

SafetyLink™ Risk Management

Contents

Risk or hazard management option.....	2
When to use risk management?	2
When to continue using hazard management?	2
Steps involved to convert from hazard management to risk management	2
Understanding risk management.....	3
What is a risk?	3
A risk-event (may happen)	3
Loss and harm – may result from a risk-event.....	3
Risk categories – who suffers loss or harm	4
Severity – the level of suffering	4
The hazard –may cause a risk-event to occur	4
Risk rating –estimate of the significance of a risk	5
Managing risk	6
Converting from hazard to risk management in SafetyLink™	8
Run the conversion	8
Reviewing risks.....	10
The risk tree - viewing how risk-events may be caused.....	10
To update a risk.....	11
Adding or changing risk categories.....	14
Adding or changing risk-event types.....	14
Adding or changing harm types (from risk-event type harm/loss selection).....	16
Adding or changing a hazard	17
Using the controls library	20
Risk rating method setup.....	22
To see which risk rating method is being used currently	22
To review the current risk rating method	23
Working from a risk rating matrix	23
Changing the risk rating method to use in SafetyLink™	28

Risk or hazard management option

Versions of SafetyLink before version 11 only had 'hazard management'. That is, a single risk rating was used to cover the combined risks that may have resulted from the hazard. Controls for hazards also covered the combined risk events that may have occurred for the hazard.

Version 11 introduced 'risk management'. This differs from hazard management in allowing multiple risk-events for a hazard, and each risk is managed separately. Each has its own risk-rating and controls, although controls may be shared by multiple risks.

Hazard management and risk management may not be used in the same system, a choice must be made. The default is 'hazard management'. The system administrator may choose to convert to risk management. The conversion process helps create individual risks from hazards. These risks need then to be manually reviewed, including selecting a risk event type and setting a raw risk rating.

When to use risk management?

Risk management more accurately reflects reality. When risk-events that could result in harm or loss from a single hazard are dealt with separately, controls needed to prevent the event from occurring are easier to determine. Also, the consequences if the risk-event were to occur may be evaluated more accurately. Different risks from the same hazard may have very different consequences so are managed separately.

When to continue using hazard management?

Hazard management is used when consequences of risks are not particularly significant or when there are insufficient resources to set up and maintain the more precise risk management system.

New Zealand legislation only requires risk management when the consequences of risks are significant or the type of organisation is considered to be high risk. However, more businesses are choosing to use risk management because it is consistent with good business management practice and is capable of reducing risks and improving business outcomes.

Steps involved to convert from hazard management to risk management

1. Understanding the difference between the two management systems
2. Running a conversion option to prepare current hazards for use with risk management
3. Reviewing each risk and:
 - selecting the risk-event type
 - Setting a 'raw' or risk rating (without any controls in place)
 - Reviewing the risk's controls (copied over during the conversion)
 - Reviewing the 'residual' risk rating (copied from hazard)

These are discussed in the following sections.

Understanding risk management

What is a risk?

Every risk has three components:

- An event - that *may* occur – the risk-event
- Harm or loss - that *may* result from the risk-event
- The hazard - that *may* cause the risk-event

May is another word for *chance*. The combination of (a) the chance of harm or loss resulting from an event, and (b) the chance the risk-event occurs from the hazard is the likelihood of the risk. As the risk is of 'loss or harm' the other part of the risk is the degree of suffering from that loss or harm, the severity, or consequences, of the loss. The combination of the likelihood and the severity gives a risk rating which places the risk on a scale of importance to the person or organisation who may suffer the loss.

This is often shown in the form of a risk matrix of likelihood and severity. The risk is placed into the matrix based on the combination of likelihood and severity. Cells in the matrix are colour coded in risk priority group levels, each priority level indicating the type of action required and who is responsible for taking the action.

A risk-event (may happen)

The most important part of managing risks is identifying the '*risk-event*' that may occur, that may result in the loss or harm. Once this event happens the situation is instantly *out-of-control*. Whether loss or harm results or not, or what type of harm or loss occurs is *pure chance*. As anyone who attempts to win lotto comes to know, 'chance' cannot be managed. So managing risk is ensuring the event that may result in harm or loss does not happen. *If the risk-event does NOT occur, there is ZERO chance of harm or loss resulting.* This is the essence of risk management.

The failure to identify risk-events has been the major reason why New Zealand health and safety performance has been so dismal in the past compared to many other countries. In Europe risk management is standard practice. It is what the insurance industry does, is standard for business financial risk management and is usually used for quality risk management. Health and safety risk management is exactly the same as any other form of risk management.

At first, the identification of the risk-event that may result in harm or loss may require some thought. But we use them all the time, examples of risk-events are: 'slip, trip, fall', 'fall from height', 'explosion'. Often though, it may be hard giving the event a name but this is essential as it is the very thing we want to prevent from happening.

Asking the following question helps identify the name of the risk-event:

What is the *event - that may happen* - that could result in any harm or loss?

Focusing on risk-events is the critical step in risk management. Hazards cannot be controlled, only eliminated. Preventing a risk-event from *occurring* is what 'controls' are designed to do.

Loss and harm – may result from a risk-event

If we fail to prevent a risk-event from occurring the result may be loss or harm. Whether loss or harm is the result is beyond our control. All we may do after-the-event is try to mitigate the suffering from the loss or harm. Mitigation is not managing risk it is an attempt to reduce suffering, after the chance has become a certainty.

Risk categories – who suffers loss or harm

If there is harm or loss, someone or something must suffer it. This is the main stake-holder for the risk. There may be other stake-holders, but risks are categorised by the main type of stakeholder.

Risk category	Stake-holder	Harm/loss	
Health & safety risks	Person	Harm	Injury/illness
Production / quality risks	Business	Loss	\$ / customer
Financial risks	Business	Loss	Reputation / company / \$
Public safety risks	Person	Harm / loss	Injury / illness / \$
Environmental risks	Public / government / environment	Harm / loss	\$ / reputation

Example of risk categories, who suffers and the type of suffering due to loss

For example if I was to slip, fall and break a leg, I would suffer loss in the form of harm to my leg, so the risk category is health and safety. If I buy a lotto ticket and lose, I have suffered a loss of the ticket price and the risk category is financial. Other types of risk categories could be production risks (the company suffers), quality risks (the product suffers) environmental risks (the environment and the company reputation suffers) and public liability (the company suffers).

Severity – the level of suffering

The risk category determines who or what suffers from the loss. The degree of suffering is called the severity, or consequence. Each risk category has its own types of loss or harm that may result from risk-events and each type of loss has a severity to the stake-holder.

In the example above, if I suffer a broken leg (in the health and safety scale of loss from abrasions to death), the severity might be somewhere in the middle. However the loss of the price of the lotto ticket (on the personal financial scale) is minor. So the type of harm or loss translates to a severity level to the main stake-holder for the category of risk we are dealing with.

SafetyLink™ may be configured to use one of several methods to allocate severity to a risk:

- Use the severity level of the most likely type of loss resulting from an event. (This is the default in SafetyLink™. The most likely type of loss for each risk-event type is manually selected, so it does not need to be reselected for each risk)
- Use the average of all possible loss types for a risk-event type. (This is the second default if the most likely loss type has not been selected or if the risk-rating-method specifies this method should be used)
- Use the level of the lowest type of loss (may be set in the risk-rating-method)
- Use the level of the highest type of loss (may be set in the risk-rating-method)
- Use a manually selected level for each risk (Override severity set in each risk). This last option is the one used when converting hazards to risks. It is preferable to reset this to use the default, once risk-event type loss types have been set up).

The hazard –may cause a risk-event to occur

The last component of a risk is the hazard. A hazard is either a thing or a situation (a combination of things coming together) that *may* cause one-or-many types of risk-event to occur. It is easy to determine a hazard from this statement.

There is a risk of HARM/LOSS when EVENT occurs *from* HAZARD - (*from* implies thing/hazard)

OR

There is a risk of HARM/LOSS when EVENT occurs *when* HAZARD - (*when* implies situation)

In reality it is rare for an event to spontaneously occur so most hazards are caused by situations (e.g. when A meets B), but sometimes associating a hazard just with a thing is easier.

Using this general 'risk statement' makes it easier to determine the components:

There is a risk of HARM/LOSS when EVENT occurs (from/when) HAZARD.

Risk rating –estimate of the significance of a risk

The risk rating is used to rank risks from highest to lowest, so we can prioritise resources to deal with them. It combines the level of suffering from loss to a stakeholder (from a risk-event), how likely it is that the risk-event will occur and, if it does, how it will result in the suffering.

The commonly accepted way of estimating the risk rating is:

Risk rating = likelihood x severity

A risk rating is not an exact measure; it is an estimate based on the best available data.

Likelihood - of risk-event and loss

Likelihood represents the combined level of chance of the hazard causing the risk-event and the risk-event resulting in loss. Note: likelihood has nothing to do with the severity of the loss, it is only concerned with how likely it is that loss will result from the event caused by a particular hazard.

For example: the risk loss resulting from the risk-event 'fall from height' from the hazard 'using a ladder' requires two things (a) the hazard to cause the event and (b) the event to result in loss. Each of these has its own probability. Because we don't know the exact probabilities for (a) and (b) we select an estimate of the total combined likelihood level from a list of likelihood levels set up in the risk-rating-system. Usually this will be a number, say 1 to 5, representing almost no likelihood to almost certain.

Exposure to hazard - part of overall likelihood

If a person is exposed to a hazard 10 times in a day, the likelihood of them being harmed will be 10 times as much as if they were exposed to the same hazard only once. So another factor to consider when determining the level of likelihood is the frequency of exposure to the hazard.

Some organisations separate the exposure level from the likelihood level and let SafetyLink™ work out the total likelihood by adding all the exposures together; i.e. total likelihood = likelihood-level x exposure-level. If a separate level of exposure to the hazard is not used, this should be taken into consideration when selecting a likelihood. Exposure to a hazard is very important as it multiplies rates of risk. This choice is up to the organisation (set up in the SafetyLink™ risk-rating system).

Risk priority - level of action required and responsibility

From the risk rating, a priority level is calculated which indicates how the risk is to be handled. The risk priority level can be determined either by placing the risk into priority groups using the risk rating or directly from a risk matrix (so long as it is set up correctly) based on the likelihood and exposure, and reading off the appropriate cell a colour representing a risk priority level. (The risk matrix may be set up in the risk rating in SafetyLink™.)

The example below shows a risk after an initial assessment with a likelihood of level 3 and severity of level 3. After controls are applied these will change.

		Severity				
		Negligible 1	Low 2	Moderate 3	Significant 4	Catastrophic 5
Likelihood	Occurs frequently 5					
	Has occurred 4					
	Could occur 3					
	Unlikely 2					
	Improbable 1					

A risk (red) of severity level 3 and likelihood level 3 placed in a risk matrix so the risk priority group can easily be identified by its colour- green (lowest) and olive (highest). In this instance the size of the red circle represents the relative exposure of people to the risk.

Managing risk

The objective of risk management is to eliminate risks, if possible, and minimise those remaining to acceptable levels in order to reduce waste, in the form of harm and loss.

How is this achieved?

1. Risks must be assessed and prioritised.
2. Acceptable levels of risk need to be established by the organisation.
3. Risks exceeding acceptable levels need to be eliminated
4. If risks cannot be eliminated, the level of risk must be minimised to acceptable limits and the risks controlled
5. Controls must be monitored to ensure they are still effective
6. The occurrence of all risk-events, whether they result in loss or not, must be investigated to determine causes— new hazards, new controls or why existing controls failed.

If all the steps above are implemented and carried out, this leads to a cycle of continuous improvement, where it will be expected that risk-events will reduce along with loss and harm and an organisation might expect to reduce waste and be more profitable.

However, risk management requires resources. Apart from apathy, this is usually the constraint on effective risk management systems. But limited resources is just one more risk to be managed, with controls to be implemented and monitored.

So far we have discussed what a risk is, its components and how to assess and prioritise risks. It is the originator's responsibility to determine the level of risk that is acceptable taking into account applicable legislation and codes of practice. This following section discusses how risks are eliminated or minimised and how they are controlled.

Risk elimination = hazard elimination

The most certain way of eliminating a risk is to eliminate its cause, the hazard. Exposure to risk is now zero. This may be achieved by changing plant or equipment or designing a new method of doing a task. If a risk cannot be eliminated, and it exceeds what is acceptable, it must be minimised until the risk is below the threshold considered acceptable.

Risk minimisation = controls

If a risk is not eliminated and is beyond an agreed acceptable limit the level of risk must be minimised to the acceptable limit or below. Intended actions taken to minimise the risk are termed controls. The term 'control' implies it will actually control risk but a control is more an intention to control – it may not work – or it may fail. 'Controls' must be monitored to firstly ensure that they do the job they are intended to achieve, and secondly that they continue working.

There are three types of controls specified by health and safety legislation for unacceptable risks that cannot be eliminated, and they must be attempted in the following order:

1. Engineering controls
2. Administration controls
3. PPE – Personal protective equipment controls

An engineering control is usually a physical change to a hazard or the environment surrounding a hazard that is designed to reduce the potential severity of harm or the likelihood of harm (including exposure to the hazard). Either of these will reduce the risk. An example might be a barrier around equipment or a guard that cannot be removed.

An administration control is a procedure to be implemented that reduces the likelihood of harm by altering what is done or reducing the exposure to the hazard. Part of an administration control is how it will be monitored and who is responsible. This type of control usually contains a set of requirements that must be met.

It must be reinforced that the objective of an administration control is to minimise one specific risk by minimising the chance of the risk-event occurring. Requirements should be specifically directed at this aim. Superfluous requirements, added in for other purposes, will redirect attention from the purpose of reducing this single risk.

PPE Controls are the last type of control that should be used if all the higher controls do not reduce the risk of harm to an acceptable level. They are almost an admission that the risk cannot be controlled for some reason. PPE controls usually do not reduce the likelihood of the risk event occurring, they only reduce the likelihood or severity of harm – after the event. This is why they are at the bottom of the controls hierarchy.

If a PPE control is used, it should specify the type of personal protective equipment, how to use it, how to check that it is in good order and what to do if it is not. It should say who is responsible for its use and when it is to be serviced or replaced.

SafetyLink™ allows you to set up all the requirements for each of these three types of controls. It also allows the sharing of controls across multiple risks, so that if changes are needed to a control it only has to be changed in one place and all risks that share the control will see those changed. As controls are added or removed or changed in a risk, a log of changes is maintained in the risk.

Risk assessments -Raw and residual

A 'raw' risk assessment is before any controls are applied to reduce risk. It also reflects the maximum level of risk if any controls that are subsequently added fail. It is the worst case scenario.

The residual risk assessment is after all controls have been applied. This is the most optimistic level of risk and is the level of risk left over assuming all controls work. This must be under the acceptable level for an organisation or legislation.

		Severity				
		Negligible 1	Low 2	Moderate 3	Significant 4	Catastrophic 5
Likelihood	Occurs frequently 5					
	Has occurred 4					
	Could occur 3					
	Unlikely 2					
	Improbable 1					

The diagram above shows the original level of risk (red) and the reduced 'residual' level of risk (yellow), after all controls are in place, assuming they all work.

Risk management is continuous improvement

No system is ever complete. Risk-events will occur, although at a diminishing rate. Risk-events that do still occur, after the system has been bedded in will be to:

- New risks
- Unidentified hazards
- Missing controls
- Controls that do not entirely work.

A fundamental part of risk management is recording and investigating these risk-event incidents, whether or not they resulted in any harm (accidents), losses or non-losses (incidents) to determine which points above were responsible, and correcting missing risk components discovered. Conditions may have changed or new staff may not have been trained sufficiently.

The occurrence of risk-events is an opportunity to improve the minimisation of organisational risk. This is the process of risk management. It is the process that leads to continuous improvement.

Converting from hazard to risk management in SafetyLink™

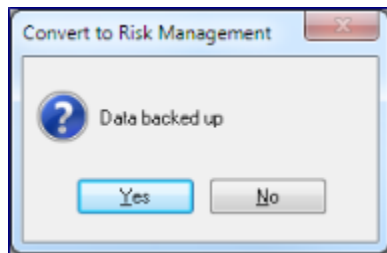
Important before converting:

1. Only the person identified in the company record under the H&S options as the system administrator will see the menu option that allows the conversion process to be initiated.
2. Conversion is a one-time, non-reversible process. Ensure the database has been backed up before beginning (File / options / maintenance / backup data to zip file. Select start. After the backup select No to the question 'Upload data to support site'.
3. It is not essential, but preferable if only the person converting is logged into SafetyLink™ when converting.

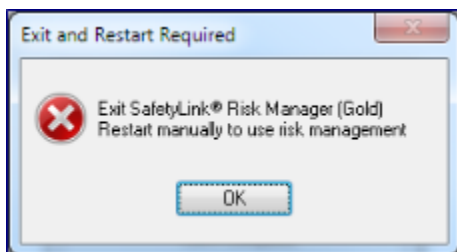
Run the conversion

1. In SafetyLink™ select File / options / maintenance / CONVERT from Hazard management to Risk management. This displays a window asking if you have backed up the database. Select

NO if this has not yet been done or YES to continue if the database has been backed up (see note 3 above).



After the conversion has completed, the window below is shown.



2. Exit SafetyLink™ and re-login using your login ID and password.
3. Log in to SafetyLink™ again using your normal login ID and password
4. To complete the conversion each risk needs to be reviewed, a risk-event type selected and an initial (raw) assessment made. The residual assessment and controls were copied from the original hazard.

After logging in again you will notice the 'Risk Management' menu item contents has changed. Also the hazards toolbar icon is now called risks and starts a risk tree where all risks may be accessed from.



Change to toolbar icons

The Risk Management menu now looks like this

Risks
 Hazards (risk managed)
 Substances

 Set hazards for job types
 Set hazards for processes
 Set hazards for tasks

 Edit risk categories and harm types
 Edit risk event types

Note: menu items are only enabled if a user's login security allows access.

Reviewing risks

IMPORTANT NOTE:

Before reviewing risks it is important to review the current risk rating method in use. The customisable risk rating method in SafetyLink™ reflects the risk matrix used by the organisation and controls how risks are assessed. (See **To review the current risk rating method** before continuing).

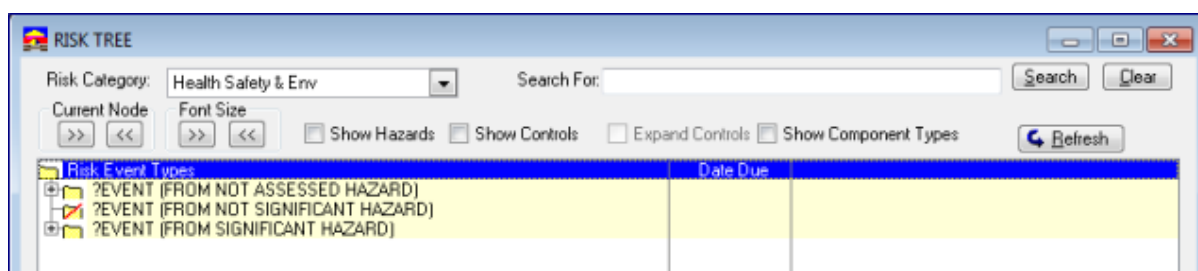
The conversion process took each hazard and created a risk – of harm resulting from a risk-event caused from a hazard. As hazards were assessed originally for all types of risk-events that they could cause, this is how they are after conversion too. The next step is to review each hazard and determine the actual risk-events that it could cause.

Since each type of risk-event may be caused by multiple hazards - and each hazard may cause multiple types of risk-events - there are two ways of viewing risks:

- From the Risk-event tree – showing hazards that can cause each risk-event type
- From hazards – showing all the risk-event types they may cause

The risk tree - viewing how risk-events may be caused

Select the Risk icon from the toolbar or from the Risk management menu.



Example of risk tree (contracted) after conversion

The risk tree for the 'Health safety & Env' risk type category contains all risks created from existing hazards during conversion. Three *temporary* risk-event types were created (because hazards did not identify risk-events before):

- Non-assessed hazards -> Event (from unassigned hazards)
- Non-significant hazards -> Event (from not significant hazard)
- Significant hazards -> Event (from significant hazard)

Navigating the risk tree

Expanding / contracting risk event types. Use '+' to expand or '-' to contract a risk-event showing the risks under each risk-event type. '>>' will and '<<' will also expand or contract a highlighted risk-event type.

Normally risk-event types are shown with yellow background, with risks under the risk-event type, e.g.

ELECTRIC SHOCK (notifiable)		
Electric Shock from Power tools (Factory)	31/01/2018	Risk Ranking 60 -> 30 (Low Risk) Manage by routine

Check **Show hazards ON** to show hazards under the risk.

ELECTRIC SHOCK (notifiable)		
Electric Shock from Power tools (Factory)	31/01/2018	Risk Ranking 60 -> 30 (Low Risk) Manage by routine
Power tools (M)		XXX Factory Blue Area, Factory Green Area, Factory

Check **Show Controls ON** to show controls for the risk. If **Expand controls** is ON the requirements will be shown under each control.

ELECTRIC SHOCK (notifiable)		
Electric Shock from Power tools (Factory)	31/01/2018	Risk Ranking 60 -> 30 (Low Risk) Manage by routine
Power tools [M]		XXX Factory Blue Area, Factory Green Area, Factory
[ADM] Prevention Of Electrocutation Tools And Leads (shared control)		
<ul style="list-style-type: none"> 1. Isolated from earth with a voltage between phase and earth conduct 2. Visually check cables and leads for damage 3. All connections to the system properly made and are suitable plugs 4. Tools and equipment regularly inspected by a competent person an 5. Never plug in power leads with wet hands 		

Control types are: **ENGINEERING**, **ADMINISTRATION** and **PPE** (personal protective equipment). A control is a group of 'requirements' that, taken together, control the reduction of risk. A risk may have several controls.

Checking **Show component types** ON helps identify the types of risk components: risks (black on red), hazards (black on white), controls (brown on green) and control requirements (brown on white) e.g.

EVENT TYPE: ELECTRIC SHOCK (notifiable)		
RISK(17) Electric Shock from Power tools (Factory)	31/01/2018	Risk Ranking 60 -> 30 (Low Risk) Manage by routine
HAZARD(17) Power tools [M]		XXX Factory Blue Area, Factory Green Area, Factory
CONTROL: [ADM] Prevention Of Electrocutation Tools And Leads (shared c		
<ul style="list-style-type: none"> 1. Isolated from earth with a voltage between phase and earth conduct 2. Visually check cables and leads for damage 3. All connections to the system properly made and are suitable plugs 4. Tools and equipment regularly inspected by a competent person an 5. Never plug in power leads with wet hands 		


Double clicking the mouse on any risk component allows editing or changing it.

To update a risk

Double click or change a risk from the risk tree.


Or double click or change a risk from a hazard.

Example of changing or editing a risk (after the risk is completed)

Select a **risk-event type** by clicking the drop button  from a list of existing risk-events and pressing the select button. New risk-event types may be added to the list. When a risk-type has been selected, the types of harm that may result from the risk-type are automatically populated into possible harm for event-type list, along with the severity of each type of harm.

The **default severity level** for the raw risk assessments is also shown. This may be the most likely harm severity, or average severity, or minimum or maximum severity, depending on an option in the risk rating method set up and it is calculated from the types of harm or loss for the risk-event type, and whether or not the risk-event type identifies the most likely type of harm. (Also see overriding the default severity level below.)

From / when is a word that joins the risk-event type to the hazard. It is selected from a drop list or, if necessary, a new word may be typed in. 'From' normally indicates the hazard is a thing, 'when' a situation.

Select the **hazard** (that may cause the risk-event type) by clicking the drop button  showing a list of existing hazards and pressing the select button. New hazards may be added before selecting.

Override default severity is normally off for new risks but ON for risks that have been just converted. OFF means use the default severity level for the RAW severity level (see default severity level above). ON means a severity level will be selected manually as the RAW severity level for this risk.

Recommendation: It is better to use the default raw severity level calculated from the information in the risk-event type. As the system improves, additional harm may be added to the risk-event type or the most likely type of harm may change resulting in the automatic adjustment of all risk. If the RAW severity level is overridden, every risk must be maintained manually.

Raw Risk assessment

A 'raw' risk assessment is *before any controls* are put in place to minimise risk. It reflects the worst case level of risk, not controls or if one or more controls fail.

Select the RAW risk tab, then set the following:

- **Severity** – use the default, or select by pressing the drop down button if overriding the default.
- **Likelihood** - select by pressing the drop down button.
- **Exposure** (if used) - select by pressing the drop down button.

The raw risk ranking, calculated from settings in the risk rating method, identifies the level of risk priority, WHAT action needs to be taken and WHO is responsible. If the level of risk exceeds that acceptable, either by the organisation or from legislation, the hazard (may cause the risk-event) must be eliminated. If the hazard is eliminated there is zero chance of anyone being exposed to the hazard, hence zero chance of a risk-event to result in harm or loss.

If the hazard cannot be eliminated then risk exists through the chance of exposure to the hazard. If the risk level is not acceptable it must be minimised until it becomes acceptable.

To add or remove controls in a risk

- Press *Select / Re-select controls*,
- Change the selection of controls by tagging or un-tagging currently selected controls in the controls library (new controls may be added),
- Press *return with changes* to update controls in the risk. (*See using the controls library*).

Controls are how risk is minimised. The Health and Safety Act specifies the order that types of controls must be applied to a risk.

1. Engineering controls – applied to the hazard.
2. Administration controls – sets of procedural requirements that, if effective, work together to reduce risk.
3. PPE Controls – the last type of control uses personal protective equipment, in conjunction with procedural use requirements, to reduce risk.

Risk is reduced in one or more of these:

- Reducing the exposure to the hazard
- Reducing the likelihood the hazard will cause a risk-event
- Reducing the likelihood that harm will result from the risk-event
- Reducing the severity of possible loss harm resulting from a risk-event.

The control needs to specifically address these factors. Superfluous requirements in a control that are not for the specific purpose of reducing risk just get in the way of achieving the control's objective.

Residual risk assessment

The residual risk is that remaining *after all controls* are in place, and assuming all controls will be effective. This is the best possible risk assessment and is used to determine if the controlled or residual risk meets legal and organisational acceptable levels. If not, additional controls or changes to the hazard will be required.

Select the *residual risk tab* then set the following:

- **Severity** – select by pressing the drop down button (generally this will be the same as the raw risk severity unless there are engineering controls).
- **Likelihood** – select by pressing the drop down button.
- **Exposure** (if used) – select by pressing the drop down button.

The residual risk rating (like the raw rating) is calculated based on settings in the risk rating method and is used to identify a residual risk group (set up in the risk rating method). It says WHAT action needs to be taken and WHO is responsible for the residual risk.

Risk reassessment frequency

Select the *reassessment frequency*, a number and days, months or years that this risk needs to be reassessed. The objective of reassessment is to ensure the original raw risk level has not changed and that the controls are still effective in reducing risk to the residual risk level.

To save changes to a risk

Press OK to save changes to the risk or Cancel to quit without saving changes.

Risk assessment history

Every time the selection of controls for a risk is changed, or a new risk assessment made, any changes are recorded in the risk's assessment history. Generally the last five changes will be shown in reports. Before exiting a changed risk a window opens showing asking for the assessor which is select by pressing the drop button. Any notes may be edited.

Example of risk recording window

Adding or changing risk categories

From risk management menu.

The conversion process created one risk category called 'Health Safety & Env'. All risks have been placed in this category under three temporary risk-event types. Later, other risk categories may be added for 'financial', 'production', etc, risks if required but, for the moment, we will only deal with health, safety and environmental risks.

The risk category determines who or what may be harmed and the type of harm or loss. Examples are in the table below. This also means that harm types are added under each risk category and the level of suffering (severity or consequences).

Risk category	Stake-holder	Harm/loss	
Health & safety risks	Person	Harm	Injury/illness
Production / quality risks	Business	Loss	\$ / customer
Financial risks	Business	Loss	Reputation / company / \$
Public safety risks	Person	Harm / loss	Injury / illness / \$
Environmental risks	Public / government / environment	Harm / loss	\$ / reputation

Risk categories, who suffers and the type of suffering (harm/loss)

Adding or changing risk-event types

Each converted hazard was for 'all risk-events' that may occur from the hazard so that is what the conversion created as the risk-event for the combined risks from the hazard.

You will need to edit each risk and select a risk-event type, or create one if it does not yet exist. At first, determining the risk-event type may be a bit difficult because we are not used to giving a name to the thing we are trying to prevent from happening but, as you progress, this will become easier. To help, the risk-events that the current Health and Safety At Work Act 2015 defines as Notifiable if they result in a serious exposure to the risk is shown below.

Examples of event types (from Act)

Risk Event Type – Exposure to a serious risk from	Notifiable Y/N & section
Escape of a substance	Y S24.1(a)
Spillage of a substance	Y S24.1(a)
Leakage of a substance	Y S24.1(a)

Implosion	Y S24.1(b)
Explosion	Y S24.1(b)
Fire	Y S24.1(b)
Escape of gas or steam	Y S24.1.(c)
Escape of a pressurised substance	Y S24.1(d)
Electric shock	Y S24.1.(e)
Fall or release from height of plant, substance, thing	Y S24.1(f)
Collapse, overturning, failure, damage of authorised plant	Y S24.1(g)
Collapse, partial collapse of a structure	Y S24.1(h)
Collapse, failure of excavation or shoring	Y S24.1(i)
Inrush of water, mud or gas underground	Y S24.1(j)
Interruption of main system of ventilation underground	Y S24.1(k)
Collision between 2 vessels, capsise, inrush of water	Y S24.1(l)
Other incident declared by regulations	Y S24.1(m)
Notifiable injury	Y S23...
Notifiable illness	Y S23...

Risk events types that are 'notifiable' in the Health and Safety at Work Act 2015.

As risks are reviewed there will be other risk-event types that you may add for risks that are not Notifiable, for example, bullying, slips, trips, falls... *It is important not to confuse risk-event types with the harm that may result from them.* For example, the risk event type of 'Electric shock' may result in one or more harm types: burns, shock, haemorrhage, fatality. Remember - ask the question: What is the *event that may happen* that may result in harm or loss?

From the Risk management menu, select Edit risk event types and press Add – or, from within a risk, press the drop down to select a risk-event type from the list. If necessary, a new risk-event type may be added to the list by pressing Add.

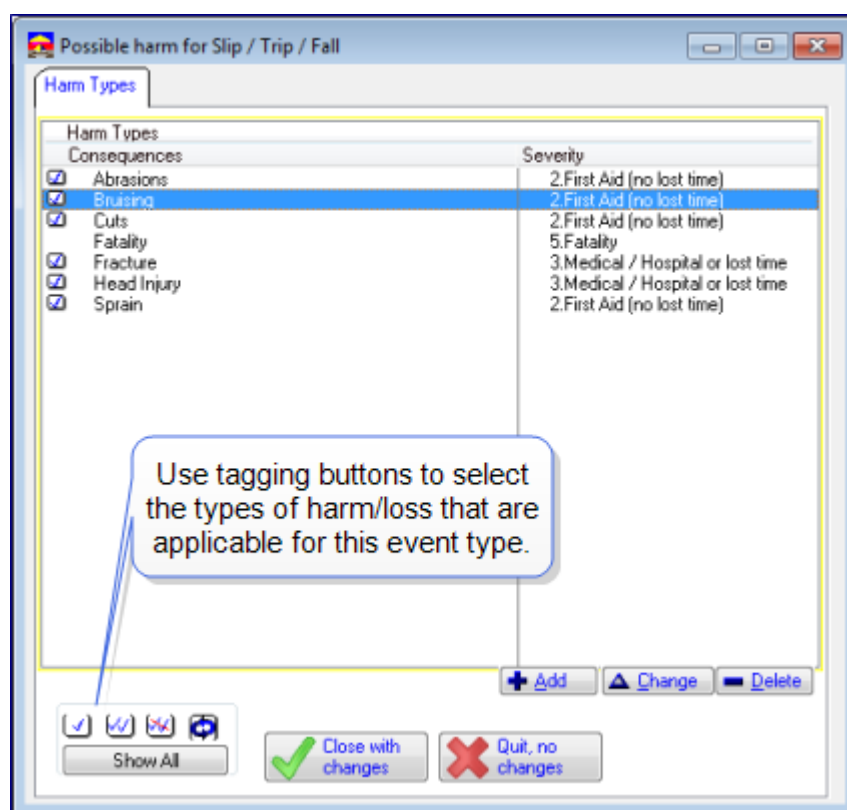
Adding a new risk-event type

- Select the risk category from the drop down button – 'Health Safety & Env'
- Enter the name for the risk event-type (see above)

- If the event is Notifiable under the Act, tick the box (optional)
- For reference, enter the section in the Act (optional)
- If your business determines that this event-type is *internally-notifiable*, tick the box (optional).
- Update all possible harm types that may result from this event type by pressing the button (see below)
- Set the most likely harm/loss type from the list by placing the cursor on it and pressing the Set most likely harm/loss button. This will be used as the default for risks of this risk-event type, unless it is overridden.
- Press OK to save the changes.

Updating possible harm or loss types for a risk-event type (from the risk event-type)

Rather than having to select the harm and loss types for every risk, they are specified once in the risk-event type, along with the most likely type of harm.

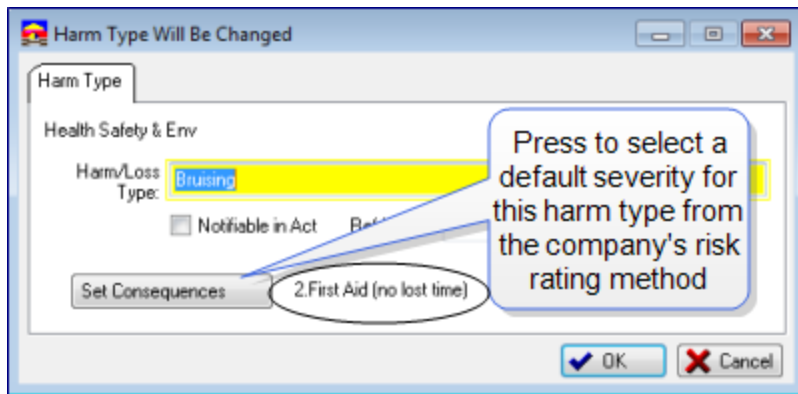


Window to select harm/loss types for risk-event type.

- Tag / untag any harm types that may result from this risk-event type.
- When finished, press Close with changes. To cancel changes press Quit, no changes.
- To add an additional harm type press Add
- To update a harm type, select the harm / loss type and press Change

Adding or changing harm types (from risk-event type harm/loss selection)

Harm types may be added from either a risk category or when selecting the types of harm or loss for the risk-event type (as in the window above). Note that the harm/loss types will be set up for a particular risk category. This means a set of health and safety harm/loss types can be used for health and safety and a different set for, say, production risks.



Editing a harm (or loss) type

- Enter the name of the harm type
- Select if the harm type is Notifiable in the Act (optional)
- If Notifiable, enter the reference in the Act (optional)
- Press the Set consequences / severity button to select a value from the company's risk rating method. (See risk rating methods.)
- Press OK to save the new or changed harm / loss type.

Note: changes to harm/loss types affect all risk-event types that refer to the harm type. For example, if the severity of harm is changed it will change it in every risk where it is referenced, possibly altering the raw (non-controlled) risk rating of the risk.

Adding or changing a hazard

From within a new risk being added, press the hazard drop down button to show a list of hazards. To add a new hazard press Add.

From the Risk management menu, select Hazards (risk managed). To add a hazard press the add button or to change a hazard highlight the hazard and double click or press change.

Hazard ID tab

Change Hazard

THE HAZARD (a Thing or a Situation)

Power tools

Date Identified: 31/01/2016

Department: Factory

NOTE: A location is required to allocate a hazard to a workplace.

Hazard/Work Place(s)	Location	Description
Main Base Site	Factory Blue Area	
Main Base Site	Factory Green Area	
Main Base Site	Factory Red Area	

Additional hazard notes

Change Hazard's Locations

How are risks for this hazard controlled?

? **Eliminate Hazard** **Minimise Risks**

Risks for Hazard

Risk Ranking	Event type	Consequence	Likelihood	Next Assessment
40.High	Electric Shock	20	2	10/02/2018
20.High	Excessive Noise	20	1	10/08/2017

+ Add Event type risk and Controls Change / Review Controls Delete

Hazard# 17 Power tools

OK Cancel

Example of a hazard showing two risks

The hazard window for risk management is a little different from that for hazard management. Each risk is assessed and managed separately so the hazard has no assessment details. Any previous assessments under hazard management will have been transferred to the first risk that was established during conversion for the hazard.

The **hazard** name is required. This is a thing – or – situation (coming together of things) that could give rise to one of the risk-event types. The **date identified** should be entered or selected using the date selector button. It is important to record this in case you need proof of hazard identification. A **department** may be selected (in the enterprise version the hazard department selected may alter what hazards and risks a user can see). It is a legal requirement to say **how this hazard will be controlled** – if it has been eliminated select *Eliminate hazard*, otherwise select *minimise risks*.

To where people may be exposed to the hazard

A list of workplaces and locations is shown on the right. This is where people may be exposed to the hazard and by selecting a list of locations SafetyLink™ know who will be exposed to the hazard, and therefore it's risks, if workers also have their work locations identified. To select the locations press Change hazards locations, tag locations and return to the hazard with the changes. Each location will be connected to a workplace so this will automatically show.

To add, change or delete risks in hazard

Press add event type risk and controls. To change or review a risk, highlight the risk and press change / review controls. To delete a risk entirely, highlight the risk and press delete. Note: if a risk is deleted there will be no record left of the risk. Risks may also be deleted from the risk tree.

Staff exposure tab

Hazard Staff and worker exposure tab

People are exposed to risks from a hazard because of what they do (tasks), things they are evolved in (processes), the job they do (which is really processes and tasks), where they go to (locations) or the hazardous materials they use (substances).

To update the selections of tasks, processes, job types or substances press the update button under each list which shows a table with currently selected items already tagged and allows tagging or un-tagging of items. After changes are complete press the return with changes button from the selection list.

Actions tab

Hazard actions tab showing an action

This tab is to record actions that need to be taken for the hazard. This may include engineering actions that will become engineering controls after they are completed or anything else connected with the hazard. Actions become part of the history of the hazard and may be required retrospectively to show when and who took them. To add an action press the Add button, Actions may be completed from here by updating the completed details or from the Actions toolbar icon.

Links to this hazard tab

Incidents and any health monitoring that was set up that is linked to this hazard will be shown in this tab.

Photo tab

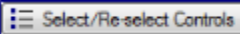
A photo or photo montage may be added by pressing the photo file name lookup button.

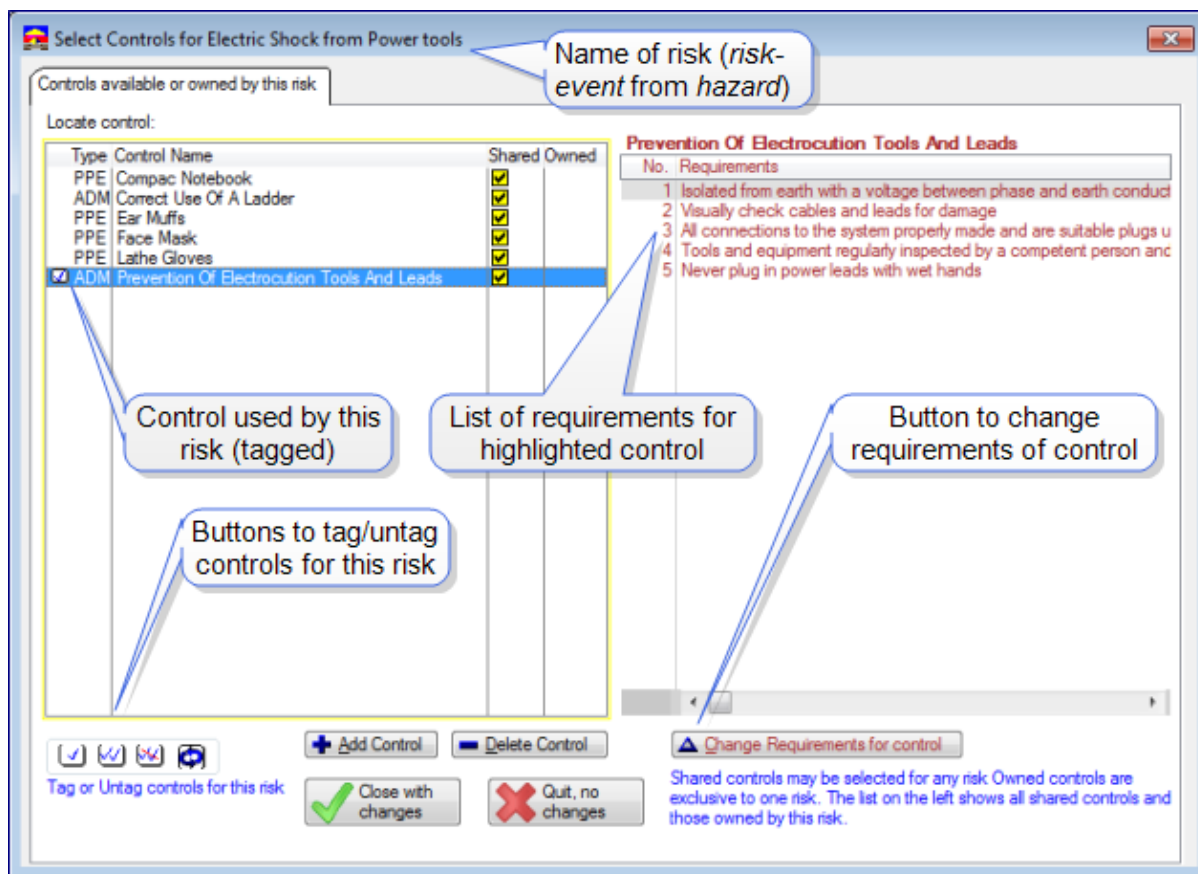
NOTE: The intention is to change this to an attachment in a later SafetyLink™ update.

Saving changes for a hazard

Press the OK button on the hazard to save it with any changes. Cancel will quit the hazard but any changes to links from the hazard to other table will already have been changed and will not be undone on cancel.

Using the controls library

The Controls library is entered from any risk by pressing . Although controls for all risks are stored in the controls library, only those selected for a particular risk or available for that risk will be shown.



Controls library showing controls used by risk (tagged) or available to be used by risk (shared controls).

Controls are all stored in one controls library and may be shared by multiple risks, if appropriate. Requirements of a control need only be changed in one place and all risks sharing the control receive the updated requirements.

Type	Control Name	Shared	Owned
PPE	Compac Notebook	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ADM	Correct Use Of A Ladder	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PPE	Ear Muffs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PPE	Face Mask	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	ADM Just For This Risk	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PPE	Lathe Gloves	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	ADM Prevention Of Electrocutation Tools And Leads	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Example above shows the controls library for a risk that has selected one shared control and one non-shared control (owned exclusively by the risk).

Selecting controls for a risk (from controls library)

On entering the controls library all currently selected controls for the risk will be shown as tagged. Changes to this selection are made by using the tag / untag buttons. New controls may be added and selected and untagged controls that are no longer required deleted. When all selection changes have been completed, press 'Close with changes' to return to the risk with the new selection of controls.

Adding and updating a control (from the controls library)

To add a new control press Add Control. To change an existing control, press Change requirements for control.

Control Will Be Changed (Prevention Of Electrocutation Tools And Leads)

Health Safety Env Control

Control Name (Required)
Prevention Of Electrocutation Tools And Leads

Control Type:
☒ Administration
☐ Engineering
☐ PPE

☒ Share Control
 A SHARED control may be used by multiple risks. Changes to the control flow to all risks sharing the control. A NON-shared control is for one risk only.

Check to share control - uncheck to own a control

Requirements for the control

Check to share control - uncheck to own a control

A completed control

The **control name** is required if the control may be shared by multiple risks, in which case, **share control ON** will be checked. Checking **share control off** means this control may only be used by the current risk. New controls have share control ON by default.

This is a very powerful feature, however care must be exercised when changing shared controls. For example, if a near-miss incident identifies a new requirement for the control to be effective, it is added to the control once. Each risk using this control also receives the new requirement, which will be reflected in reports, checklists and safety requirements. However care must be taken when sharing a control as you may not have access to all risks sharing the control due to your security. In general, controls should be maintained by one person in an organisation representing the safety committee or safety officer. Controls span across all sites and all users, they are organisation controls. *If a control is specific to one particular risk, share control should be set OFF.*

The **control type** may be Engineering (change to plant or equipment), Administration (if a procedure must be followed) or PPE (if personal protective equipment is required). The Act requires controls to be applied in the preceding order to reduce risk.

Every control has the specific objective of *controlling* some aspect of the risk. In order to achieve this objective there will be one or more **control requirement** that, taken-all-together, make the control effective. A control that is not 100% effective is not a control; it is a failed control which needs attention. Each control requirement is focused on its part for control of risk. Ad-hoc and unnecessary requirements that do not play a part only confuse. A large part of continuous improvement is improving the requirements of controls, discovered as a result of investigating incidents, so the control becomes increasingly more effective.

Even a PPE control usually needs other behavioural requirements such as how to effectively use the PPE, how to check its condition and when to replace it. Administration controls usually consist of a series of requirements. Often these will be behavioural requirements expressed in terms of what is expected.

Control requirements may be added, changed or deleted.

Completed control requirement and observation

The requirement is what is required or expected to be done. The observation is what would have been expected to have been seen if the requirement was met. Requirements are shown in risk controls and observations in checklists for observers to use when checking requirements. The observation is usually the past tense of the requirement. Note: Pressing the F7 key on an entry field anywhere in the application checks spelling.

Risk rating method setup

The SafetyLink™ risk rating setup is extremely flexible and can facilitate most types of risk ratings used by organisations and a few risk rating methods are provided with the application as samples. However each organisation needs to set up their own based on the types of risks and whether the risk management system is for health and safety only or will be used for other organisation risks such as production, environmental, public safety or financial.

To see which risk rating method is being used currently

- Select the Company toolbar item

- Select H&S Option tab
- This shows the risk rating method in use, the default is #2. A new one may be selected using the dropdown – however do not change the current risk rating method reviewing it and possibly making changes.

To review the current risk rating method

From the main menu, select File / Options / Risk rating methods. This shows a list of risk rating methods available. The current risk rating method in use will be the one with the number specified in the company record. SafetyLink™ installs three different types of risk rating methods, number 0,1 and 2. The one marked 2 is the default. If a new risk rating system needs to be added give it a number going backwards from 9, which will same confusion if the happen to install a no 3 during a software update. **CARE: If the risk rating method is changed, or modified substantially, all risks may need to be reassessed.**

Working from a risk rating matrix

The risk rating system matrix is for levels of likelihood of loss against levels of the consequences of that loss. Consequences usually range from insignificant to catastrophic. The matrix will be for all categories of risk, health and safety, environmental, possibly production risks or financial risks, so the meaning of catastrophic will vary depending on who suffers. One fatality is catastrophic for a worker but for a large business catastrophic means the end of the business, so the meanings of levels of consequence differ for different categories of risk. In the risk matrix below the meanings are italicised.

Take an example from Worksafe New Zealand:

<http://www.worksafe.govt.nz/worksafe/toolshed/safe-use-of-machinery-toolkit/assess-risk-rating-table>

Risk Rating Table				
Likelihood of injury or harm to health	Consequences of injury or harm to health			
	Insignificant no injuries	Moderate first aid and/or medical treatment	Major extensive injuries	Catastrophic fatalities
Very likely	High	Extreme	Extreme	Extreme
Likely	Moderate	High	Extreme	Extreme
Moderate	Low	High	Extreme	Extreme
Unlikely	Low	Moderate	High	Extreme
Highly unlikely (rare)	Low	Moderate	High	High
Extreme = immediate action				

Risk matrix from Worksafe site

The first step is to work out what values to give to each of the 5 levels of likelihood and the 4 levels of consequences and decide how to combine the values to arrive at a numerical risk rating. There are two usual types of ranges for likelihood and consequences: linear (e.g. 1,2,3...or logarithmic e.g. 2,4,8,16... If linear, the risk rating is given multiplying the likelihood value by the consequences value and if logarithmic the values of likelihood and consequences are added (adding logarithmic numbers is the same as multiplying linear numbers).

Step 1. – Give likelihood and consequences level numbers from smallest to highest.

Risk Rating Table				
Likelihood of injury or harm to health	Consequences of injury or harm to health			
	Insignificant no injuries ①	Moderate first aid and/or medical treatment ②	Major extensive injuries ③	Catastrophic fatalities ④
Very likely ⑤	High	Extreme	Extreme	Extreme
Likely ④	Moderate	High	Extreme	Extreme
Moderate ③	Low	High	Extreme	Extreme
Unlikely ②	Low	Moderate	High	Extreme
Highly unlikely (rare) ①	Low	Moderate	High	High

Extreme = immediate action

Step 2 – Find a set of values for each level of likelihood and consequences that work in the matrix

Levels	Consequence	1	2	3	4
Likelihood	Values	1	5	20	50
5	11	H (11)	E (55)	E (220)	E (550)
4	4	M (4)	H (20)	E (80)	E (200)
3	3	L (3)	H (15)	E (60)	E (150)
2	2	L (2)	M (10)	H (40)	E (100)
1	1	L (1)	M (5)	H (20)	H (50)

Values for levels of likelihood and consequence that satisfy the risk rating matrix where risk rating = (likelihood x consequences).

Risk ratings are calculated as value of a level of likelihood times a value of a level of consequence. Looking at the values obtained, it can be seen that they are not linear, each level increase more than the last. This implies that the risk matrix is probably logarithmic and so a different set of values may be obtained that are added instead of being multiplied.

Levels	Consequence	1	2	3	4
Likelihood	Values	1	4	8	16
5	7	H (8)	E (11)	E (15)	E (23)
4	4	M (5)	H (8)	E (12)	E (20)
3	3	L (4)	H (7)	E (11)	E (19)
2	2	L (3)	M (6)	H (10)	E (18)
1	1	L (2)	M (5)	H (9)	H (17)

Values for levels of likelihood and consequence that satisfy the risk rating matrix where risk rating = (likelihood + consequences (logarithmic scaling)).

We see from above that the intention of the Worksafe risk matrix was to use logarithmic values for likelihood and consequences adding smaller numbers rather than multiplying larger ones for the risk rating. There are many solutions to a matrix such as this, any that work for all combinations of likelihood and consequences will do the job.

Step 3 – Find the lower and upper values for each risk ranking level.

After deciding which matrix solution to use (either will do), the lowest and highest value for each of the risk ranking levels needs to be noted.

Using the first solution, the Low is 1 – 3, Moderate 4 – 10, High 11 – 50 and Extreme 51 upwards to the highest of 550. In this case risk rating is likelihood value x consequence value. Using the second solution, Low is 1 – 4, Moderate 5 – 6, High 7 – 10 and Extreme 11 upwards to the highest of 23 and risk rating is likelihood + consequences.

Adding or editing a risk rating method level.

From the main menu, select File / Options / Risk rating methods and press Add.

For this example we will use the Worksafe risk matrix and the values from the first solution above (but the second set could equally be used).

Risk rating method - General tab

Risk rating method – General tab

Risk rating method is a unique number to identify this method.

Brief description help identify the method in a list.

Risk score calculation is multiply if using linear values for likelihood and consequences, i.e. risk rating = likelihood value x consequences value; add if using logarithmic scales, i.e. risk rating = likelihood + consequences.

Severity to use for multiple harm tells SafetyLink™ how to calculate a default severity for a risk when the risk-event type has previously been set up with possible types of harm. The default option is to use the severity of the most likely type of harm, the most likely has been identified in the risk-event. Failing that it will calculate and use the average severity of all the types of harm. The highest or lowest severity value of any harm in the event-type may also be chosen. This saves having to make a decision for every single risk, although this default may be overridden for any risk.

Risk rating method - Labels tab

Severity
Severity Label: Number of Levels:

Likelihood
Likelihood Label: Number of Levels:

Exposure
Exposure Label: Number of Levels:

Risk Rating
Priority Label: Priority Levels Used:
☒ Risk Priority Actions and Responsibilities Used

This tab sets up the labels and levels for severity, likelihood, exposure (if it is used) and the risk rating and whether or not risk priority actions and responsibilities will be used (recommended).

Severity label is the name to be used for severity of loss or harm or injury. Sometimes, consequences is used instead of severity. Also the **number of levels for severity** needs to be specified. The maximum is 7 but in this case 4.

Likelihood label is usually likelihood, but this may be changed. The **number of Likelihood levels** is also required (maximum 7). In this case there are 5 levels.

Exposure label is the name for this aspect of likelihood. If total likelihood is to be separated into the likelihood of 1 exposure times the total number of exposures to a hazard then specify the name for Exposure and the **number of levels of exposure** (maximum 7) that exposure will be separated into. If exposure is included when selecting a risk's likelihood then clear the label and set the number of levels to 0.

Priority label is the heading for the **risk priority levels** (e.g. Low risk, medium risk... catastrophic) and select the number of risk priority levels. If each priority level is to be associated with a set of words that describes what action needs to be taken and who is responsible, tick **Risk Priority and Responsibilities used**.

Risk rating method - Severity tab

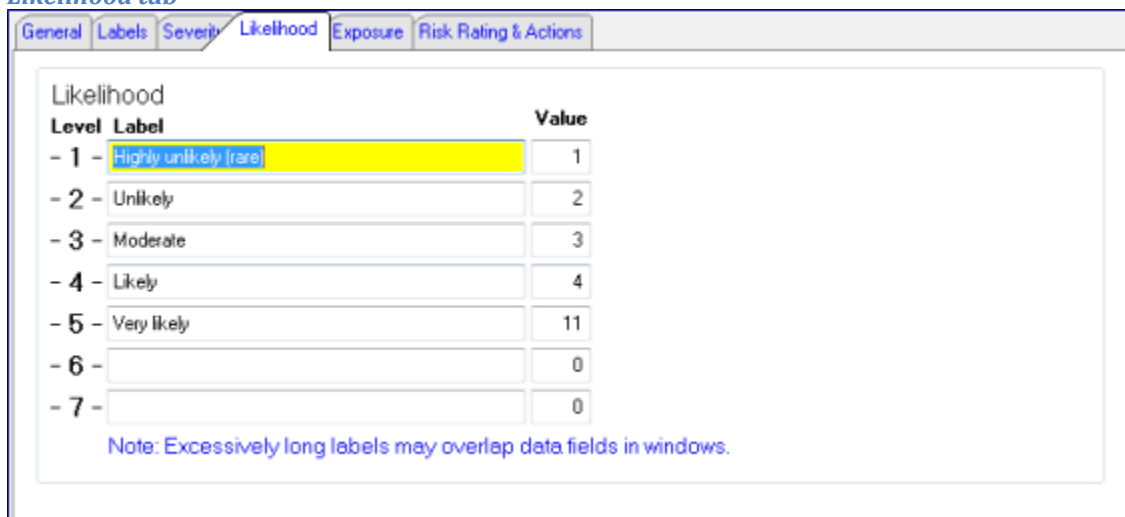
Level	Label	Value
- 1 -	Insignificant (no injuries)	1
- 2 -	Moderate (First aid, Med treatment)	5
- 3 -	Major (Extensive injuries)	20
- 4 -	Catastrophic (Fatalities)	50
- 5 -		0
- 6 -		0
- 7 -		0

Note: Excessively long labels may overlap data fields in windows.

In this tab, the levels of severity (or consequences) is set up from level 1, the lowest level to however many levels specified in the risk rating labels tab. Each **severity level's label** should be brief and

against each label is the **level's severity value** taken from the risk matrix. It is important to ensure the values are accurate as these determine the risk ratings for all risks. For all unused levels, clear the label and set the value to 0.

Likelihood tab

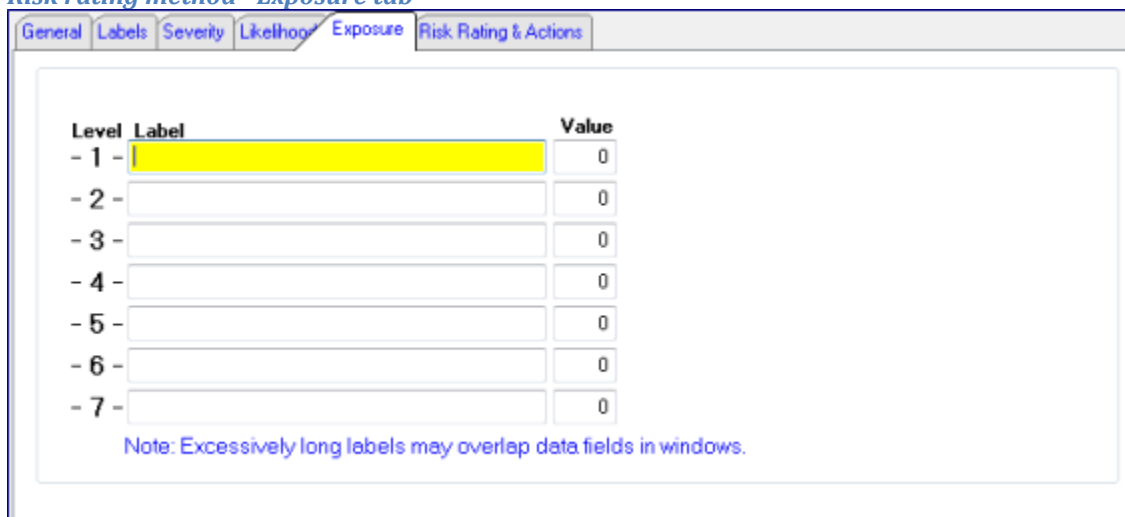


Level	Label	Value
- 1 -	Highly unlikely (rare)	1
- 2 -	Unlikely	2
- 3 -	Moderate	3
- 4 -	Likely	4
- 5 -	Very likely	11
- 6 -		0
- 7 -		0

Note: Excessively long labels may overlap data fields in windows.

In this tab, the levels for likelihood is set up from level 1, the lowest level to however many levels specified in the risk rating labels tab. Each **likelihood level's label** should be brief and against each label is the **level's likelihood value** taken from the risk matrix. It is also important to ensure the values are accurate as these determine the risk ratings for all risks. For all unused levels, clear the label and set the value to 0.

Risk rating method - Exposure tab



Level	Label	Value
- 1 -		0
- 2 -		0
- 3 -		0
- 4 -		0
- 5 -		0
- 6 -		0
- 7 -		0

Note: Excessively long labels may overlap data fields in windows.

In this tab, the levels for exposure are set up from level 1, the lowest level to however many levels specified in the risk rating labels tab. Each **exposure level's label** should be brief and against each label is the **level's exposure value**. For all unused exposure levels, clear the label and set the value to 0. In the Worksafe example being used, the likelihood selected includes exposure so all exposure levels have been cleared.

Risk rating method - Risk rating and actions tab



Level	Label	Background Colour	Low	High	Action / Responsibility
1	Low	Green	3	3	Manage through continuous improvement
2	Medium	Yellow	4	10	Management responsibility required
3	High	Orange	11	54	Manage risks immediately
4	Extreme	Red	55	550	Stop activity or process and report immediately
5					
6					
7					

Default report column background shading color

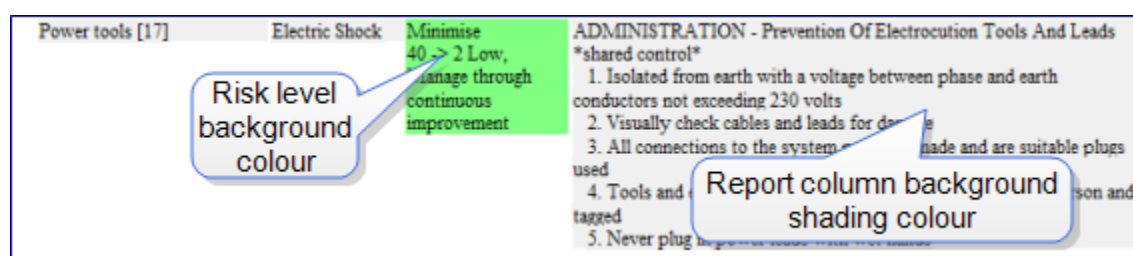
Note: Excessively long labels may overlap data fields in windows.

For each risk level used in the risk matrix:

- Label** is the name for the level
- Background colour** may be selected using the colour popup button to the right of the label. These are the level colour from the risk matrix.
- Low** is this level's minimum risk rating
- High** is the level's highest risk rating. NOTE: Make sure there are no gaps between levels, i.e. the level's low should be the previous level's high+1.
- Action / responsibility** is what action should be taken and who is responsible. This is used for both raw risk assessment and residual risk assessments.

For any remaining unused levels (there is a maximum of seven), clear the label, low, high and action responsibility fields.

A **default report column background shading colour** may be selected if you wish by pressing the colour picker popup button.



Power tools [17]	Electric Shock	Minimise	ADMINISTRATION - Prevention Of Electrocution Tools And Leads
		40 -> 2 Low, manage through continuous improvement	*shared control* 1. Isolated from earth with a voltage between phase and earth conductors not exceeding 230 volts 2. Visually check cables and leads for damage 3. All connections to the system made and are suitable plugs used 4. Tools and tagged 5. Never plug

Task risks report extract showing use of risk rating level colour (green for low risk) and report column background shading colour (grey).

Saving the risk rating method

After all changes have been made to the risk rating method, press OK to save the changes. Cancel will quit without saving changes.

Changing the risk rating method to use in SafetyLink™

Press the Company toolbar item and press the H&S Options tab.

- Use the Risk rating method dropdown button then select the new risk rating method.
- Press the OK button to save the changes to the company record.



Risk Rating Method

Risk Rating Method: 9

NOTE: If the Risk Rating Method is changed, all hazards must be reassessed.

Consequences x Likelihood (Worksafe Risk Rating Matrix)

Important note: after changing the risk rating system, depending on what was changed, the follow will need to be reviewed and possibly changed:

- The severity (or consequence) value for each harm in each risk category.
- All risks may need to be reviewed to ensure changes to the risk rating method have not changed the raw or residual risk rating levels.