been picked up.

## 21.4 Hazard Assessment & Management

Where hazards are potentially harmful to people on the boat, the employer is required to take **all practicable steps** to provide a safe and healthy environment. The employer's responsibility only extends to matters they can reasonably be expected to recognise or be aware of.

Everyone on board the boat shares in the responsibility to recognise and manage problems themselves and this includes handling non-work issues sensibly.

Hazards need to be assessed to determine whether or not they are **significant**.

The Act describes a hierarchy of action for managing significant hazards. (Hazards that are not significant must still be managed, and this process may be useful for managing those hazards also).

The preferred action is to **eliminate** the hazard, by changing things so that the hazard no longer exists. This might include, for example, relocating equipment or instruments which restrict forward visibility, or replacing a hazardous substance with one that is harmless.

If this can't be reasonably done, you should **isolate** the hazard, by putting in place a process or mechanism that keeps employees away from the hazard. This might include:

- Permanently fixing a guard to cover a dangerous part of a particular machine
- Fitting an acoustic enclosure around noisy machinery; or
- Putting a releasable door catch inside a freezer.

If this can't reasonably be done, the hazard must be **minimised**, by doing what can reasonably be done to lessen the likelihood of harm being caused by the hazard and to protect employees. This might include:

- Providing employees with suitable protective clothing or equipment
- Monitoring employees' exposure to the hazard
- With their informed consent, monitoring employees' health in relation to the hazard.

(This process is set out in a two page form at the end of this section.)

Not all hazard management methods are "physical". There can be rules or policies designed to reduce the risk from the hazard (for example, the development of a fatigue management plan).

## 21.5

# What does “all practicable steps” mean?

Employers, employees, self-employed people, people in control of workplaces, and principals, are required to take all ‘**reasonably practicable steps**’, in circumstances they know or should reasonably know about, to ensure their own safety and the safety of others.

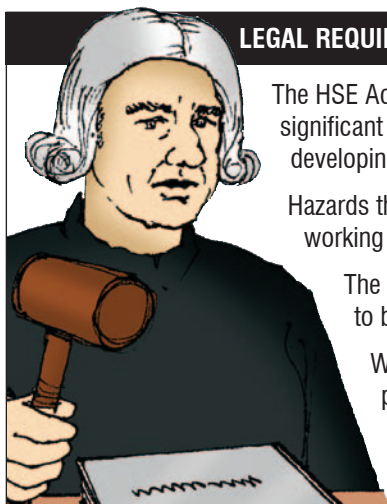
‘All practicable steps’ means those steps that it is reasonably practicable to take. A step is practicable if it is possible or capable of being done.

The word ‘reasonable’ means that not everything that is humanly possible needs to be done. Instead, it is only necessary to do what a reasonable and prudent person would do in the same situation.

Whether a step is reasonable needs to take into account:

- The nature and severity of any injury or harm that may occur
- The degree of risk or probability of injury or harm occurring
- How much is known about the hazard and the ways of eliminating, isolating or minimising the hazard
- The availability and cost of safeguards.

The costs of dealing with a hazard are only one factor in deciding if a step is reasonably practical. Costs should be measured against other factors, including the risk and seriousness of harm that might occur if nothing is done. If there is a risk of serious or frequent injury or harm, spending a greater amount of money to deal with the hazard is considered reasonable.



### LEGAL REQUIREMENTS

The HSE Act requires employers to systematically identify hazards and to systematically manage significant hazards by either eliminating them, isolating them or minimising them and then developing and maintaining emergency procedures

Hazards that aren't significant still need to be managed to make sure that the boat is safe and that working on the boat is safe

The HSE Act requires employers to give employees (e.g. the crew) reasonable opportunities to be involved in all parts of the hazard management process

Where appropriate, employers must provide suitable protective clothing and equipment to protect people from hazards. They also need to provide training in its use and make sure it is worn or used.

Maintain a Hazard Register

### Summary Points

- Set up a regular system for identifying hazard. Schedule this into your work routines, including regularly looking at whether the ways in which you're controlling hazards is working.
- Emphasise to everyone on board the boat that it is their responsibility to let the skipper know of any hazards that they find on the boat.
- Set up regular meetings with the crew to talk about hazards and how they can be managed.
- Set up emergency processes for hazards in case things go wrong.
- Regularly review accidents and near misses to help you identify any hazards you might have missed.
- When you identify things that need to be done to manage a hazard, make sure responsibility for the action is clear, and someone checks that it has been done.
- Make sure you regularly check that policies and procedures are being followed and that your management of hazards is effective.
- Make sure everyone on board the boat has enough training and information around how hazards are managed on the boat, and how to work safely, and that they're supervised when necessary.

- Information needs to be provided in a way that will be understood – this might be through talking to people, or it might mean making sure written material is in different languages, simple to understand, and including diagrams or pictures where you can.
- Keep a register of all hazards that are identified on the boat.

### **Where can I find out more?**

Maritime NZ has produced a booklet for the maritime industry, (Health & Safety - A guide for seafarers) which outlines your obligations under the HSE Act 1992, and the associated hazard management processes. **You can get copies from Maritime NZ on freephone 0508 22 55 22 or from the Maritime NZ website – [www.maritimenz.govt.nz](http://www.maritimenz.govt.nz).**

**To find out more about how to go about identifying and managing hazards, contact Maritime NZ, on freephone 0508 22 55 22, or email [ssm@maritimenz.govt.nz](mailto:ssm@maritimenz.govt.nz).**

# Significant Hazard Management Worksheet

## Section One: Background

Hazard:

Is this hazard significant? Yes/No

Why is the hazard significant or not significant?

## Section Two: Elimination

Can the hazard be eliminated? Yes/No

If yes, list the steps to achieve this, allocate responsibility, then go to Section Five:

Step	Timeline	Responsible

If no, why not?

Test your reasons against the “all practicable steps” requirement.

## Section Three: Isolation

Can the hazard be isolated? Yes/No

If yes, list the steps to achieve this, allocate responsibility, then go to Section Five:

Step	Timeline	Responsible

If no, why not?

Test your reasons against the “all practicable steps” requirement.

# Hazard Management Worksheet

## Section Four: Minimise

List the steps you will take to minimise the likelihood of harm from the hazard:

Step	Timeline	Responsible

List the equipment and clothing that are required to protect employees from the harm:

Equipment/Clothing	Timeline for Provision	Responsible

## Section Five: Review and Monitoring

Have you tested your answers against the “all practicable steps” requirement? Yes/No

How will the employees’ exposure to the hazard, and their health in relation to the exposure, be monitored?

Monitoring Step	Timeline	Responsible

How and when will you review the success of your control measures?

Review Step	Timeline	Responsible

Were employees involved in this hazard management process? Yes/No

If no, why not?

## Section Six: Sign-Off

Vessel Name:

Name and position of person filling out this sheet:

Date: