

## Hazards & Risks

### Legal Requirements for Managing Hazards & Risks

Hazard Management is the **core activity** in a health and safety system. Typically, a hazard is anything that has potential to cause harm, (including the behaviour of people), and risk is the probability of the harm occurring. Risk calculation models tend to use two factors: "How severe can the harm be", compared with "How probable"

Having identified hazards, an employer should assess each hazard to understand the risk. We have a duty to put in place, maintain, monitor and periodically review, hazard and risk control measures

It is acceptable practice to consider risk as part of the thinking process used to decide on the extent of hazard control measures. While an important principle used in health and safety is that of "providing the highest level of protection", (sometimes expressed as the principle of "zero harm"), the reality is that there can never be an "absolute zero risk" in any activity

This leaves employers with the need to manage risk to a "reasonable level". This literally means that if the probability of (say), death, is 1 in 100,000,000, we could possibly accept that risk, while retaining a continuing duty to either eliminate the hazard, or minimise it still further. A common way to describe this duty is the concept of "reasonably practicable", a shortened version of which is:

An employer, in carrying out their duties, must do that which is, or was, at a particular time, reasonably able to be done, taking into account all relevant matters, including:

- The probability of harm if the action is not taken
- How severe the harm could be
- What a reasonable person knows, (or ought to know), about a hazard or risk and ways to control it
- The availability and suitability of ways to control the hazard or risk
- Whether the cost of controlling the hazard is grossly disproportionate to the risk

Note that the first two matters above are to do with considering "risk", while the rest are to do with understanding the risk in relation to what is reasonably available as control measures

### Procedure for recording Hazards & Risks

Hazards are essentially parts of a process, or human behaviours, that have the potential to cause harm. Employers must first of all identify hazards. Previous experiences, incidents and accidents, supplier and manufacturer's warnings provide basic information. There are three key ways of applying this information:

- By Area: What can we observe in a given area
- By Occupations and Tasks: What type of work people do, considering each separate task
- By Total Process: What different hazards exist as we move through a process from start to finish

One way to take the analysis to a useful level is to consider all the possible modes of failure for each part of the equipment or process. If the hazard itself is not readily understood, or the most appropriate control measures are not confidently known by available internal experts, then external specialist advice must be sought

Hazards must then be **assessed** to determine the level of risk, SafetyBase **Accident Report** files and **Hazards & Risks** files use a 5 x 5 Probability vs. Severity matrix to calculate a risk score. The score may generate an advisory Task email automatically.

The next step is, taking into account what is **reasonably practicable**, to follow a hierarchy of risk controls as follows:

#### Hierarchy of Controls

**Eliminating** risks to health and safety. If elimination is not reasonably practicable, **Minimise** the risks, to the extent to which a person could reasonably have the ability to influence and control the matter. A person must take one or more of the following actions that is the most appropriate and effective, taking into account the risk:

**Substituting** (wholly or partly), the hazard, for one with a lesser risk

**Isolating** the hazard to prevent any person coming into contact with it - for example a guard, barrier or distance

Implementing **Engineering Controls**. (Something physical in nature and includes a mechanical device or process)

If a risk remains, minimise the remaining risk by implementing **Administrative Controls**. (Might include rules, procedures, signs, information, training but does not include engineering controls or use of PPE)

If a risk remains, minimise the remaining risk by ensuring provision and use of suitable **Personal Protective Equipment (PPE)**. (PPE means anything used or worn by a person to minimise risks to their safety, and includes air-supplied respiratory equipment)

**Maintaining Hazard Controls**. Hazard control measures must be **maintained and monitored** in consultation with all workers to ensure they remain effective, fit for purpose, suitable for the work, and installed, set up and used correctly

**Reviewing Hazard Controls**. Hazard control measures must be reviewed/revised if the controls do not control risks as far as is reasonably practicable; before a change in the workplace that is likely to introduce new risks; when a new hazard or risk is identified, or when it becomes apparent that health effects may be suffered

### How to Record Hazards & Risks Using SafetyBase

The SafetyBase Hazards & Risks files are the **core** of the safety system. The details are intended to prompt a detailed assessment of each hazard, taking into account risk measurements. It prompts you to develop a range of follow up and maintenance Tasks. *It therefore assists the creation of your safety system if you complete all drop-list questions, because some of these prompt the creation of activities such as training, inspection and maintenance.* If you have advanced versions of SafetyBase, they prompt a wider range of these control measures

Open a **Hazards & Risks** file under the **Hazards** heading. SafetyBase prompts a systematic method of providing appropriate control measures and follow up measures

To create a **Hazards & Risks Register**, use the **Reports** page and generate a list based on the **Hazards & Risks** files you have created

### Using Tasks while recording Hazards & Risks

Tasks can be notifications, instructions, alerts or corrective actions associated with a particular file. You can add Tasks as you go during data entry, using the inline **New Task** button in your screen. You can also use the Toolbar at the bottom of your screen during data input, or the **Tasks** tab after you submit the file

As you create a file, SafetyBase may automatically set suggested Tasks, depending on some of your droplist selections. Watch for on-screen informational messages, which are there to alert you if a droplist might create an automatic Task

Please note that although these automatic Tasks may be created as helpful prompts, they do have generic wording, so you have the choice of amending the Tasks yourself. This is advisable if you prefer the wording to be specific or personal. If appropriate, you can select the **"Recurring"** button, which lets you create a repeating schedule, (say, a regular inspection, review or check-up interval)

When any Task is set in the system, it will display in the form you created, a summary tab in the file and in the Task List of the person it is allocated to (Recurring Tasks don't show until they are due). Tasks are also e-mailed to the allocated person on the required number of days prior to the Due Date

A small number of tasks have been set as mandatory (example, reporting Notifiable Events to the statutory authority). *These cannot be deleted.*

### SafetyBase Tips and Tricks for managing Hazards & Risks

If the Hazard's status is left as "Under Action", it will show on the Dashboard Open Files list. This is important, as a means of ensuring visibility to all affected parties  
Spend sufficient time on the Hazards & Risks files and you will develop a broader based and more robust set of hazard and risk controls

If you have any existing hazard information that can be uploaded using a CSV file (comma separated values .csv type), you can upload these to SafetyBase. Your Administrator can use the **Upload CSV** button at the right of any file type summary page and follow the instructions. Contact SafetyPro for assistance if required. 0800 000 267

Attach an electronic document (example, an existing S.O.P, Code of Practice). Using the **Attach Documents** button in the Toolbar at the bottom of your screen while entering data, or afterwards, using the Attach Documents tab. Browse to the document and submit it. The document will download and be available for viewing

Link a relevant SafetyBase file (example, Accident Report, Hazard Analysis or similar file that has direct relevance). Use the **Link Files** inline button in the Toolbar at the bottom of your screen while entering data, or afterwards, using the Link Files tab. Select the SafetyBase file you want from the droplists and submit. The files will be linked

Remember to associate People with this file type, using the **Associate People** inline button in the Toolbar at the bottom of your screen while entering data, or afterwards, using the Associate People tab, so you can get reports on their safety history.

Check file history in the **"Status Log"** tab. This automatically records status changes to the file. If you would like to monitor the file, click the **"Watch"** button at the top of the file summary. This will place the file on your Watchlist and e-mail you whenever the file status changes