Guide for the funeral industry

Queensland Government

Contents

1. Introduction

The funeral industry has many hazards that can create a risk to health and safety. Common hazards include hazardous manual tasks, infectious diseases and hazardous chemicals.

Other hazards may include electricity, radiation, confined spaces, noise, plant and psychosocial hazards like exposure to trauma, occupational violence, work-related fatigue, stress and bullying.

The purpose of this guide is to provide information on some of these hazards and risks and ways to manage them.

This guide is designed to help persons conducting a business or undertaking (PCBU) and workers meet their health and safety duties under the *Work Health and Safety Act 2011* (WHS Act).

It does not address all hazards and risks in the funeral industry. Where this guide does not address an identified hazard or risk, you should refer to the How to manage work health and safety risks Code of Practice 2011.

2. Managing health and safety

The WHS Act requires duty holders to ensure health and safety, so far as is reasonably practicable, by eliminating risks. If this is not possible, risks must be minimised so far as is reasonably practicable.

Risk management involves four steps:
- **identify hazards** to find out what could cause harm
- **assess risks** to understand how serious the harm could be and the likelihood of it occurring
- **control risks** and implement the most effective control measures that are reasonably practicable in the circumstances
- **review control measures** to ensure that they are working as planned and are maintained.

The risk management process should be undertaken:
- now, if you have not done it before
- after a change occurs or is introduced (e.g. to work procedures)
- after an incident or 'near miss'
- in response to concerns raised by workers, health and safety representatives or others
- at regular times scheduled according to the level of workplace risk.

Control measures for some risks (e.g. hazardous chemicals) are described under the Work Health and Safety Regulation 2011 (WHS Regulation).

For other risks, the control measures appropriate for your workplace will depend on the outcomes of your risk assessment.

Ways of controlling risks are ranked from the highest level of protection and reliability to the lowest; this is known as the hierarchy of control measures. Duty holders are required to work through this hierarchy when managing risks.

First, always try to **eliminate the hazard** and associated risk. If this is not possible, minimise exposure to the risk by:

- **substituting** the hazard with something safer, such as a safer hazardous chemical, material, process or equipment
- **isolating** the hazard from people, such as isolation of hazardous chemicals and clinical waste
- using **engineering controls** or **redesigning** equipment or work processes, such as using mechanical hoists to lift heavy loads.

If a risk remains:

- introduce **administrative controls,** such as work procedures and training
- use suitable **personal protective equipment** (PPE).

Administrative controls and PPE should be used:

- when there are no other practicable control measures available
- as an interim control measure until a more effective way of controlling the risk can be used
- to supplement higher level control measures.

For more information refer to the [How to manage work health and safety risks Code of Practice 2011](#).

3. Consultation

Consultation is a collaborative process between the PCBU and workers that involves sharing of information about health and safety. Workers are entitled to elect a health and safety representative and to request a health and safety committee.

For more information refer to the [Work health and safety consultation, co-operation and co-ordination Code of Practice 2011](#).

4. Information, training, instruction and supervision

Providing information, instruction, training and supervision for people working in the funeral industry is essential to ensure health and safety. This must be suitable and adequate having regard to the nature of the work, the hazards and risks and the control measures implemented. It must also be provided in a way that is readily understood by the workers.

5. Hazardous chemicals

Funeral industry workers may be exposed to a wide range of products containing [hazardous chemicals](#), including:

- embalming products
- cleaning agents
- disinfectants
- hearse/car detailing products
- dusts produced from the cremation process
- gardening pesticides
- coffin polishes and finishes
- wood dust from coffin manufacture
- respirable dusts (e.g. [silica](#)) from monumental masonry
- poisons present in people who have committed suicide
- cytotoxic drugs present in deceased cancer patients.

What are cytotoxic drugs?

Cytotoxic drugs which are used in the treatment of cancer are hazardous chemicals. Funeral workers may be at risk of exposure to these drugs during body preparation and embalming procedures if these drugs have been recently administered to the deceased person. The drugs are excreted in body fluids, such as urine and faeces.

Cytotoxic drugs are highly toxic to cells and many are known to be carcinogens (capable of causing cancer), mutagens (capable of causing mutations) and teratogens (capable of causing birth defects).

Where there is a risk of exposure to these drugs, a PCBU must implement appropriate control measures and monitor and review these controls for their effectiveness (see section on 'Selecting the means for controlling risk').

For more information refer to the Guide to handling cytotoxic drugs and related waste.

Health effects of hazardous chemicals

Exposure to some hazardous chemicals can pose a serious risk to the health of workers, or can worsen existing health problems. Health effects from exposure to hazardous chemicals can include:

- **Dermatitis** or inflammation of the skin.
  There are two types of dermatitis
  - o Irritant contact dermatitis caused from contact with irritant substances, such as detergents in cleaning agents.
  - o Allergic contact dermatitis caused when a person develops an allergic reaction to a chemical, such as glutaraldehyde or formaldehyde.
- **Asthma.** A respiratory disease which narrows the air passages and results in breathing difficulties. Chemicals, such as glutaraldehyde and formaldehyde, used in the funeral industry may aggravate pre-existing asthma or cause occupational asthma.
- **Cancer**. Workers in the funeral industry may be exposed to chemicals, such as formaldehyde and cytotoxic drugs, which are probable human carcinogens (chemicals that are thought to cause cancer).

Hazardous chemicals can enter the body through the skin, by inhalation or by swallowing. Acute health effects, such as eye and throat irritation, may occur from single, large or repeated exposures, with effects occurring soon after exposure. Chronic health effects, such as allergic contact dermatitis, usually develop after long term exposures and can take some time to appear.

The likelihood of a hazardous chemical causing adverse health effects depends on many factors, including:

- the toxicity of the substance
- the amount of hazardous chemicals to which workers are exposed
- the length of exposure
- the frequency of exposure
- the route of entry into the body (e.g. skin absorption, inhalation or ingestion)
- the physical nature of the substance (e.g. a liquid, vapour or dust - dust particles smaller than 10 micrometres in diameter may readily penetrate the lungs)
- in some circumstances, the worker's history of exposure to the hazardous chemical.

Identifying the hazards arising from hazardous chemicals

The process of identifying hazardous chemicals usually relies on using a safety data sheet and the product label.

Safety data sheet (SDS)
A SDS provides information about ingredients, potential health effects, the safe use, first aid requirements and storage of hazardous chemicals. You must:
- obtain a current copy of the SDS from the supplier
- keep a register containing a list of all hazardous chemicals used at the workplace with the current SDS for each hazardous chemical
- keep a copy of the SDS close to where the hazardous chemical is being used
- ensure the contents of the SDS are not changed other than in accordance with any amendments made by the manufacturer or importer.

Labels
Labels provide immediate information about the identity of hazardous chemicals and brief health and safety information. Hazardous chemicals used in the workplace must be correctly labelled in accordance with the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

- The label must:
  - be in English
  - state the product identifier
  - provide information on Australian contacts
  - provide information on ingredients, bear a pictogram, a hazard statement, a signal word and a precautionary statement
  - have information on hazards, first aid and emergency procedures.
- When transferring a hazardous substance from one container into a second container, you must ensure the second container is properly labelled with the product identifier, signal word and hazard and precautionary statements, if the substance is not entirely used immediately.
- Chemicals should not be decanted into food or beverage containers or stored in unlabelled containers.

Disposal
Contact the Department of Environment and Science for advice on the safe disposal of hazardous chemicals.

Managing the risk when using each hazardous chemical
Managing the risk from hazardous chemicals begins with assessing the information on the SDS and the label.

First, you will have to determine:
- What the health risks are to a worker or other people from hazardous chemicals?

You can get most of this information from the health effects section of SDS and some from the label. The SDS will also provide information about exposure limits and the controls which are needed to protect against the hazardous chemical.

Second, have a look at the workplace to determine:
- Are any of the workers exposed to hazardous chemicals, either by inhalation or skin contact?

Below is a checklist to help assess the quality of your workplace air
- Are there any complaints of respiratory or eye irritation?
- Do strong odours linger for more than 10 minutes?
- Can strong odours be detected at a distance from the source? (e.g. from the other side of the room)
- Do you still smell product odours when you open the mortuary in the morning?
- Do the walls ever 'sweat' with moisture or the windows become foggy?
- Do workers complain of offensive odours?
- Do you ever have to open the window or door because the odours become too strong?

If you answered yes to one or more of the questions, then it is likely that workers will have a significant inhalation exposure to the hazardous chemical and you may need to implement control measures at the workplace.

Managing the workers' risk of exposure to airborne contaminants will require air monitoring (personal exposure monitoring) if you:

- are not certain on reasonable grounds whether or not the concentration of an airborne contaminant may exceed the relevant exposure standard, or
- need to determine whether there is a risk to health.

A competent person such as a certified occupational hygienist should be engaged to undertake exposure monitoring.

Further information on personal exposure monitoring can be found in the Safe Work Australia publication Guidance On The Interpretation Of Workplace Exposure Standards For Airborne Contaminants.

Third, determine what you are already doing:

- What controls are already in place? Typical approaches will include:
  - o ventilating the work area
  - o using personal protective equipment.

Your management procedures must ensure that any controls will make sure that exposure standards for substances are not exceeded. Where they do not, you will need to take additional control measures to meet that standard.

Selecting the means for controlling the risk
Risk management requires that if you, a worker or others may be exposed to a hazardous chemical, then you must:

- eliminate the risk, so far as is reasonably practical
- if it is not reasonably practical eliminate risk, the risk must be minimised so far as is reasonably practicable.

Consider these control measures to manage exposure to hazardous chemicals.

Eliminating the hazard

- Stop using a hazardous chemical (e.g. do not use formaldehyde or glutaraldehyde products for cleaning and disinfecting mortuary instruments, and for cleaning surfaces, such as trolleys).

Substituting the hazard

- Replace a product with an alternative one containing a less hazardous chemical. Health information found in a SDS may assist in selecting a less hazardous chemical. For example:
  - o Substitute glutaraldehyde with ophthalaldehyde (OPA) when disinfecting mortuary instruments. Note: The long-term health effects of OPA have not been established. Therefore, the same level of precaution used when working with glutaraldehyde should be adopted when using OPA.
  - o Substitute glutaraldehyde with non-hazardous detergents and disinfectants when cleaning work surfaces and blood and body fluid spills.

Isolating the hazard

- Make sure mortuary instrument soaking containers containing glutaraldehyde products are kept covered with a tight-fitting lid.
- Do not treat autopsy viscera in an open container. Use a covered pail or closed viscera bag.
- Keep the lid on the embalming machine when in use.

Implementing engineering controls

- Chemicals used for cleaning, disinfecting and embalming may contain hazardous chemicals that can cause respiratory irritation and sensitisation. Raking out cremators or bone crushers may also cause respiratory health effects. These tasks should occur in a well ventilated area and may need additional local exhaust ventilation to capture emissions at source and remove them from the work area. Refer to Appendix 1 for information on ventilation.
- Ensure the mortuary room is supplied with fresh air.

- Install local exhaust ventilation where hazardous chemicals are generated (e.g. over the mortuary table, over mortuary instrument soaking containers if using glutaraldehyde products for disinfection, or over the sluice where run off collects from the mortuary table).
- Replace pressurised aerosol container products with pump sprays to reduce aerosols. Pump sprays should not be used for dispensing cleaning products because of the potential for bacterial growth.
- Avoid dry-sweeping or using compressed air to clean up dust such as cremation dust. Use wet methods or a suitably-rated industrial vacuum to prevent dust becoming airborne.

Implementing administrative controls
- Ensure the SDSs are available to workers for all hazardous chemicals.
- Provide workers with information, training and supervision on the safe use of hazardous chemicals.
- Allow only authorised personnel to access hazardous chemicals.
- Provide emergency eyewash and shower facilities for people exposed to hazardous chemicals.
- When applying embalming fluids to body cavities, make sure that all connections are tight on the gravity feeding equipment.
- Use the lowest possible concentration of formaldehyde or glutaraldehyde by diluting the embalming fluid concentrate.
- Have procedures in place for cleaning chemical spills. Make sure that the spills are cleaned promptly and the area is cordoned off to prevent access. Refer to the SDS for guidance on the type of PPE and absorbent material to use when cleaning spills. Dispose of spilt hazardous chemicals safely, and thoroughly wash any equipment used to clean the spill.
- Purchase chemical products in ready-to-use packages rather than transferring from large containers.
- Prohibit eating, drinking or smoking in areas that contain chemicals.
- Wash hands with soap and running water before eating, drinking or smoking.

Some hazardous chemicals are corrosive, flammable, combustible or have other hazardous properties. You will need to identify and manage all risks associated with the handling, security, flammability and ignition, stability, compatibility with other stored chemicals, and spill containment.

Providing personal protective equipment
- Provide suitable PPE as determined by the risk management procedures for the hazardous chemical. Guidance can be found in the SDS. (Note: Latex gloves may not provide adequate protection against exposure to some hazardous chemicals, such as formaldehyde or glutaraldehyde, particularly where exposure is prolonged. If latex gloves are used they should be changed frequently. Consult with your glove supplier for more suitable glove types.)
- Workers should wear eye protection, face shields, impervious or fluid-resistant aprons or gowns and covered shoes to protect against chemical splashes.
- Workers at risk of inhaling hazardous chemicals should be provided with suitable respiratory protective equipment. For example, workers who are at risk of exposure to formaldehyde and glutaraldehyde should be provided with respirators fitted with an organic vapour filter. Guidance can be found in the SDS. (Note: A surgical mask does not protect against inhaling hazardous chemicals.)
- Workers at risk of inhaling fine dust particles from the cremation process should be provided with respirators fitted with a particulate filter.
- Workers raking out radiant furnaces should be provided with a powered air purifying respirator or full-face respirator fitted with a particulate filter.
- If workers are required to wear a tight-fitting respirator, provide them with a fit test to make sure that they are wearing a brand, model and size of respirator that properly fits their face, and instruct them on how to correctly fit the respirator.
- Ensure workers cover non-intact skin and wounds with a waterproof dressing.

Keep appropriate records

The following records need to be kept for a period of 30 years from the day the document was made:

- an air monitoring result
- a health monitoring report.

Workers exposed at the workplace to hazardous chemicals must be permitted ready access to their exposure records.

Train workers about the risks and how to use the controls

You must provide workers who may be exposed to a hazardous chemical with induction and ongoing training about the use of hazardous chemicals. The training must be appropriate to the nature of the work and be readily understandable by the people being trained.

For more information refer to the hazardous chemicals requirements of the WHS Regulation, the Labelling of workplace chemicals Code of Practice 2011, and the Managing hazardous chemicals in the workplace Code of Practice 2013.

6. Excavations and confined spaces

Cemetery workers digging graves and exhuming bodies are exposed to risks including:

- being trapped by the excavation collapsing
- being struck by an object falling into the excavation
- falling into the excavation
- inhaling, or exposure to, carbon monoxide or another impurity of the air in the excavation, crypt or mausoleum
- risks from contact with underground services.

Confined spaces

You must manage risks to health and safety from confined spaces at a workplace. This includes risks associated with entering, working in, on or near the confined space (including a risk of a person inadvertently entering the confined space).

You must ensure that a risk assessment is conducted by a competent person.

For more information refer to the confined spaces requirements of the WHS Regulation and the Confined spaces Code of Practice 2011.

Excavations

You must manage the risks to health and safety from excavations at a workplace including the excavation of trenches used for burial.

Control measures

Consider these control measures to manage risks associated with excavation work and working in confined spaces. Control measures eliminating the need for people to enter the excavation or confined space are preferred to those that minimise exposure to the risks.

Eliminate

- Use machines such as mini excavators and backhoes to dig the trenches.

Redesign

- When the job requires a worker to access the excavation, implement controls manage the risk of the excavation collapsing, for example
  - shore all sides of the trench
  - bench all sides of the trench
  - batter all sides of the trench
  - obtain written approval from a geotechnical engineer that all sides of the trench are safe from collapse.
- Use excavators and cranes with controlled descent valves on the hydraulics, fitted to the boom or dipper arm. This prevents the boom or load falling onto workers in the event of hydraulic hose failure.
- Use plant fitted with suitable overhead protection to protect workers against falling objects.

- Ensure there is adequate ventilation to prevent exposure to carbon monoxide.
- Minimise exposures to hazardous substances as far as is reasonably practicable.
- In multi coffin graves, fluorescent tape (similar to that used for underground electrical cables and pipes) placed approximately 100 millimetres above the coffin will help indicate the position of the lower coffin.
- Use extractor fans to remove airborne contaminants and explosive gases from the excavation. (Note: At the risk assessment stage, identify the possibility of a contaminant or lack of oxygen in the excavation, mausoleum or crypt prior to any person entering the confined space. Continually monitor the confined space for air quality, if there is a risk that the contaminant, explosive or other substance is likely to remain or re-enter the area while work is being done.)

Administrative controls
- Before starting work to dig an excavation, determine what underground services are at or near the location of the excavation.
- Erect a barricade or hoarding at least 900 millimetres high to restrict access by members of the public to the excavation (unless this is impracticable or no member of the public is likely to be near the excavation). A visible barricade helps warn members of the public that the hole is still open. The barricade should remain in place until the fill has compacted enough to minimise tripping.
- Place a secure cover over the excavation to prevent unauthorised access.
- Place scaffolding planks and other supporting structures around the top of the excavation to gain access for burial.
- Maintain records of soil stability, particularly where the ground is unstable. Soil stability may be affected by factors such as the height of the water table and the geological properties of the soil type (e.g. sand, rock or clay). Act to control risks associated with unstable soil conditions (e.g. collapse of a trench).
- Remove people from the excavation when lifting and placing loads into the excavation.
- Store materials and equipment away from the edge of the excavation.
- Position vehicles, plant and machinery away from the excavation.
- Monitor the level of any airborne contaminant, explosive gases or vapours in the excavation.
- Remove all sources of ignition if explosive gases are present.

Personal protective equipment
- Provide and use suitable personal protective equipment (PPE), such as respiratory equipment, protective clothing and safety helmets.

Benching and battering
When benching or battering is provided as a means of managing the risk of collapse of a trench, you should consider the following control measures:
- Battering should commence from the bottom of the trench and extend outwards at an angle of 45 degrees (measured from the horizontal).
- Benching should commence at a maximum of 1.5 metres up the trench wall and step out and up at a 1:1 ratio, with no vertical face exceeding 1.5 metres.
- Where reasonably practicable, vertical faces should not exceed 1 metre.
- Where benching and battering are used in combination the angle of repose for the battering should extend from the bottom of the trench. An angle of repose of 45 degrees should not be exceeded.
- Angles of repose are measured from the horizontal plane and must be applicable to the soil type. Smaller angles of repose may be required where soil types indicate a need (e.g. loose sandy soils). Larger (steeper) angles of repose should not be used unless written advice has been obtained from a geotechnical engineer confirming that it is safe to do so.

Zone of influence
The zone of influence in the volume of soil around the excavation affected by an external load (e.g. vehicles, plant, excavated material). A minimum safe clearance of 1 metre should be maintained from the defined zone of influence.

Where space restrictions prevent obtaining the width required at ground level to achieve appropriate benching and battering requirements, including a minimum safe clearance from the excavated edge, the PCBU will need to consider other control measures such as shoring, shielding or other comparable means.

For more information refer to the excavation work requirements of the WHS Regulation and the Excavation work Code of Practice 2011.

7. Noise and vibration

Plant used in the funeral industry may expose workers to excessive noise and vibration. For example:
- An excavator or backhoe used for grave digging may expose an operator to excessive noise depending on the type and model of the excavator or backhoe, and if the cabin is air conditioned. Operators may also be exposed to whole body vibration when operating these types of machines.
- Plant used for grounds maintenance including a lawn mower, ride-on-mower, slasher, whipper snipper and chainsaw create noise and vibration for operators.
- Mechanical tools, such as a pneumatic chipping hammer, diamond saw and other equipment may expose stonemasons to periods of loud noise and hand-arm vibration.

Workers near the operating plant may also be affected by the noise.

You must manage the risks of hearing loss associated with exposure to noise at work.

The exposure standard for noise, in relation to a person, means:
- an 8-hour equivalent continuous A-weighted sound pressure level of 85 dB(A), referenced to 20 µPa or
- an unweighted peak sound pressure level of 140 dB(C), referenced to 20 µPa.

You should conduct a risk assessment to determine if control measures are needed to prevent or minimise exposure to noise and hand-arm or whole-body vibration. A competent person (such as a certified occupational hygienist) should conduct assessments of exposure to noise and whole body or hand-arm vibration. Use appropriate control measures where risk assessments indicate that risks exist.

Control measures
Ways that a duty holder can prevent or minimise exposure to excessive noise and hand-arm or whole-body vibration include the following.

Redesign
- Provide earthmoving machines with upgraded muffler systems, such as 'critical residential' type mufflers.
- Ensure engine encapsulation, where provided, is kept in place during machine operation.
- Use air-conditioned cabins on the operating earthmoving machine to reduce noise entering the operator's cabin.
- Earthmoving machines and ride-on-mowers should have suspension dampened seating arrangements to minimise the effects of whole body vibration.
- Lagging the chipping hammer 'bottles' and chisel shafts with a soft resilient rubber may reduce the level of vibration entering stonemasons' hands.
- Lawnmowers, slashers, whipper snippers and chainsaws should have handle bars lagged with rubber handles to reduce the effects of hand-arm vibration. These items of equipment should be of low noise emission to reduce noise exposure to the operator, nearby workers and others.

Administrative controls
- Review existing work processes to see if low noise alternatives may be substituted, and where possible, follow quiet work practices.
- Implement a system, including a timetable, for gradually replacing existing plant with quieter ones, and/or with lower vibration levels.
- Implement a maintenance program so that plant is kept in good working order.

- Reduce the exposure time of workers operating plant or equipment with high noise and/or vibration levels through job rotation or sharing.
- Implement a health surveillance program for workers exposed to hand-arm vibration acceleration in excess of 2.9 m/s. The program should include:
  - health surveillance conducted by a doctor to detect the presence or susceptibility to Raynaud's disease (a condition in which the fingers and toes become white, cold and numb in cold conditions)
  - an examination conducted soon after commencing employment and not later than six months after commencing hand-arm vibration work
  - subsequent examinations conducted at the discretion of the doctor between one to five years.
- Monitor and review the noise and vibration control measures on a regular basis and adjust as required.

Personal protective equipment
- Workers must be issued with, and instructed to wear, suitable personal hearing protection if exposed to excessive noise from plant.
- When purchasing hearing protectors ensure they have been tested and rated in accordance with relevant Australian Standards.
- The hearing protectors selected should reduce the in-ear noise level to between LAeq,8h 85 dB(A) and 75 dB(A). Avoid over protection which may lead to a sense of isolation by the wearer and adds to the wearer's difficulty in perceiving useful sounds.
- The exposed worker should select hearing protectors based on comfort and fit and should be compatible with the requirements of the job and work environment.
- Provide workers with training and instruction on hearing protection and how to fit, maintain and wear the personal protective equipment (PPE). The training program should be periodically followed with refresher training courses.
- Implement voluntary audiometric testing procedures for workers who frequently use hearing protectors.

For more information refer to the noise requirements of the WHS Regulation and the Managing noise and preventing hearing loss at work Code of Practice 2011.

8. Electrical equipment

Unsafe electrical equipment can create health and safety risks. Electrical shock can result in electrocution and burns, as well as follow-on injuries, such as falls.

Workplace electrical installations
Most activities in the funeral industry involving electrical equipment will be classified as service or office work.

To meet the requirements of service or office, you must ensure electrical equipment is:
- inspected and tested by a competent person at least once every
  - year if used for service work, or
  - five years if used for office work, or
- connected to a type 1 safety switch or a type 2 safety switch.

If, after inspecting and testing the electrical equipment, a competent person decides the equipment is safe to use, a durable tag must be attached to the equipment showing the date by which the equipment must be inspected and tested again. If the equipment is not safe to use, a durable tag must be attached warning people not to use the equipment and the equipment must be immediately withdrawn from use.

If the specified electrical equipment for service or office work is to be connected to a safety switch, you must ensure:
- the fixed safety switch is tested using its inbuilt test button at least once every six months
- an operating time/current test is performed by a competent person at least once every 12 months for service work or every two years for office work.

If a safety switch is not working properly, it must be tagged to warn people not to use the device and immediately withdrawn from use.

Work involving assembly, fabrication, installation, maintenance, manufacturing, refurbishment or repair (e.g. coffin manufacture) is classified as manufacturing work. Refer to the *Electrical Safety Act 2002* and Electrical Safety Regulation 2013 for information about requirements for class 2 work.

Control measures
Consider these control measures to manage the risks associated with electricity.

Eliminate
- Withdraw faulty equipment from use.

Substitute
- If working in wet conditions, use splash proof or waterproof electrical equipment instead of standard electrical equipment.
- Use power boards instead of double adaptors.

Engineering and redesign
- Install additional socket outlets to avoid overloading power outlets.

Administrative controls
- Make sure workers are trained in using electrical equipment and manufacturers' instructions are followed.
- Store and operate electrical equipment away from damp areas when not in use and make sure electrical leads do not run across wet surfaces or any place where the leads may be damaged.
- Keep electrical leads away from heat and chemicals to prevent insulation damage.
- Conduct monthly (or more frequently, if necessary) visual inspections of electrical equipment to check equipment (including connecting lead, plug and accessories) has no obvious external damage.
- Develop and maintain a record containing the description, make and serial number of all electrical equipment and the date when tested.
- When adjusting or cleaning electrical equipment, switch off the power and pull out the plug - not by the cord.
- Do not touch electrical equipment with wet hands or use a wet cloth to clean socket outlets.

Personal protective equipment
- Wear rubber soled (insulating) shoes which may provide some protection from electrical shocks in some cases.

For more information refer to the *Electrical Safety Act 2002*, the Electrical Safety Regulation 2013 and the Managing electrical risks in the workplace Code of Practice 2013.

9. Facilities

You must ensure so far as is reasonably practicable:
- that general workplace facilities such as layout, lighting, ventilation, floors and other surfaces allow work to be carried out without risk to health and safety
- the provision and maintenance of adequate and accessible facilities including toilets, drinking water, washing facilities and eating facilities.

You must also:
- provide first aid equipment and access to facilities for the administration of first aid
- prepare, implement and maintain emergency plans.

Maintain adequate levels of lighting. Too much or too little light can create glare and shadows, which may contribute to headaches and eyestrain. Poor lighting can also lead to accidents (e.g. skin penetrating injuries from mortuary instruments).

For more information refer to the first aid requirements of the WHS Regulation, the [Managing the work environment and facilities Code of Practice 2011](#) and the [First aid in the workplace Code of Practice 2014](#).

10. Slips, trips and falls

Workers in this industry work in a wide range of outdoor and indoor environments which present different slips, trip or mis-step risks. Falls from slips, trips and mis-steps can result in serious injuries and are preventable.

Assess the risk
Check the following to assess the area and work activity for risk of slips and trips:

- Is there substance (or contaminants) on the floor that makes it slippery (includes rain/weather)?
- Is the floor/ground surface too slippery for expected use?
- Is the cleaning (practice/systems) inadequate to properly clean contamination?
- Are there walking surface irregularities (e.g. holes, protrusions, loose mats, uneven paths, rough ground and pot holes)?
- Are temporary obstacles in walkways or work areas (e.g. cables, pallets, equipment, boxes)?
- Are there trip hazards that can be removed and not highlighted (e.g. single steps, edges of platforms?
- Is the lighting inadequate or uneven so that workers can't clearly see path of travel and potential slip, trip or mis-step hazards?
- Are stair dimensions, edge of step and handrails not adequate or difficult to use? (Requirements are covered in Safe movement on stairs: what to check and fix)
- Can the work be better planned to minimise slips, trips and missteps (e.g. scheduling of work, maintenance, reporting of hazards)?
- Is the type and condition of footwear suitable for the work? Is there equipment available to keep the soles of the footwear clean?

Controls
The following are some ways to reduce the risks:

- Use good housekeeping practices to keep accessways around work areas and stairs clear, clean and in good condition for safe movement.
- Contain contaminants to stop it from reaching the floor (e.g. proper drainage, overflow bin). Address poor drainage or ponding of rain and waste water.
- Put in place a cleaning practice that properly cleans contamination and is correct for the type of flooring. Block off access to the area until fully clean and dry.
- Provide walking surface that has adequate grip for expected use and contaminants. Consider appropriate flooring or floor treatments to improve slip resistance.
- Provide adequate and even lighting for walkways and work areas to clearly see path of travel and possible hazards. For outdoor work in low light levels, consider using head torches.
- Eliminate leads and cables across walkways and work areas by mounting equipment and tools from balancers, locating power source close to point of use, routing leads and cables overhead.
- Ensure stairs, nosing/edge and handrails are in good condition and easy to see and use. (See Safe movement on stairs: what to check and fix)
- Additional planning and organisation of work can minimise risks when working outdoors on rough ground and in variable weather conditions.
- Provide suitably fitted non-slip footwear and footwear cleaning stations to ensure regular cleaning. Monitor and replace footwear to ensure sufficient grip of tread.
- Ensure hazard and maintenance reporting process is readily available to all workers.

- Talk to and work with parties that workers need to interact with, such as hospitals, funeral homes, churches and emergency services to better plan and address slips, trips and mis-step risks.

For more information:
- [Slips, trips and falls at level systems self-assessment tool](#)
- [Slips, trips and falls](#)
- [Design considerations](#)

11. Plant

Plant includes:
- any machinery, equipment, appliance, container, implement and tool
- any component of any of those things
- anything fitted or connected to any of those things.

Examples of plant in the funeral industry include:
- cremators
- refrigerators
- ozone makers
- mortuary tables
- hoists and mechanical lifters
- caskets
- cistern/sluice
- air conditioners
- implements
- power tools for fixing coffin linings
- vacuum sealers
- heat sealers
- hair dryers
- washing machines
- washer/disinfectors
- dryers
- extractor fans
- trolleys
- stretchers
- cremators
- autoclaves
- embalming machines
- plant used for excavation and garden care.

Prior to purchasing or obtaining plant, you should be satisfied that the design and construction of plant is suitable for the intended use. You should consult the information supplied by the designer and manufacturer to ensure that the plant suits its intended use. The information supplied by the designer, manufacturer or supplier should outline any residual risks and provide information how to manage these.

Where plant has been in service prior to purchase (second hand) and information regarding safe use is not available, a competent person should be employed to:
- develop this information
- assess and provide guidance on updating to meet current safety standards.

Consider the following control measures:
- **Control devices** such as start/stop switches should satisfactorily perform their intended function.
- **Guarding** should be used to minimise the risks associated with some hazards.
- **Alarm systems** should be provided where appropriate.
- **Release of hazardous chemicals from plant** should be controlled to minimise risk.
- **Noise** levels should not be a risk to hearing or health.

You will need to implement control measures to ensure workers are not exposed to risk of injury from:
- entrapment
- contact with moving parts
- ejected material from plant
- projections from plant
- release of potential energy
- harmful temperatures
- electricity

- noise
- vibration
- release of steam, heat or other harmful emissions.

Control measures
Consider these control measures to manage plant risks.

Engineering
- Install a physical barrier between occupants and stretchers in transfer vehicles.
- Ensure adequate machine guarding is in place prior to starting work, for example, ensure
  o shape cutters used on spindle moulders have appropriate guarding
  o jigs and fixtures are used to ensure hands are clear from hazardous machine areas.

Administrative controls
- Provide training and instruction in the safe use and maintenance of plant and check that workers are competent.
- Adequately supervise workers and other people when operating plant.
- Ensure plant power isolation procedures are in place, before work starts, to clean, maintain or repair plant.
- Make sure plant is commissioned, tested, operated, inspected, maintained and repaired according to the manufacturer's specifications. Keep a record of these activities.
- Withdraw damaged plant from service until any risks to health and safety have been assessed and controlled.

For more information refer to the plant requirements of the WHS Regulation and the Managing risks of plant in the workplace Code of Practice 2013.

12. Hazardous manual tasks

Characteristics of hazardous manual tasks
Hazardous manual tasks (HMT) are activities that require a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing that involves one or more of the following risk factors:
- repetitive or sustained force (e.g. pushing transfer trolley over long distances)
- high or sudden force (e.g. pushing casket onto storage shelves or into a hearse)
- repetitive movement (e.g. fill of excavations, body preparation and embalming)
- sustained or awkward posture (e.g. prolonged bending over while preparing the body)
- exposure to vibration (e.g. using powered equipment).

Hazardous manual tasks frequently cause musculoskeletal disorders (MSD) such as sprains and strains of muscles, ligaments, tendons and joints. HMT can cause sudden traumatic MSD. More commonly, gradual ongoing forces and repetition cause wear and tear injuries to these body structures. The most frequently affected areas are the back, shoulder and knees.

Examples of manual tasks in the funeral industry include collecting deceased persons, storing and preparing the deceased, handling bariatric (severely obese) deceased persons, handling caskets, using hand power tools, driving excavators and other plant.

Not all manual tasks are hazardous. It is important to identify those that are hazardous manual tasks so that the risk factors can be managed.

Designing controls for HMT risks – target the source of risk
HMT controls are best applied at the source of risk. In the funeral industry this may include:
- work area design and layout (e.g. height of preparation table, height and dimensions of storage shelves, height and dimensions of vehicles; distance to push trolley)
- work environment (e.g. type of flooring, slipperiness/evenness of flooring, amount of space around work area to allow good posture and ease of movement; sufficient lighting levels, cold environments)
- nature, size, weight and number of people, animals or things involved in the task (e.g. the size, shape and weight of the deceased person, size and weight of casket, suitability of handles of casket, equipment used in preparation of body, maintenance of tools and equipment used)

- systems of work (e.g. how work is organised such as the length of shifts and times of breaks, ensuring adequate staffing levels for busy periods).

Control measures
Control measures to manage HMT risks are classified by their effectiveness:

Elimination controls
- Use mechanical equipment to fill excavations.
- Use an automatic device to lower coffins into graves.

Redesign controls
- Plan work processes to minimise double handling and lifting (e.g. storing loads on trolleys).
- Provide and use mechanical handling devices including
  - overhead or gantry ceiling hoists
  - trolleys to minimise carrying (e.g. to move the casket from the hearse and in or out of the church)
  - hover mats to reduce number of and effort required for transfers
  - adjustable trolleys or tables that match different work surface heights to minimise lifting and lowering during transfers
  - rollers to help reduce the pushing forces (e.g. when putting body trays on shelves or into the hearse).
- Ensure workbenches are adjusted to a comfortable height for the worker in order to promote an upright posture of the back and neck.
- Make sure there is enough room for easy movement around furniture and work areas including the collection of the body; pushing/manoeuvring trolleys.
- Ensure there is adequate storage space to store heavy items (including deceased persons) between shoulder and knee height of workers.
- Provide adequate lighting for the task to reduce bending.
- Place frequently required work items within easy reach and between shoulder and knee height of workers.
- Provide non-slip and well-maintained level and even flooring.
- Consult with staff regarding the selection and trial of new tools and equipment prior to purchase.

Administrative controls
- Work organisation
  - Communicate with other agencies (such as hospitals, ambulance services) and the family prior to collection of the deceased. Improved coordination can reduce double handling and better allocation of staff and appropriate equipment for the task.
  - Communicate with the family from the onset on the manual handling requirements and expectations for safe and dignified handling.
  - Break up prolonged tasks with other activities that require different postures and movements or with regular breaks from the task.
  - Roster adequate staffing for peak/busy periods.
- Ensure clothing does not restrict movement of workers.
- Provide training to ensure workers and others can competently implement the risk controls. Training should include information about manual tasks risk management, specific manual tasks risk and how to control them, use of mechanical aids, tools, equipment and safe work procedures and how to report a problem or maintenance issue.

Note: Training in lifting techniques is not suitable and adequate training and must not be used as the sole or primary means to control the risk of MSDs. For tips covering the minimum content for training workers see tips for hazardous manual task training.

Maintenance programs
- Properly maintain all mechanical aids, equipment and tools to maximise their availability and good working order.

Resources

For more information about hazardous manual task requirements refer to the:

- WHS Regulation
- Hazardous manual tasks Code of Practice 2011
- Manual tasks involving the handling of people Code of Practice 2001
- After a manual task injury
- Managing hazardous manual tasks

13. Biological hazards

Funeral workers may be at risk of exposure to infectious diseases from contact with human remains and blood and body substances. Invasive procedures, such as those associated with body preparation and embalming, create the highest risk.

Other people such as visitors, clients, contractors and cleaners may also be exposed to infection risks. Consider all people who may be affected and decide on control measures to eliminate or minimise exposure to infectious diseases.

In the funeral industry infectious diseases may be transmitted by:

- **contact transmission** – this occurs from contact with infectious human remains, blood and body substances and contaminated surfaces, items and equipment via a person's non-intact skin, skin penetrating (needlestick) injuries and a person's contaminated hands touching their eyes, nose or mouth
- **droplet transmission** – this occurs when infectious splashes and sprays of blood and body substances contaminate a person's eyes, nose or mouth
- **airborne transmission** – this occurs when a person inhales infectious aerosols (e.g. when opening body cavities or performing embalming procedures on the respiratory cavity).

Funeral workers are at risk of skin penetrating injuries, which can transmit blood borne viruses such as hepatitis B, hepatitis C and human immunodeficiency virus (HIV).

Skin penetrating injuries can occur from sharp objects such as needles, scalpel blades, trocars, razor blades, sharp body parts, sharp medical instruments that are attached to the deceased person's body, and broken glass at the site of a fatality. Some procedures (e.g. inserting a mandibular/nasal suture) pose a high risk for skin penetrating injuries.

Standard and transmission-based precautions

Standard and transmission-based precautions are infection prevention and control practices that protect against exposure to infectious diseases.

Standard precautions are work practices that provide a basic level of infection prevention and control. These include:

- good hygiene practices, including covering cuts and washing hands
- safe handling and disposal of clinical waste and sharps
- regular cleaning of the funeral premises, mortuary and transfer vehicles
- managing spills of blood and body substances
- reprocessing mortuary instruments and equipment after use
- safe handling of linen
- safe handling, storage and disposal of clinical waste and sharps
- using PPE appropriate to the level of contact with blood and body substances.

Some infections, including blood-borne-viral infections, may not be known at the time of death. All bodies should be considered as potentially infectious, and standard precautions should always be adopted, regardless of the cause of death.

Transmission-based precautions are additional infection prevention and control practices that are adopted when standard precautions alone are not sufficient to manage the infection risk, for example where there is potential exposure to highly transmissible or serious infectious diseases or to infectious droplets or aerosols. These additional measures are targeted at the infectious disease and how it spreads, and may include enhanced PPE, enhanced cleaning and disinfection, and restrictions on body preparation, embalming and viewing.

Control measures

The following section outlines control measures that may be used to eliminate or minimise exposure to infectious diseases.

Eliminate

- Eliminate unsafe work practices, such as recapping needles, passing sharps by hand between people, and eating, drinking and smoking in the mortuary.

Substitute

- Where possible, substitute reusable mortuary equipment with single use disposable equipment (e.g. use disposable razors and scalpel blades).
- Substitute safer work practices, for example:
  - use a needle or scalpel blade holder instead of holding sharps by hand
  - use a scalpel blade removal device instead of removing scalpel blades by hand or with artery forceps
  - use stapling devices instead of conventional suturing methods
  - use blunt-ended scissors instead of sharp-ended scissors
  - place sharps in a receptacle such as a kidney dish during body preparation, rather than on a surface.

Engineering and redesign

- Use safety engineered medical devices such as retractable needles and syringes.
- Position sharps containers close to the point of use.
- Make sure floors, surfaces, equipment, furnishings and fittings are made of materials that can be readily cleaned.
- Separate 'clean' and 'dirty' tasks and functions, for example
  - separate clean and dirty work areas. Staff should remove PPE and wash their hands before leaving a dirty area and moving to a clean area
  - install separate sinks for hand washing and for instrument cleaning
  - keep clean and dirty mortuary instruments and equipment separate
  - separate clinical waste from general waste.
- Organise one-way work flow between clean and dirty areas.
- Install taps and waste bins in the mortuary with non-hand operated controls to reduce the risk of contaminating fixtures, and fit taps with an anti splash device.
- Develop safe disposal methods for bulk volumes of blood and body substances to minimise splashing and the creation of aerosols.

Isolate

- Make sure all used sharps are disposed immediately after use in an appropriate sharps container, and do not fill sharps containers more than three-quarters full.
- Place clinical waste in a labelled, leak proof bag or container, and seal it before disposal.
- Place the deceased person in a body bag, or wrap the body, to contain blood and body substances.
- Cover the deceased person's wounds and other body areas with plastic or similar material during handling and transportation to prevent leakage of blood and body substances, and use dry seal powders on incisions after suturing to prevent leakage.
- Prevent unauthorised access to the mortuary room.

Administrative controls

- Develop and implement documented infection prevention and control policies and procedures based on standard and transmission-based precautions.
- Provide workers with information, training, instruction and supervision regarding infectious disease risks and control measures.
- Provide suitable hand washing facilities including running water, liquid soap and disposable paper towels, and alcohol-based hand rub. Hand hygiene facilities such as alcohol-based hand rub and hand wipes should also be available in transfer vehicles.
- Provide suitable first aid facilities so that workers can cover cuts and abrasions. First aid kits should also be available in transfer vehicles.
- Provide a spills kit for managing spills of blood and body substances, and keep a spills kit in transfer vehicles.

- Develop a protocol for managing accidental exposure to blood and body substances and skin penetrating injuries, and provide emergency eyewash and shower facilities.
- Implement an [occupational immunisation program](#) for workers, including
  - hepatitis B immunisation for those who have regular contact with blood, body substances and sharps. Those at significant risk of hepatitis B should have a blood test after completing the vaccination schedule to make sure they have adequate immunity
  - current tetanus immunisation for those who work with soil and dirt (e.g. grave diggers)
- Control the entry of pests such as flies and rodents.
- Maintain floors, surfaces, equipment, furnishings and fittings in a hygienic state, and repair or replace if perished or damaged.

Workers who regularly perform invasive procedures on the respiratory tract, such as cavity or arterial embalming, should seek advice from [Queensland Health](#) about tuberculosis screening.

Hazardous chemicals such as glutaraldehyde and formaldehyde should not be used for cleaning and disinfecting surfaces or managing spills of blood and body substances. Glutaraldehyde should only be used for disinfecting mortuary instruments if suitable control measures are implemented, such as local exhaust ventilation. Consider using safer disinfectants for reprocessing mortuary instruments or use thermal disinfection methods (e.g. a washer-disinfector or boiling) or sterilisation (e.g. an autoclave).

Personal protective equipment
- Select PPE that
  - meets relevant Australian Standards
  - provides adequate fit
  - is regularly inspected, cleaned and maintained.
- Workers should receive proper instruction regarding appropriate use, fit, maintenance and cleaning of PPE.
- PPE may include
  - protective clothing, such as a full length fluid-resistant apron, gown, overalls or 'scrubs'
  - gloves, such as disposable latex, vinyl or nitrile gloves, cut resistant gloves, or heavy-duty household gloves
  - safety glasses, goggles or face shields if a worker's eyes or face could be splashed with blood or body substances
  - respiratory protection, such as a disposable P2 respirator, if a worker could inhale infectious aerosols. Surgical masks do not provide respiratory protection against infectious aerosols. Where there is concurrent exposure to aerosols and hazardous chemicals (e.g. embalming fluids), a half-face piece, full face-piece or powered air purifying respirator with particulate and organic vapour filters should be worn
  - protective footwear, such as protective over-shoes or rubber boots. Footwear should have nonslip soles and provide adequate protection against sharps being dropped.
- PPE should be readily available, including in transfer vehicles.
- Single-use (disposable) PPE should be disposed of after use and not re-used.
- Reusable PPE should be decontaminated after use and stored in a clean area.

Visitors
Relatives and others may wish to view the body or assist with religious or ritual body preparations. Inform visitors of any infection risks and precautions they should take, such as washing hands after contact with the deceased.

Working with soil
Workers who work with soil and dirt, such as grave diggers, cemetery grounds staff and those involved with exhumation, may be exposed to infection risks from contact with soil and mud. Workers should cover cuts, wash hands after contact with soil and mud, and wear PPE such sturdy footwear and gloves when working with soil and mud.

For more information about infectious diseases visit Queensland Health at www.health.qld.gov.au or call 13HEALTH (13 43 25 84).

14. Latex

Disposable latex gloves are widely used in the funeral industry to protect against infection risks. Latex exposure may cause health problems for some workers as outlined in Table 1.

Table 1: Health problems resulting from the use of latex gloves

Health problem	Symptoms	Major causes
Irritant contact dermatitis	• dry, itchy, irritated skin in areas exposed to latex	• prolonged dampness from sweating in gloves, causing skin to be vulnerable to chafing and rubbing powdered gloves that can absorb skin oils and dry the skin • repeated or incomplete hand washing • contact with detergents and disinfectants
Allergic contact dermatitis (type IV reaction)	• redness, itching, blisters, crusting (symptoms can progress beyond the area of contact)	• allergic reaction to the chemicals that are added to gloves during manufacture
Latex allergy (immediate hypersensitivity reaction/type I reaction)	• hives, itchy eyes, running nose, asthma-like symptoms • anaphylaxis (a severe allergic reaction which requires emergency medical treatment)	• allergic reaction to latex proteins in natural rubber • high protein, powdered gloves can increase the risk because latex proteins attach to glove powder, and may be inhaled after gloves are removed

Control measures

Consider these control measures to manage the risk of latex allergy.

Eliminate
• Eliminate unnecessary use of latex gloves (e.g. use non-latex gloves for activities that do not involve contact with blood and body substances, such as routine housekeeping and cleaning).

Substitute
• Select low protein, powder free latex gloves.
• Use alternative gloves where appropriate (e.g. nitrile or vinyl).
• Use water-based hand care products, as oil based products can cause latex deterioration and leaching of latex proteins

Engineering and redesign
• Redesign tasks so that latex gloves are not worn for prolonged periods.
• Position hand washing basins close to where latex gloves are used so that workers can readily wash their hands after removing gloves.

Administrative controls
• Develop policies and procedures for selecting and using latex gloves.
• Provide workers with information about latex allergy and its prevention, skin care, and reporting signs of latex allergy.
• Ensure workers who develop signs of latex allergy seek medical advice.
• If a worker is diagnosed with a latex allergy, seek advice about appropriate selection of gloves and how to ensure a latex-safe workplace for the affected worker.

15. Work-related violence and aggression

Work-related violence is any incident in which a person is abused, threatened or assaulted in circumstances relating to their work. It includes a broad range of actions and behaviours that can create a risk to the health and safety of workers.

Work-related violence and aggression can result in a worker sustaining physical and/or psychological injuries, and can sometimes be fatal.

Examples of work-related violence include, but are not limited to:
- biting, spitting, scratching, hitting, kicking
- pushing, shoving, tripping, grabbing
- throwing objects, damaging property
- using or threatening to use a weapon
- sexual assault.

Aggressive behaviour can include:
- verbal abuse and threats
- angry and hostile behaviour
- antagonism and jeering
- intimidation and insults
- shouting and swearing
- encroaching on someone's personal space (i.e. standing too close)
- stamping feet
- banging, kicking or hitting items.

When are workers exposed to violent or aggressive behaviour?
Situations where funeral workers may be exposed to the risk of work-related violence and aggression include:
- providing services to people and families that are bereaved
- performing work alone and/or in isolated environments
- acts of petty theft or robbery
- breaking and entering.

Control measures
Controls which can be used to prevent or minimise the risks from work-related aggression and violence include:

Redesign
- Redesign or refurbish existing environments so they are more secure (e.g. remove potential weapons from the environment, restrict access to non-public areas of the workplace and to areas where high-value items are stored). Design work practices to minimise potential conflict with bereaved people and families. For example, provide families with a single point of contact to reduce the requirement to retell their situation; ensure relevant information about the deceased is communicated during handovers or conveyed to supervisors or managers. Install security equipment, such as security doors, grills, alarm systems, surveillance and external security lighting.

Administrative controls
- Ensure all access points, such as external doors and windows are secure, and restrict access to body storage and preparation areas.
- Minimise the amount of money kept on the premises and develop procedures for cash handling, storage and transfer.
- Display signage to indicate the presence of security systems and to indicate that no money is kept on the premises after hours.
- Keep a written record of whether jewellery or other valuables have been left on deceased persons. Valuables should be stored in a locked storage area or safe.
- Develop emergency response procedures to be followed in a threatening situation and provide workers with training on potential security threats. This includes providing workers

with an effective means for summoning help and the establishment of an employee assistance program.
- Provide workers with training on help workers to communicate effectively with bereaved people.
- Institute policies for workers to refuse or withdraw the provision of a service in situations where they face violence or aggression from clients or others. Ensure workers are supported where such service is refused or withdrawn.
- Ensure the whereabouts of staff are known if they are conducting home or field visits, and if possible, restrict visits to daylight, working hours. Where this is not possible, implement control measures such as having workers operate in pairs.
- Review the requirement to work alone.
- Ensure workers have access to a reliable means of communication when conducting home or field visits.
- Carry out regular inspection and maintenance of security equipment and installations.
- Provide training for workers on:
    o Reporting all hazards, including abuse and threats
    o Dealing with challenging behaviour
    o De-escalation and avoidance strategies
    o Seeking assistance before a situation becomes critical.
- The organisation's policies and procedures relating to aggressive behaviour. Provide support personnel as necessary.
- Provide counselling services to workers as required.

How to tell if controls are working?

- Consult with staff and follow up on issues raised.
- Conduct regular audits to ensure controls are effective and being used by workers.

16. Work-related stress

Work-related stress describes the physical, mental and emotional reactions of workers who perceive that their work demands exceed their abilities and/or their resources (such as time, help, support) to do the work.

Workers are likely to be exposed to a combination of psychosocial hazards and factors – some may always be present, while others only occasionally.

When are workers exposed to work-related stress?
Workers in the funeral industry may be exposed to work-related stress due to the nature of their day-to-day work activities. Examples of workplace stressors within this industry may include, but are not limited to:
- high work demands (such as time pressure, working long hours and overtime, shiftwork)
- emotionally demanding work (such as dealing with bereaved people, distressing fatalities such as homicide or suicide events, community disasters, events involving young children, events involving persons known to the worker)
- low levels of control over how they meet work demands
- poor support from supervisor or co-workers
- lack of role clarity
- poorly managed relationships (such as conflict and workplace bullying)
- low levels of recognition and reward
- poorly managed change
- organisational injustice.

Exposure to psychosocial hazards or stressors can impact mental and physical health through stress, psychological strain, job burnout, anxiety, depression, muscular aches and pains, irritability, poor concentration and disturbed sleep. Pronounced and/or prolonged exposure to these stressors may also negatively affect work performance and efficiency, worker morale, personal and work relationships, and lead to an increase in absenteeism, turnover and sick leave.

Control measures
Controls which can be used to prevent or minimise the risks arising from work-related stress include:
- Where emotional demands are an unavoidable part of a worker's role, ensure these are captured in a position description and that applicants are informed at the pre-selection stage (e.g. at interview) of the demanding nature of the role.
- Roster work activities to ensure workers are not required to approach difficult client situations on their own.
- Ensure work tasks and cases are matched with the worker's capability level.
- Ensure there is sufficient supervision available so workers can reach out for support to deal with challenging situations.
- Provide workers with breaks and opportunities to get distance from emotionally demanding situations.
- Rotate tasks and activities to ensure there isn't overexposure to emotionally demanding activities.
- Where possible, allow workers greater control over their jobs (e.g. empowering workers to make decisions that will reduce emotional demands.
- Ensure shifts and rosters are scheduled to allow workers adequate time for rest and sleep (particularly when workers are on-call).
- Ensure shift rosters are agreed to by workers and provide communication and consultation when designing or changing rosters.
- Develop, implement and enforce a code of conduct so that everyone is aware of appropriate work behaviours. Ensure these standards are implemented to demonstrate that there are consequences for poor behaviour.
- Ensure all managers have the skills to identify and manage conflict.
- Where workers are exposed to distressing or potentially traumatic events, offer psychological first aid in which workers are supported and their immediate needs met, and monitored over time. Psychological first aid includes provision of information, comfort, emotional and practical support to those seeking help. Psychological first aid should be tailored to the worker's needs.
- Provide workers with access to an employee assistance program (e.g. professional counselling and support).
- Provide training to workers about the psychological stressors associated with the funeral industry and inform workers of the resources available to help them develop coping skills.
- Create and environment in which workers feel comfortable raising concerns and speaking up about difficulties coping with work demands. Develop a supportive workplace that encourages peer support and ensure good communication channels between supervisors and other staff.
- Undertake effective consultation and communication with workers to ensure the above controls are tailored to the specific work environment.

Resources
For more information about work-related stress, refer to Preventing and managing risks to work-related psychological health.

17. Physical hazards

Physical hazards include:
- solar ultraviolet radiation
- radiation
- extreme heat levels
- fire
- unstable memorials.

Solar ultraviolet radiation
Workers may be exposed to solar ultraviolet radiation (sunlight) when working in cemeteries and crematoriums. Garden and maintenance workers may also be exposed to plants that produce photosensitivity, causing the skin and eyes to be highly reactive to sunlight.

Control measures

Consider these control measures to manage the risks associated with solar UV radiation.

Redesign

- Where possible, use shade created by portable structures or permanent objects, such as trees and buildings.

Administrative controls

- Implement a policy statement and procedures for protecting workers against solar ultraviolet radiation.
- Where possible, organise work programs so that outdoor activities are limited when the sun is most intense (e.g. between 10.00 am and 2.00 pm).
- Provide workers with instruction and training on exposure to solar ultraviolet radiation and safe work methods.

Personal protective equipment

- Provide workers with personal protective equipment (PPE) that meets the relevant Australian Standards, including:
  - long sleeved and collared clothing with a high Ultraviolet Protection Factor (UPF)
  - hat with a broad brim at least 8-10 centimetres wide
  - wrap around sunglasses
  - broad spectrum sunscreen with a Sun Protection Factor (SPF) of 30 or higher.

Radiation

Where the deceased person has been treated with radioactive materials before death and these are present in the body, the body substances and bone ash may create a radiation hazard. Appropriate radiation precautions should be implemented where a radiation hazard exists.

Further information on radiation is available from Queensland Health.

Extreme heat

Workers required to load cremators and rake out furnaces are often exposed to extreme heat levels, hot fumes and the risk of burns when performing these activities. Working in hot or humid environments can cause thermal discomfort, heat stress and heat stroke.

Control measures

Consider these control measures to manage extreme heat.

Redesign

- Ensure there is adequate ventilation and air flow to minimise exposure to extreme heat levels and hot fumes when raking out hot ashes.
- Ensure unauthorised personnel can not access the work area when hot ash trays are being moved from the cremator to the cooling racks.
- Position cooling racks as close as possible to the cremator to reduce the distance the worker travels with hot ashes.
- Ensure cooling racks are placed away from other workers and visitors.

Administrative controls

- Ensure the furnace flame to the top chamber is switched off when loading the cremator.
- Ensure only the person operating the cremator is in the work area when loading the top chamber of the cremator.
- Install a warning system (e.g. a siren and flashing light that is activated when the cremator doors are opened).
- Establish a 'no go' zone (e.g. by using barricades and yellow safety lines preventing unauthorised persons from accessing areas where extreme heat is generated).
- Place warning and danger signs in conspicuous places near the work area to warn people of the presence of hot ashes and extreme heat levels.

Personal protective equipment

- Ensure the cremator operator has appropriate PPE (double lined leather gloves, protective leather apron and face shield to minimise exposure to extreme heat levels, hot ashes and hot fumes).

Fire hazards

Coffins and casket manufacture can create fire hazards from large quantities of sawdust, timber, and flammable substances such as paints and thinners.

Control measures

Consider these control measures to manage the risk of fire hazards.

Eliminate

- Use inflammable liquids where possible.

Administrative controls

- Implement good housekeeping practices (e.g. remove any timber off cuts and sawdust at the end of each day).
- Ensure combustible liquids and other dangerous goods are stored and handled safely.
- Develop and implement emergency procedures. These should include first aid requirements, evacuation arrangements, roles and responsibility of key personnel (e.g. fire wardens) and arrangements with emergency organisations.
- Make sure all workers are provided with instruction and training on emergency procedures.
- Make sure staff with specialised duties (e.g. first aid officers or fire wardens) receive appropriate training and refresher courses.
- Install warning systems and equipment (e.g. fire alarms and extinguishers) in case of emergency. Periodically test the equipment to make sure it works.

Unstable memorials

Unstable memorials can cause injury and death. Risk factors for unstable memorials include:

- memorial out of alignment by five degrees or more
- movement of the memorial when a firm pressure is applied to the side of the memorial
- cracked memorial base
- memorial situated on unstable ground (e.g. sand)
- memorial missing a component that formerly contributed to stability.

Control measures

Consider these control measures to manage unstable memorials.

Redesign

- Gain advice from structural engineers or an appropriately qualified person regarding structurally sound methods for erecting memorials.

Administrative controls

- Establish clear safety policies setting out the workplace's standards for managing memorial stability.
- Carry out inspections to identify any memorials posing an immediate danger to the public.
- Deal with unstable memorials immediately, for example by
  - laying them down
  - structurally supporting them
  - preventing access to the area
  - carrying out immediate repairs
  - erecting warning signs alerting people to the danger of unstable memorials.
- Develop and implement an ongoing inspection and structural safety program for large cemeteries (e.g. conduct comprehensive inspections every five years). The frequency of inspection will depend upon the age, size and condition of the memorials.
- Train staff to carry out inspections of unstable memorials.
- Be aware of any conservation orders that may apply to cemeteries preventing memorials being laid down.

Appendix 1 – Ventilation
Types of ventilation systems

Natural ventilation
Natural ventilation generally does not provide sufficient airflow to be suitable as a method for controlling exposure to airborne contaminants, such as chemical vapours and mists in mortuaries, or ash dust in crematoriums.

Air conditioning
Air conditioning is provided for the comfort of workers. It does not remove contaminated air but merely dilutes the airborne contamination as it recirculates the air throughout the room. If the air inlet and outlet distribution is not uniform, some areas may remain more contaminated.

Local exhaust ventilation (LEV)
LEV is the preferred and most reliable means for removing airborne contaminants at its source. LEV is designed to contain or capture the contaminant close to the point where it is generated and exhaust it out of the workplace. This prevents the contaminated air from dispersing into the general workplace air and being inhaled by workers.

LEV does not need to move large volumes of air to be effective. Consequently, only low makeup volumes are required and LEV can be used inside air-conditioned spaces.

Components of a LEV system
LEV should be installed and designed by an appropriately qualified person who is aware of the principles of ventilation. All LEV systems should have:
- a device (e.g. a hood) to capture the contaminant
- a ducting system to carry the contaminant from the workplace
- a fan or other means of moving the air to capture the contaminant
- a system for discharging the contaminated air outside the workplace
- a filtration system or remote discharge system to ensure the discharged contaminated air does not present a health hazard to other persons (e.g. members of the public).

Position of exhaust systems
Areas where embalming fluids are used ideally should have:
1. A LEV hood positioned so that it:
   - does not interfere with a worker's tasks (e.g. during embalming procedures)
   - can be moved as close as possible to the source of contaminant (e.g. positioned on a flexible arm)
   - does not draw air from a contaminating source past a person's breathing zone (nose and mouth).

or
2. A LEV (downdraft) table. Various designs are available. Information on one such design can be found in the National Institute of Occupational Safety and Health publication *Controlling Formaldehyde Exposures During Embalming*.

or
3. General room (dilution) ventilation. This ventilation system is generally less efficient than a LEV system, often requiring more exhaust air to achieve the same effectiveness of contaminant control and extraction. The make-up air costs for heating or cooling are also considerably more for dilution ventilation, than a LEV system. It is recommended that a LEV system, rather than a dilution system be used for exhausting contaminants from the workplace.

Extraction of contaminants

An exhaust extraction system should be tested and maintained on a regular basis to ensure its effectiveness. Use an air current tube to check for leaks, turbulence and stagnant air conditions in and around LEV hoods.

Air velocity should be measured on a regular basis to ensure the extraction system is operating at the desired rate. Air velocity for a:
- downdraft table should be at the rate indicated by the manufacturer
- LEV hood should preferably be at 0.5 m/s at the point of contaminant capture.

Regular inspection and maintenance of the fan and motor should also occur to maximise the potential of the extraction system to capture contaminants. Design of, and separation between the air inlet and exhaust outlet is also important to achieving adequate air extraction from the room. Air movement should be balanced to keep the room at a slight negative pressure to keep any contaminants in the room.

Air quality

The required supply of fresh air will be determined by factors, such as:
- level of contaminant concentration
- contents and shape of the room
- the use of embalming fluids.

Indoor air quality should be controlled to meet all relevant exposure standards. This is particularly important in the mortuary where there may exist greater levels of airborne contaminants. It is also important to ensure that air from the mortuary is not recirculated into other areas of the funeral home.

Further guidance on mechanical ventilation systems can be obtained from AS 1668.2.

Information on LEV systems may be sought from specialist providers.