

Hazard Identification and Risk Management

The Health and Personal Safety of all our volunteers and staff takes precedence at all times

Firefighting is strenuous, sometimes dangerous work that often takes place under difficult conditions. Many of the difficulties experienced in controlling and suppressing fires are due to human failings that can be avoided.

This policy identifies hazards encountered on the fireground during operational incidents, training sessions and those hazards associated with using fire equipment.

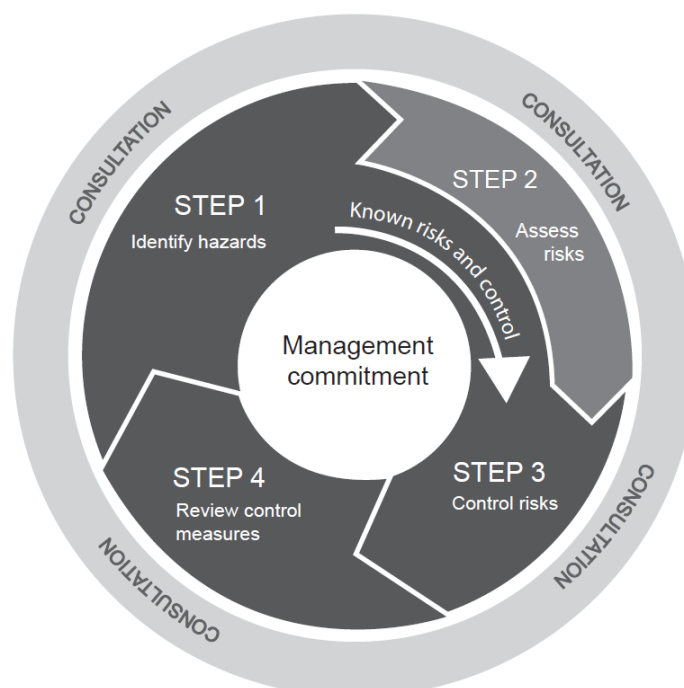
Policy

SRFA is committed to controlling risks to health and safety so far as is reasonably practicable. We have adopted a risk management approach to underpin our health and safety practices. We will do this by implementing the most effective control measure either by eliminating or minimising the risks arising from aspects of our work. This approach involves all workers identifying hazards, assessing risk, implementing control measures and reviewing how effective the control measures are.

We will carry out hazard identification and risk management as follows:

- Step 1:** IDENTIFY HAZARDS
- Step 2:** ASSESS RISK
- Step 3:** CONTROL RISKS
- Step 4:** ENSURE EFFECTIVE CONTROL
- Step 5:** REVIEW CONTROL MEASURE

All workers will be trained in hazard and risk identification and management. All workers are required to participate in the management process. Any new hazards should be reported to a Manager and /or Health and Safety Co-ordinator as soon as practicable.



Definitions

Reasonably Practicable

Deciding what is reasonably practicable to protect people from harm requires taking into account and weighing up all relevant matters, including:

- The likelihood of the hazard or risk concerned occurring.
- The degree of harm that might result from the hazard or risk.
- Knowledge about the hazard or risk, and ways of eliminating or minimising the risk.
- The availability and suitability of ways to eliminate or minimise the risk, and
- After assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated, including whether the cost is grossly disproportionate to the risk.

Hazard

Hazards at work may include; manual handling, working alone and bullying and violence at work. It also includes a person's behaviour where that behaviour has the potential to cause death, injury, or illness to a person.

Risk

Is the possibility that harm (death, injury or illness) may occur when exposed to a hazard.

Risk assessment

In practical terms, a risk assessment is a thorough look at our workplace to identify those things, situations, processes, etc. that may cause harm to people. After identification is made, you evaluate how likely and severe the risk is, and then decide what measures should be in place to effectively prevent or control the harm from happening.

Risk Control

Means taking action to eliminate health and safety risks so far as is reasonably practicable, and if that is not possible, minimising the risks so far as is reasonably practicable. Eliminating a hazard will also eliminate any risks associated with that hazard.

Step 1: Identify Hazards

Find out what could cause harm.

To identify hazards in our workplace we will consider our physical work environment, the equipment, plant, machinery, materials, substances used and we will look at the way tasks are performed. We will consider information provided by WorkSafe NZ about hazards and risks relevant to our workplace.

New hazards are always going to develop and enter the workplace over time. We will systematically identify new or developing hazards and risks:

- When changing work practices, procedure or environment;
- Prior to completion of design work for new or refurbished premises;
- Prior to the procurement of new equipment or materials;
- Through regular workplace inspections;
- Through reviewing hazard, accident, and incident data;
- When new information or legislative updates become available;

- When responding to concerns raised by workers, health and safety Co-ordinators or others;
- Through task analysis.

It is important that everybody report new hazards, assesses and understands the risks and implements the most appropriate controls.

We will consult with our employees to understand any hazards or risks they have identified.

We will maintain a risk register. We will list all hazards on the risk register and workplace site map if applicable.

Step 2: Assess Risk

Understand the nature of the harm that could be caused by the hazard, how serious the harm could be and the likelihood of it happening.

We will carry out Risk Assessments when;

- A hazard is identified and we have not done one before.
- When a change occurs such as when changes occur to the work equipment, practices, procedures or environment.
- As part of responding to a workplace incident, even where an injury has not occurred.
- Where new information about a risk becomes available or concerns about a risk are raised by workers
- A work activity involves a number of different hazards and there is a lack of understanding about how the hazards may interact with each other to produce new or greater risks
- At regularly scheduled times appropriate to the workplace.
- When it is mandatory, for example, under Regulations for high risk activities.

We will carry out risk assessment by:

Determining likelihood	Explanation and examples
How often are people exposed to the hazard?	A hazard may exist all of the time or it may only exist occasionally. The more often a hazard is present, the greater the likelihood it will result in harm. <i>For example:</i> Continuously lifting heavy items has the potential to cause harm whenever the work is done.
How long might people be exposed to the hazard?	The longer that someone is exposed to a hazard, the greater the likelihood that harm may result. <i>For example:</i> The longer a person is exposed to heat, the more likely it is that they will suffer from heat exhaustion and make mistakes that they would not normally make.
How effective are current controls in reducing risk?	In most cases the risks being assessed will already be subject to some control measures. The likelihood of harm resulting from the risk will depend upon how adequate and effective the current measures are. <i>For example:</i> Firefighters being caught in a flare up due to a sudden change in wind direction.

Determining likelihood	Explanation and examples
<p>Could any changes in your organisation increase the likelihood?</p>	<p>The demand for goods or services in many organisations varies throughout the year. Changes in demand may be seasonal, depend on environmental conditions or be affected by market fluctuations that are driven by a range of events. Meeting increased demand may cause unusual loads on people, plant and equipment and systems of work. Failures may be more likely.</p> <p><i>For example:</i> A sudden high turnover of volunteers within the organisation will mean a decrease in the level of competent firefighters</p>
<p>Are hazards more likely to cause harm because of the working environment?</p>	<p>Examples of situations where the risk of injury or illness may become more likely:</p> <ul style="list-style-type: none"> • Environmental conditions change. For example, work performed in high temperatures in a confined space increases the potential for mistakes because workers become fatigued more quickly; • People are required to work quickly. The rate at which work is done (e.g. number of repetitions) can over-stress a person's body or make it more likely that mistakes will be made. • There is insufficient light or poor ventilation.
<p>Could the way people act and behave affect the likelihood of a hazard causing harm?</p>	<p>The possibility that people may make mistakes, misuse items, become distracted or panic in particular situations needs to be taken into account. The effects of fatigue or stress may make it more likely that harm will occur.</p>
<p>Do the differences between individuals in the workplace make it more likely for harm to occur?</p>	<p>People with disabilities may be more likely to suffer harm if the workplace or process is not designed for their needs.</p> <p>New or young workers may be more likely to suffer harm because of inexperience and unfamiliarity. Even though they are trained, lack of experience means that they are not necessarily competent and require more supervision.</p>

Step 3: Control Risks

Implement the most effective control measure that is reasonably practicable in the circumstances.

Definitions:

Elimination

Physically remove the hazard and its associated risk.

Substitution

Wholly or partially replace the hazard with a lesser risk.

Engineering control

- (a) Means a control measure that is physical in nature; and
- (b) Includes a mechanical device or process.

Isolation

Put a barrier between yourself and the control.

Administrative Control

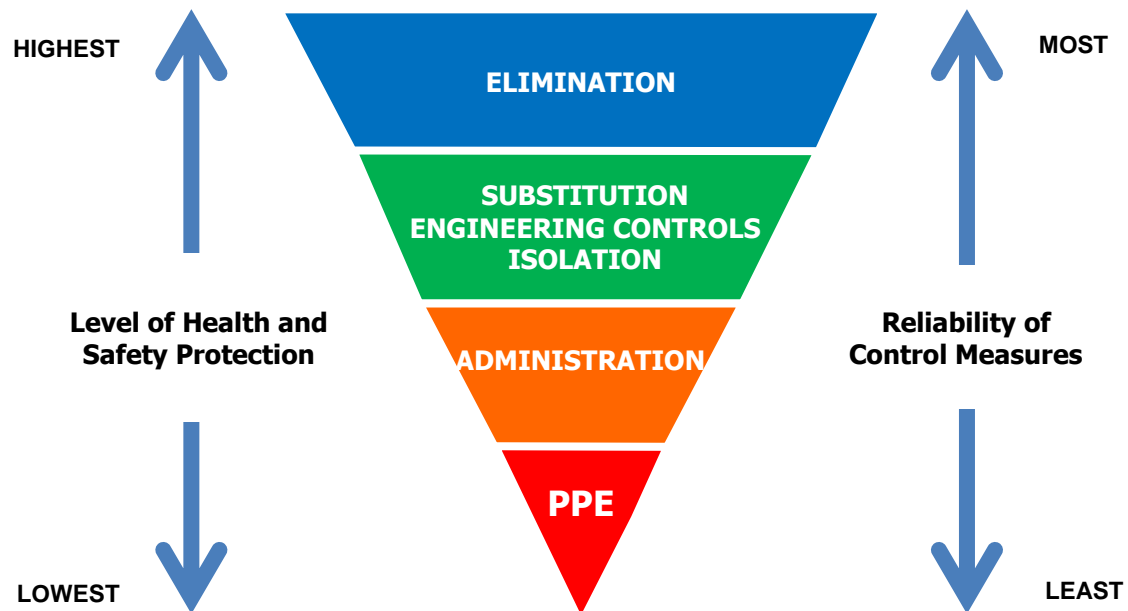
- (a) Means a control measure that is a method of work, process, or procedure designed to minimise risk; but
- (b) Does not include –
 - (i) An engineering control; or
 - (ii) The wearing or use of personal protective equipment.

PPE

Personal Protective Equipment (PPE) i.e. something worn by a person.

Hierarchy of Control:

We will control risks by implementing the hierarchy of controls. The hierarchy of control is a tool where all possible control options are ranked by order of effectiveness. The hierarchy of control is a useful tool, as the order tells us which types of control measure provide a better level of risk control. The higher in the hierarchy of control, the better and more reliable the controls will be as shown in the figure below.



The Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 require all workplaces to implement the hierarchy of control:

- **Eliminate:** Physically remove the hazard and its associated risk.
- **Minimise by:**
 - Use one or more of the following:
 1. Substitution (wholly or partly)
 2. Isolating the hazard
 3. Implementing engineering controls
 - If a risk still remains then you must try to minimise the risk by:
 - Implementing an administrative controls.
 - If a risk still remains then you must try to minimise the risk by:
 - Ensuring that appropriate PPE is supplied to and is worn by employees.

We will consider various control options and choose the control that most effectively eliminates the hazard or minimises the risk in the circumstances. This may involve a single control measure or a combination of different controls that together provide the highest level of protection that is reasonably practicable.

Where possible we will implement controls straight away, if we can not implement immediately we will plan to resolve. We will prioritise areas for action, focusing first on those hazards with the highest level of risk.

Step 4: Maintain Effective Control Measures

Anyone who implements a control measure must make sure that it is effective, and maintained so that it continues to be effective. They must make certain that the control is;

- Fit for purpose; and
- Suitable for the nature and duration of the work; and
- Installed, set up, and used correctly.

Step 5: Review Control Measure

Review Control Measure to ensure they are working as planned.

We will regularly review our controls to ensure they are effective in managing the associated risks.

We will do this by:

- Consulting with employees;
- Observations of processes;
- Health monitoring;
- Reviewing accident and incident data to see whether existing control measures are adequate.

In accordance with the Review Policy, the risk register will be reviewed periodically as part of this step.

Types of Risks

Hazards can be categorised as follows:

PHYSICAL	CHEMICAL	PSYCHOLOGICAL	BIOLOGICAL	ERGONOMIC
Fire/ Radiant heat	Smoke	Stress	Blood	Repetition
Noise	Foam	Trauma	Bodily fluids	Weight
Dehydration	Mist	Accidents	Fungi	Posture
Temperature	Gases	Duty	Bacteria	Work patterns
Vibration	Dust	Drugs	Yeasts	Seating
Light levels	Fumes	Alcohol	Enzymes	Lifting
Manual handling	Vapor	Fatigue	Infected material	
Machines	Solvents		Viruses	
Energy sources	Acids			
Mechanical	Pesticides			
Confined spaces	Metals			
Tools	Paints			
Atmospheric	Resins			
Ventilation	Waste			
Slips, trips, falls	By-products			
Stairs, ladders	Sprays			
Housekeeping	Aerosols			
	Flammability			
	Explosives			
	Corrosives			
	Alkalis			



INSERT WORKPLACE MAP WITH HAZARDS DRAWN ON

Identify all hazards that a visitor/contractor may potentially come into contact with whilst in the workplace, there will be further hazards from the examples provided above at your workplace that should be drawn on, it is important to identify as many as possible without making your map too difficult to read. These can be drawn on with a code – for example:

Roads = _____

“No go” zones = 

EXAMPLES OF HAZARDS AND EMERGENCY INFORMATION:

- Carparks
- Public roads
- Slippery walk ways
- Chemical cupboards

- Any “no go” areas
- Fire exits
- Fire extinguishers
- First aid kits
- Outside assembly point
- Pedestrian areas
- Forklift use areas
- No pedestrian access area.



Risk Register



HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
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STRESS AND FATIGUE						
Excessive or continued Long hours of work	Physical and / or mental Stress / fatigue	CRITICAL	Physical: headaches, indigestion, tiredness, slow reactions, shortness of breath. Mental: Difficulty in decision-making, forgetfulness. Behavioural: diminished performance, withdrawal behaviours, impulsive behaviour, increase in alcohol and nicotine consumption. longer-term: Cardiovascular disease (CVD), immune deficiency disorders, gastrointestinal disorders, psychiatric/psychological illness (PPI) and musculoskeletal disorders.	<ul style="list-style-type: none"> Allow sufficient time for breaks 	LOW	
				<ul style="list-style-type: none"> Provide sufficient information to enable employees to perform tasks competently, including adequate support and resources for decision-making 		
				<ul style="list-style-type: none"> Provide additional practical assistance when employees are doing challenging tasks (eg second person to assist) 		
				<ul style="list-style-type: none"> Allow employees sufficient time to perform tasks and provide well maintained suitable equipment 		
				<ul style="list-style-type: none"> Refer to WorkSafe NZ publication, 'Healthy Work – guide to Managing Stress and Fatigue in the Workplace.' 		
				<ul style="list-style-type: none"> Ensure that work loads are within individual employees capabilities. 		
				<ul style="list-style-type: none"> Give employees some control over the way they do their work including work pace and order of tasks . 		
				<ul style="list-style-type: none"> Rotate tasks and schedules so that employees are not always assigned jobs that require a high level of decision making or prolonged periods of concentration. 		
				<ul style="list-style-type: none"> Plan ahead for any overtime hours required, so that employees can make necessary adjustments to their work flow in advance 		
				<ul style="list-style-type: none"> Design jobs within employees' capabilities 		
	Extra work load on remaining employees			<ul style="list-style-type: none"> consult with employees when determining performance targets 	LOW	
Distractions / lack of attention	Increase in workplace accidents	CRITICAL		<ul style="list-style-type: none"> Develop a well being programme for the organisation 	LOW	
				<ul style="list-style-type: none"> Educate employees about the early warning signs of stress and fatigue, encourage them to report any tiredness and take breaks when they need to, where reasonably practicable 		
				<ul style="list-style-type: none"> Ensure that employees understand the need to get sufficient sleep 		
	Inattentive workers	CRITICAL			LOW	

Risk Register



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BULLYING AND HARASSMENT

Offensive, intimidating, malicious or insulting behaviour	poor morale and poor employee relations	CRITICAL	nausea ulcers skin rashes irritable bowel syndrome high blood pressure tearfulness	<ul style="list-style-type: none"> Identify at risk situations and put in place controls to prevent the behaviour from occurring in the first place. Provide Staff training and information. Prompt and appropriate response occurs in response to a reported incident of violence or harassment. Refer to WorkSafe NZ guide – Violence at Work. and Violence at Work: a guide for Employers -HSE Develop procedures. that prevent violence from occurring in the workplace 	LOW	
Aggressive and intimidating conduct	reduced work performance, concentration and decision making ability	CRITICAL	distress, anxiety, panic attacks or sleep disturbance	<ul style="list-style-type: none"> Acknowledgement that bullying and harassment are problems for the organisation Setting clear directive that these actions will not be tolerated and is an employment related issue Offer counselling for party's A trained emergency response team is provided if needed Educating staff about reporting procedures 	LOW	
Belittling or humiliating comments	loss of self-esteem and self-confidence	CRITICAL	muscular tension, headaches, fatigue digestive problems thoughts of /or actual suicide	<ul style="list-style-type: none"> Will be acted upon by senior management as soon as a complaint has been laid Clear statement that bullying and harassment is unlawful, will not be tolerated within the business Management statement that bullying and harassment may be treated as disciplinary offences 	LOW	

CYBER BULLYING

Threatening emails	Not being able to use phones or computers	CRITICAL	depression thoughts of /or actual suicide. nausea ulcers skin rashes irritable bowel syndrome high blood pressure tearfulness	<ul style="list-style-type: none"> Ensure that all employees understand what is meant by unacceptable behaviour Clearly outline the steps the organisation takes to prevent bullying and harassment 	LOW	
Public bullying through social media				<ul style="list-style-type: none"> Ensure that managers are trained so as they know how to deal with a bullying / harassment complaint Offer of counselling to any employee who feels that they have been bullied or harassed Train employees how to deal with a cyber bullying issue i.e. forward emails onto supervisor or manager Trained investigation personnel to follow up any reported cyber issues Some types of workplace bullying are criminal offences, check with your manager to see if your type of bullying is a criminal offence or not 		

Risk Register



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MANUAL HANDLING						
Over exertion	Lifting items that are too heavy for one person	HIGH	Bruising, Lacerations Soft tissue damage serious back injuries musculoskeletal disorders Fractures	<ul style="list-style-type: none"> Use a trolley to transport heavy items. High shelves for light items only (anything over shoulder height). Break items down into smaller more manageable size. Anything over 20kg must be lifted by two people. Ensure regular maintenance of equipment to allow easy movement and operation Use slides, rails, roller tracks or castors to reduce friction and therefore reduce force. Label the item with handling instructions, including the weight of the package Consider how special needs such as age, fitness, disability, pregnancy and size might influence the task. For example, plan for reducing manual handling activities during pregnancy. Have sufficient people for the task's demands. 	LOW	
	Lack of rest period or micro breaks	HIGH		<ul style="list-style-type: none"> Reduce repetition and allow sufficient rest breaks and pauses (these do not have to be long but should be frequent) and rotate employees between tasks that have different actions. Take micro breaks and do stretching exercises 		
Poor work environment	Excessive noise	HIGH	Partial or full hearing loss	<ul style="list-style-type: none"> Ensure that the noise levels are low enough that you can hear any shouted warning or conversation with a second person 	LOW	
	Increase chance of a slip, trip or a fall	HIGH	Bruising, Lacerations Soft tissue damage serious back injuries musculoskeletal disorders Fractures	<ul style="list-style-type: none"> Ensure that the route you are taking is clear of any obstruction or trip hazard Reduce the slipperiness of floors or increase cushioning through altering floor surface or footwear. Ensure that floors don't get slippery in wet weather or wet conditions. 	LOW	
	Uneven surfaces	HIGH		<ul style="list-style-type: none"> Ensure that ramps are use if the ground is too uneven If there are steps and slopes, and the task cannot be altered to avoid them, ensure good design and adequate visibility. 	LOW	
	Poor lighting	HIGH		<ul style="list-style-type: none"> Ensure lighting provides good visibility, and avoid extremes of glare, high contrast or dull lighting 	LOW	

Risk Register



HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
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MANUAL HANDLING continued						
Poor work environment	Restrictive or confined work space	HIGH	Bruising, Lacerations Soft tissue damage serious back injuries musculoskeletal disorders Fractures	<ul style="list-style-type: none"> Ensure that there is enough room to lift or lower an object without having to twist at the same time Provide as much space as is required to safely carry out the handling task, through moving unnecessary equipment and furniture, or redesigning the layout of the task. This can be established through a trial. Increase the available space for handling by removing unnecessary equipment, redesigning the layout or altering or changing the location of the task. 	LOW	
	Extreme temperatures	HIGH		<ul style="list-style-type: none"> Limit the duration of handling in extreme temperatures or for particular at-risk tasks. Reduce extreme temperatures where possible. (Where this is not possible, arrange professional assessment, for example by an occupational hygienist.) Erect windbreaks around outdoor areas where handling occurs regularly. Redesign tasks to limit outdoor handling where possible. Reduce exposure to bad weather by encouraging the delivery of goods closer to indoor areas. Follow Rural Fire Health and Policy 		
Poor lifting Technique	Restrictive clothing	HIGH	Bruising, Lacerations Soft tissue damage serious back injuries musculoskeletal disorders Fractures	<ul style="list-style-type: none"> Ensure that appropriate clothing and personal protective equipment are available and that they are used/worn by the employees. For example: <ul style="list-style-type: none"> divided skirts, culottes, shorts or trousers non-slip footwear overalls with sufficient room to bend the back and knees easily, stretch and reach up. Ensure that loose clothing does not get in the way of the lift Ensure that footwear is fit for purpose i.e. anti slip sole if working in wet conditions or on tile floors 	LOW	
	Untrained employees	HIGH		<ul style="list-style-type: none"> Reduce the weight or force required to move the load. This may mean you should consider where it is positioned and how it is moved. Follow ACC's Work safe Work Well lifting techniques. Never lift and twist at the same time Ensure that all employees have been trained in safe lifting methods 		

Risk Register



HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
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MANUAL HANDLING continued						
Poor lifting Technique	Prolonged or repetitive work when squatting, kneeling or crouching	HIGH	Bruising, Lacerations Soft tissue damage serious back injuries musculoskeletal disorders Fractures	<ul style="list-style-type: none"> Avoid whenever possible Spend minimum possible time in these situations 	LOW	
	An uncontrolled or invariable pace of work	HIGH		<ul style="list-style-type: none"> Machinery rate should be set to a safe working load for a person i.e. it should be set a speed that is comfortable for a single person to handle including micro breaks for stretching Ensure that the person doing the lifting is sufficiently fit and capable of carrying out the task 	LOW	
Incorrect Equipment / gear for the task	Control has introduced other hazards	HIGH	Bruising, Lacerations Soft tissue damage serious back injuries musculoskeletal disorders Fractures	<ul style="list-style-type: none"> Ensure that mechanical aids are appropriate for the task and that they do not introduce additional hazards. Train employees in the safe use of any mechanical handling equipment. Ensure any equipment is designed and maintained to reduce vibration, as well as other factors which may contribute to manual handling hazards. Provide employees who are handling in a seated position with appropriate adjustable seating and ensure regular changes in position. The employee should be able to reach the load easily and keep the load close to their body. 	LOW	
Awkward loads	Reduces the persons view	HIGH		Bruising, Lacerations Soft tissue damage serious back injuries musculoskeletal disorders Fractures	<ul style="list-style-type: none"> Ensure that the load does not obstruct your view of the path or passageway Break your load down into smaller loads if it restricts your view Wear grip gloves if the item you are lifting is slippery or greasy Do not carry awkward loads that you do not have 100% control of i.e. large flat item in windy conditions Restrict your carrying distance to as short as possible especially if the load is heavy or an awkward size Do not reach over or reach down to carry loads Use a mechanical device such as a pallet lifter or store barrow whenever possible 	LOW
	Increases chance of dropping or losing load	HIGH	<ul style="list-style-type: none"> Improve or attach appropriate handles – these need to be in the correct position to allow a good grip and to allow the employee to hold the object close to the body. 		LOW	
	Poor surface area to grip	HIGH				LOW

Risk Register



HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
WORKING ALONE (office/Fire Station)						
Medical event	Failure to seek prompt medical attention	CRITICAL	Medical event such as stroke, Heart attach Compound Fracture Arterial bleed	<ul style="list-style-type: none"> Overtime is not encouraged and must be at the approval of the manager / supervisor First aid kits to be available on both floors and throughout the factory floor Reporting procedure developed so as management know that worker has returned home safely (txt message is sufficient) Anyone working alone must have there phone on them at all times Those working alone are be first aid trained. 	LOW	
Intruder	Actual or perceived Physical Violence	CRITICAL	Laceration Fractures Death	<ul style="list-style-type: none"> Office doors are to be locked after 6.00 pm at night. Suitable lighting is required for the car park area or outside area of the building. No one is to open the door after 6.00 pm 	LOW	
VISUAL DISPLAY UNIT (VDE)						
Incorrectly set up station	Pain & Discomfort injuries (PDI)	HIGH	Headaches Migraines Eye Sight issues Carpal Tunnel	<ul style="list-style-type: none"> Ergonomic setup of work station for all new employees. Reassessment to be carried out at any change to work feature e.g. new desk, new screen, change in lighting. Workstation set up to provide good posture and to avoid glare and reflections on the screen. 	LOW	
Inadequate LUX levels	Eye strain due to glare or poor lighting	HIGH	Partial or permanent eye sight damage	<ul style="list-style-type: none"> Lighting and temperature suitably controlled. Adjustable blinds/ curtains at window to control natural light on the screen. Eye tests provided for those that need them, PCBU to pay for test and spectacles if required. 	LOW	
Insufficient breaks	Pain & Discomfort injuries (PDI)	HIGH	Partial or permanent soft tissue damage	<ul style="list-style-type: none"> Work planned to include regular breaks or change of activity 	LOW	
OFFICE EQUIPMENT						
Protruding objects	Office setup Office Equipment suitable for location/ Employee	LOW	Lacerations Bruising Sprains / strains Fractures	<ul style="list-style-type: none"> No draws or filing cabinets are to be left open especially around walkways. Ensure furniture and office equipment is laid out in a manner that prevents injury. Office designed so that there is a minimum 1.2 m separation between walls / desks and walkway area Soft close doors and draws should be taken into consideration when replacing old furniture /equipment 	LOW	

Risk Register



HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
GUILLOTINE						
Inadequate or no guarding on Guillotine	Exposed cutting blade	HIGH	Lacerations Amputation	<ul style="list-style-type: none"> All guillotines are to be fitted with a blade guard on them. The blade guard is not to be removed under any circumstance. Procurement procedure to recognise safety features such as blade guard as integral part of the procedure Guillotine to be removed from service if the blade guard is damaged. 	LOW	
Inexperienced operator	Has fingers too close to cutting edge	HIGH	Lacerations Amputation	<ul style="list-style-type: none"> Only trained competent persons are allowed to use this piece of equipment May be used under direct supervision of a competent person 	LOW	
PHOTOCOPIER						
Laser strike Laser strike	Exposed to light from photocopier	LOW	Temporary loss of vision	<ul style="list-style-type: none"> Direct or indirect reflected eye contact with the laser beam might cause serious eye injury so ensure that the lid is closed before pressing the print button do not raise the lid until the printing has stopped. Never use photocopier with the lid open Ensure workflow does not interfere with copier 	LOW	
Changing cartridges	Chemical contact with skin	LOW	Skin irritation	<ul style="list-style-type: none"> If old type powder toners, wear a disposable dust mask as well. Wash your hands after handling any toner. Wear disposables gloves if handling any toner. 	LOW	
Fingers jammed in trays or under lid	Entrapment	LOW	Bruising	<ul style="list-style-type: none"> Ensure fingers are clear before closing any tray or lid. 	LOW	
Electrical leads / extension cords						
Faulty Electrical Equipment / Leads	Electric shock	HIGH	Electrocution, Death	<ul style="list-style-type: none"> Use electrical appliance close to power source. Use isolating transformers or residual current device (where necessary). Ensure that all electrical equipment has a current test tag. Physically check all lead for damage every three months. No power cords or extension cords are permitted in any walkways or access areas. 	LOW	
	Fire	HIGH	Blistering Burns Property damaged	<ul style="list-style-type: none"> Ensure that there is a foam fire extinguisher in the office and that there are workers trained to use the fire extinguisher available at all times Defective Equipment to be removed from office or immediately and tagged until it is either repaired replaced. 	LOW	

Risk Register



HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
HOT WATER						
Direct skin contact with hot water	Outlet temperatures too hot	CRITICAL	Blistering Burns Temporary or permanent loss of sight	<ul style="list-style-type: none"> Install tempering valve Hand basins / showers/ tubs should not exceed 43 degrees Celsius Hot water cylinders should be set at 60 degrees Celsius and temperature at the sink or laundry area should be no greater than 55 degrees Celsius Have all hot water pipes, vessels and taps clearly marked. Ensure cylinder (if installed) is secured (3 earthquake proof metal straps). 	LOW	
Splashing	Hot water burning / blistering skin	CRITICAL	Blistering Burns Temporary or permanent loss of sight	<ul style="list-style-type: none"> Install a filter / water restrictor to the tap to prevent splashing Do not carry hot liquids around the work area 	LOW	
Maintenance	failed tempering valve	CRITICAL	Blistering Burns Temporary or permanent loss of sight	<ul style="list-style-type: none"> Check temperatures at all hot water taps at least twice a year (record the temperatures) incase of failed tempering valve 	LOW	
DRINKING WATER (potable)						
Drinking Water not to potable standard	Galvanised pipes / contaminated water line	HIGH	Illness due to contaminated water supply Gastro issues	<ul style="list-style-type: none"> Ensure all drinking water is potable. Ensure that water is below 20 Celsius Ensure any water filter is check and changed as per manufacturers instructions 	LOW	
Carrying full water cooler container	Carry heavy awkward load	HIGH	Pain & Discomfort injuries (PDI)	<ul style="list-style-type: none"> Use two people to refill water cooler containers especially when lifting onto the base unit If water cooler is being used, ensure that it is plumbed directly to a water connection rather than trying to fill and carry the water vessel 	LOW	
Insufficient water supply	Lack of drinking quality water on site	HIGH	Dehydration Headaches Dizziness Lack of concentration	<ul style="list-style-type: none"> Ensure adequate water supply when working off site i.e. bottled water. 	LOW	

Risk Register



HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
FLOORING						
Wet flooring	Slipping over	HIGH	Lacerations Bruising Soft tissue damage Fractures	<ul style="list-style-type: none"> All spills cleaned up and floor dried off If unable to dry off, isolate area with barrier arms and cones If no cones or barriers are available, put up warning signage 	LOW	
Uneven Surfaces	Tripping	HIGH		<ul style="list-style-type: none"> Transition areas between uneven flooring levels must be ramped whenever possible High vis paint painted onto the floor to warn of uneven surface Barrier off area until controls have been put in place 	LOW	
Damaged Flooring	Tripping	HIGH		<ul style="list-style-type: none"> Report any damaged floor as soon as it is observed Barrier off section of flooring if it can cause a trip hazard 	LOW	
FLOORING continued						
Slippery Substances On Footwear	Slipping over	HIGH	Lacerations Bruising Soft tissue damage Fractures	<ul style="list-style-type: none"> Change footwear when accessing area where product / substance such as oil could affect the grip of your footwear. Wear appropriate footwear for the flooring surface. Ensure that floors are clean regularly to prevent a build up 	LOW	
LIGHTING						
Insufficient lighting	Low light levels	HIGH	Temporary or permanent damaged to eye sight	<ul style="list-style-type: none"> Ensure work area is well lit. Install LED lights wherever possible Insure adequate lighting in and area any parking areas 	LOW	
Glare	High light levels	HIGH		<ul style="list-style-type: none"> Under a LUX survey to ensure that there is sufficient lighting for employees to undertake their tasks in safe manner Ensure work areas are not effected by glare (sunlight) Install sunshade (roller blinds etc.) if necessary 	LOW	
Flickering lights	Faulty lights	HIGH		<ul style="list-style-type: none"> Ensure that all lightbulbs are replaced as soon as they blown or faulty Stroboscopic effect eliminated by effectively working fluorescent tubes. 	LOW	

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HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
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OFFICE VEHICLES						
Contact between vehicles and pedestrians	Pedestrian being run over by a vehicle	CRITICAL	Bruises Lacerations Fractures Death	<ul style="list-style-type: none"> Install barriers between car park and office access areas. Install demarcation lines if barriers can not be installed. Separate immediate car park area from pedestrian access. Restrict speed limit around pedestrian areas. Encourage drivers to reverse into car parks and drive out forwards. Signage installed warning drivers of pedestrians. Install offset barriers to slow pedestrian traffic. 	LOW	
Unlicensed driver	Untrained driver	HIGH	Bruises Lacerations Fractures Death	<ul style="list-style-type: none"> Ensure driver has a current license. Request copy of license at annual review stage Have random checks throughout the year to ensure employee still has current license 	LOW	
Vehicle not mechanical sound	Safety features not operating correctly	CRITICAL	Bruises Lacerations Fractures Death	<ul style="list-style-type: none"> Ensure that a pre start check is undertaken on the vehicle every time a new driver gets into it Any issues must notified to the manager immediately and the keys handed back in 	LOW	
Excessive speed around the yards	Hit pedestrian or run into structure /vehicles	HIGH	Bruises Lacerations Fractures Death	<ul style="list-style-type: none"> Install speed bumps to slow traffic down if necessary Set speed limit around the yard at a maximum of 15km/h Restrict vehicle traffic to freight trucks and tractor – no person vehicles 	LOW	
FIRE EXTINGUISHER						
Incorrect extinguisher for the type of fire	Electric shock	HIGH	Electrocution,	<ul style="list-style-type: none"> Ensure that the correct extinguishers are available for the type of fire is likely to occur. Ensure extinguishers have been checked by a qualified person annually All extinguishers are to be hung up on brackets 	LOW	
Untrained operative	Blow back (fire)	CRITICAL	Burns Death	<ul style="list-style-type: none"> All employees need to be trained in the safe and correct use of a Fire Extinguisher 	LOW	
	Inhalation of powder	HIGH	Respiratory distress Asphyxiation Death	<ul style="list-style-type: none"> Ensure that training covers hazards associated with the operation of an extinguisher i.e. dry powder removes oxygen from the air so should not be used in confined spaces 	LOW	
Extinguisher not hung up and signage not displayed	Failure to locate extinguisher when needed	CRITICAL	Burns Death Structure damage	<ul style="list-style-type: none"> All extinguishers are to be hung up on brackets Signage is to be display as close to extinguisher as possible 	LOW	

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HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
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NOISE - general						
Exceeding daily workplace exposure levels	Exposure to excessive noise levels	CRITICAL	Partial or full hearing loss	<ul style="list-style-type: none"> Undertake a noise survey of the workplace Procurement policy and procedure to include decibel rating of any new plant or equipment e.g. using battery operate tools instead of power tools (electric) Check the location of noisy equipment such as compressors – can these be moved to an area of the building where there are less people or moved outside of the work area altogether Audiometric testing of all employees issued with hearing protection (check Workplace exposure levels first) Provide suitable training to all employees and contractors that are / could be effect by any noise over 80dB Ensure that all employees and visitors to the affected area are wearing appropriate grade hearing protection 	LOW	
STAIRS						
Obstructed view	Slip / trip / fall injuries	CRITICAL	Sprains / strains Laceration Fractures Death	Do not carry anything in your hands that obstructs the view of the step / tread.	LOW	
Failure to distinguish individual steps		CRITICAL		Mark the edge of each tread with white or yellow paint		
Slippery steps		CRITICAL		Ensure that threads are not slippery, add anti slip cover if they are (rubber grip mat fixed to treads).		
Inappropriate footwear		HIGH		Ensure that threads are not slippery, add anti slip cover if they are (rubber grip mat fixed to treads).		
Poor lighting		HIGH		Wipe up any spill immediately and dry off with a cloth		
Loose balustrade		HIGH		Ensure footwear is suitable for tread depth ,i.e. steep stairway – do not wear stiletto heels		
				Ensure that there is adequate lighting to clearly see each tread on the stairwell		
				Ensure that the handrails are securely attached and in good condition		

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ELECTRONIC EQUIPMENT E.G. COMPUTERS, RADIOS

Overloading circuit	Electric shock	HIGH	Electrocution	<ul style="list-style-type: none"> Do not overload sockets Hard wire as much equipment as possible rather than using multi boards or extension leads 	LOW	
	Failure to check condition of equipment	HIGH	Electrocution	<ul style="list-style-type: none"> Ensure that they have been tagged and checked at least once a year by an electrician. 	LOW	
Powerboard overloads	Fire / overheating	CRITICAL	Burns Property / structure / equipment damage	<ul style="list-style-type: none"> Replace or repair any faulty appliances. Regularly check electrical wiring, switching and electrical equipment for signs of insulation breakdown, and cracks or breaks in switch or controller casings. 	LOW	
	Electric shock	HIGH	Electrocution	<ul style="list-style-type: none"> Do not overload a powerboard 	LOW	
Exposed power points	Fire / overheating	CRITICAL	Burns Property / structure / equipment damage	<ul style="list-style-type: none"> Do not repair or alter power board's yourself Only use a power board with a cut out devise 	LOW	
	Electric shock	HIGH	Electrocution	<ul style="list-style-type: none"> Put wiring, power points, power boards out of reach of children. or child safety plugs are fitted to open sockets 	LOW	
	Fire / overheating	CRITICAL	Burns Property / structure / equipment damage	<ul style="list-style-type: none"> Do not use power board's that are damaged. – cut off the plug and destroy them 	LOW	

SHELVING

Falling objects	Objects falling from heights	HIGH	Bruising Lacerations Fractures Death	<ul style="list-style-type: none"> Don't store unstable loads at height Ensure that the shelving unit is fitted with side railings to reduce incidents of falling objects Don't over stack shelving unit. Don't overload shelving Inspect the storage area regularly and report any damage to shelving 	LOW	
	Unsecured shelving	HIGH		<ul style="list-style-type: none"> Secure all shelving to a wall or part of the building structure 	LOW	

OPERATIONAL ACTIVITIES

Use of sewerage and contaminated water for fire fighting	Biohazard	HIGH	Sickness Disease	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Concentrate class A firefighting foam	Irritant	LOW	Possible allergies Skin irritation Eye irritation	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Concentrate fire retardant	Poisoning	HIGH	Skin irritation Eye irritation Sickness	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016

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HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
Noise from fire pumps, machinery and aircraft	Exposure to excessive noise levels	HIGH	Breathing problems Partial or full hearing loss	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Working in cold, wet & windy conditions	Exposure to elements	CRITICAL	Hypothermia Death	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Fire hose bursting under pressure or a coupling blowing off	Injury to workers	HIGH	Bruising Lacerations Fractures	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Working around helicopters	Injury to workers	CRITICAL	Bruising Lacerations Fractures Death	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Fumes from fire pumps & fire risk while re-fuelling	Inhalation of fumes Fire	HIGH	Sickness Loss of bodily functions Burns Death	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Hand tools and their use	Injury to workers	HIGH	Bruising Lacerations Fractures Death	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Hazards arising from the use of motorised tools – chainsaws & scrub bars	Injury to workers	CRITICAL	Bruising Lacerations Fractures Burns Death	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Carrying equipment on uneven ground – incorrectly carried, lifting, falling & weight of equipment	Injury to workers Damage to plant & equipment	HIGH	Bruising Lacerations Fractures Strains Death	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Working with heavy machinery (bulldozers & diggers)	Injury to workers Damage to plant & equipment	CRITICAL	Bruising Lacerations Fractures Death	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Working around fixed wing aircraft	Injury to workers	CRITICAL	Bruising Lacerations Fractures Death	Refer to control measures outlined in hazard ID	LOW	15 December 2016
Climbing 10 metre mast for instrument inspection & maintenance on remote automatic weather stations	Falling	CRITICAL	Bruising Lacerations Fractures Strains	Refer to control measures outlined in hazard ID	LOW	15 December 2016

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HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
Limited visibility and speeding vehicles while working on/near roads	Injury to workers Damage to plant & equipment	HIGH	Death Bruising Lacerations Fractures Strains	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Insufficient rest:work ratio while involved in fire suppression operations	Injury to workers Damage to plant & equipment	HIGH	Fatigue Bruising Lacerations Fractures Strains Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Direct contact to heat source & exposure to radiant heat	Injury to workers	CRITICAL	Burns Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Unexpected changes in fire behaviour putting fire fighters in danger	Injury to workers Damage to plant & equipment	CRITICAL	Bruising Lacerations Fractures Strains Burns Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Smoke inhalation	Injury to workers	CRITICAL	Breathing problems Damage to airway Burns to airway Suffocation Carsenagenic contamination Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Superheated air	Injury to workers	CRITICAL	Breathing problems Damage to airway Burns to airway Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Airbirne sparks and ash	Injury to workers Damage to plant & equipment	HIGH	Breathing problems Damage to airway Burns to airway Suffocation Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Spot fire – indicate extreme fire behaviour & can grow rapidly trapping fire fighters	Injury to workers Damage to plant & equipment	CRITICAL	Breathing problems Damage to airway Burns to airway Suffocation Burns Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016

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HAZARD	RISK	RISK RATING	POTENTIAL HARM	Risk Controls	RESIDUAL RISK RATING	Dates Reviewed / Comments
Power lines arching, broken or with carbon or salt build up on lines or insulators	Injury to workers Damage to plant & equipment	HIGH	Electrocution Burns Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016
Metabolic heat build up in fire fighters	Injury to workers	CRITICAL	Heat stress Heat exhaustion Heat stroke Death	<ul style="list-style-type: none"> Refer to control measures outlined in hazard ID 	LOW	15 December 2016

Industry Recommendations and Standards

Where practicable the employer must comply with the Industry Recommendations and Standards published by WorkSafe NZ or comparable organisations. A non-exhaustive list is set out below. SRFA is committed to identifying and accommodating any changes to these standards.

Non-exhaustive list of relevant health and safety publications

- Legislation and Regulations:
 - Health and Safety at Work Act 2015.
 - Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.
 - Health and Safety at Work (Asbestos) Regulations 2016.
 - Health and Safety at Work (Worker Engagement, Participation and Representation) Regulations 2016.
 - Forest and Rural Fires Act 1977.
 - Forest and Rural Fires Regulations 2005.
 - Fire Service Act 1975.
 - Civil Defence Emergency Management Act 2002.
 - Hazardous Substances and New Organisms Act 1996.
 - Accident Compensation Act 2001.
 - Employment Relations Act 2000.
 - Land transport(Road User) Rule 2004.

- Introduction to the Health and Safety at Work Act 2015, WorkSafe NZ, March 2016.
- Health and Safety Guide: Good Governance for Directors, WorkSafe NZ, March 2016.
- Good Practice Guidelines: Worker Engagement, Participation and Representation, WorkSafe NZ, March 2016.

- Heights Publications:
 - Best Practice Guidelines for Working at Height in NZ, Ministry of Organisation, Innovation and Employment, April 2012.
 - Fact Sheet 1: Planning a Safe Approach to Working at Height, WorkSafe NZ, September 2015
 - Fact Sheet 2: Selecting the Right Equipment for Working Safely at Height, WorkSafe NZ, June 2015.
 - Fact Sheet 6: Total Restraint System, WorkSafe NZ, June 2015.

- Ladder Publications
 - Fact Sheet: Safe Working with ladders and Stepladders, WorkSafe NZ, August 2015.

- A Guide to Respiratory Protection, Department of Labour, August 1999.

- Code of Practice for Manual Handling, Department of Labour, June 2001.

- Asbestos Publications:
 - Information Sheet 1: Health Risks from Asbestos Exposure, WorkSafe NZ, April 2016
 - Information Sheet 2: Locations Where Asbestos May be Found, WorkSafe NZ, April 2016
 - Information Sheet 4: Managing Asbestos, WorkSafe NZ, April 2016.

- Noise:
 - ACOP: Management of Noise in the Workplace, Department of Labour, October 2002.
 - Factsheet: Noise in Manufacturing, WorkSafe NZ, February 2016.
 - Noise Control, ACC.

- Your Safe Driving Policy, ACC, October 2010.
- Fact Sheet- Workplace Traffic Management, WorkSafe NZ, May 2015.
- Best Practice Guidelines - Preventing and responding to workplace bullying, WorkSafe NZ, February 2014.
- Fact Sheet Personal Protective Clothing & Equipment, Department of Labour, December 2002.
- First Aid for Workplaces - A Good Practice Guide, August 2011.
- Guidelines for Using Computers preventing and managing discomfort, pain and injury, ACC, November 2010.
- Healthy Work: Managing Stress and Fatigue in the workplace, 2003.
- Approved Code of Practice – Substances Hazardous to Health in the Place of Work, July 1997.
- Safe Stacking and Storage, Department of Labour, revised 1999.
- Fact Sheet: Stacking and Shelving to Withstand Earthquakes, WorkSafe NZ, January 2016.