

SAFE WORKING

AT HEIGHTS FROM WORK PLATFORMS IN THE MEAT INDUSTRY

GUIDE 2009

Disclaimer

This publication may contain occupational health and safety and workers compensation information. It may include some of your obligations under the various legislations that WorkCover NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website (www.legislation.nsw.gov.au) or by contacting the free hotline service on 02 9321 3333.

This publication does not represent a comprehensive statement of the law as it applies to particular problems or to individuals or as a substitute for legal advice. You should seek independent legal advice if you need assistance on the application of the law to your situation.

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Purpose

The purpose of this document is to assist meat processing workplaces control the risks associated with working on raised processing platforms.

Background

The issue of working at heights from processing platforms in abattoirs has been identified as an area where some guidance is required. WorkCover NSW set up a working party in June 2007, which included industry bodies, employer representatives and representatives from the Australian Meat Industry Council (AMIC), Australian Meat Industry Employees Union (AMIEU) and Australian Quarantine and Inspection Service (AQIS). The working party looked at a number of different systems of work and identified some practical measures being adopted by industry to control the risks associated with working from these platforms. This guide was developed following recommendations made by the working party regarding improved information and support for the industry to promote safe practices.

Please note: The information on controls outlined in this document is not exhaustive and should only be used as a guide in conjunction with comprehensive risk assessments conducted on the tasks being performed from these platforms.

Legislative requirements

Each state and territory has a separate occupational health and safety legislative framework that duty holders should be aware of and follow. Reference is made to the individual state's legislative requirements on page 11 of this document.

A risk assessment must be carried out on identified hazards associated with a workplace, including any arising from plant used at the workplace or specific operations being carried out at the workplace. Appropriate measures must be implemented to eliminate or, where this is not practicable, control the risks arising from the hazards.

Refer to the relevant Australian and joint Australian/New Zealand Standards listed in this publication prior to implementing any control measures.

Risk management

The appropriate control measures for a particular system of work are generally determined by individual job factors. Conducting a risk assessment identifies these factors. Employers must identify any foreseeable hazards, assess their risks and take action to eliminate or control them. Risk management is a regulatory requirement. Risk management is a problem-solving process that – when taken step-by-step – will lead to informed decisions about how best to avoid or control the impact of risks. You must involve your workers when undertaking risk management.

There are four basic steps:

Step 1: Identify the problem (hazard identification).

Step 2: Determine how serious a problem it is (assess the risks).

Step 3: Decide what needs to be done to solve the problem (eliminate or control the risks).

Step 4: Review the risk assessment process and control measures to ensure risks are still adequately addressed.

Hierarchy of controls

Appropriate measures **must** be implemented to eliminate the risk; however, where this is not practicable the hazard **must** be controlled in a manner that minimises the risk to the lowest level reasonably practicable, using the hierarchy of controls in the following order:

1. Substitute the hazard giving rise to the risk with a hazard that gives rise to a lesser risk.
2. Isolate the hazard from the person put at risk.
3. Minimise the risk by engineering means.
4. Minimise the risk by administrative means (for example, by adopting safe working practices or providing appropriate training, instruction or information).
5. Use personal protective equipment.

Note: A combination of the above measures is required to be taken to minimise the risk to the lowest level reasonably practicable if no single measure is sufficient for that purpose.

Hazards associated with working platforms

There are a number of hazards associated with working at heights from working platforms (fixed, adjustable and automated) and **some** of them are listed below:

- falls
- slips and trips
- hit by falling object or knife injury (including access and egress)
- manual handling.

Assessing and controlling the risks associated with working platforms

The working party visited a number of abattoirs throughout NSW, identified a number of factors that need to be considered when undertaking a risk assessment and identified some control measures that can be used in conjunction with your risk assessment program. This is not an exhaustive list and does not negate the need for a comprehensive risk assessment to be performed on these tasks. The hierarchy of controls must be followed and it should be noted that many of the risks might require the use of more than one control measure.

Falls from the working platform

Working from platforms at any height can result in serious risk of injury, depending on the specific circumstances involved in the tasks. Therefore all tasks (including cleaning and maintenance) that require persons to work from these platforms **must** be adequately assessed and appropriate risk control measures need to be implemented using the hierarchy of controls.

Assessing the risk of falls

Factors to consider include the:

- height of the platform
- size of the platform
- distance between the carcass and the leading edge of the platform
- cleaning and maintenance of the platforms, including the risk of working with hot water.



No fall protection measures implemented on this platform at workstations.



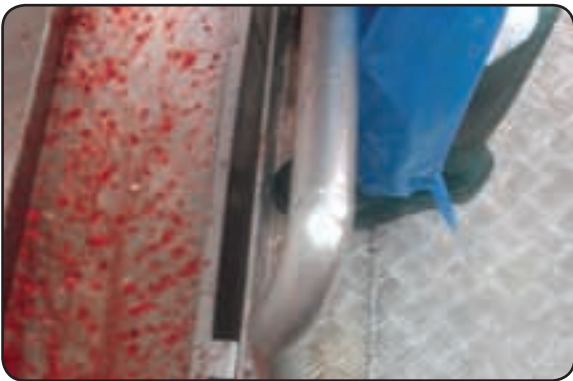
No fall protection measures in place for cleaners on this platform.

Suggestions for controlling the risk of falls

The following control measures are only for consideration and are not guaranteed risk removal strategies. Each site will have to determine what is appropriate for its operations, subject to its own risk analysis results.



The use of handrails with a midrail and toe board as per AS 1657:1992 to prevent the fall of a person from this platform.



The use of curved handrails to control the risk of falls from the processing platform. This can reduce the risk of cross-contamination of the carcass in line with AQIS requirements.



Rise and fall platforms fitted with appropriate railings and toe boards to prevent a fall.

- All work platforms, stairways and ladders are constructed and designed to Australian Standard (AS) 1657:1992, with appropriate fencing and/or guard railing to prevent the fall of a person, where practicable.
- An appropriate travel restraint is used that will stop the worker from being able to fall off the edge of the platform.
- An appropriate form of physical restraint is provided that will arrest the fall of a person from a height of more than two metres.
- Access to work platforms is restricted (ensuring all persons comply – including supervisors, inspectors, cleaning and maintenance personnel).



Example of waist belt harness with fall restraint lanyard attached to prevent the worker reaching the edge of the platform.



Example of fall restraint harness system to prevent the worker reaching the edge of the platform. Note the slide ring attachment which enables easy movement along the platform.

Slips and trips

Slips and trips are a major factor in many of the incidents that occur in this industry and can result in different types of injuries, including fall from heights or same level injuries, knife stick injuries and musculoskeletal disorders (sprains and strains).



Floor surface should be non-slip and kept clean from off-cuts and wet and slippery materials, where practicable.

Assessing the risk of slips and trips

Factors to consider include:

- the work platform surface
- wet and sometimes slippery work environments due to the tasks being performed, including cleaning and maintenance
- off-cuts and body fluids left on working platforms, causing trip and slip hazards
- the type of footwear provided
- access and egress to platforms
- the application of force, such as pulling, pushing or downward forceful cutting.



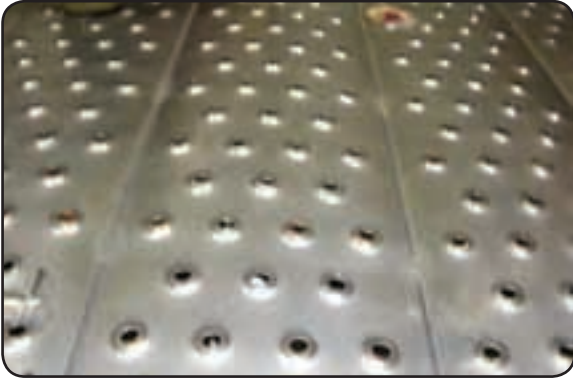
Access provided not adequate and as per AS1657:1992. Note: Vertical rung type ladder should not be used except where all other types of ladders or stairs are impracticable and must not exceed 3 m.



Safety boots in poor condition increase the risk of a slip, trip and/or fall injury occurring.

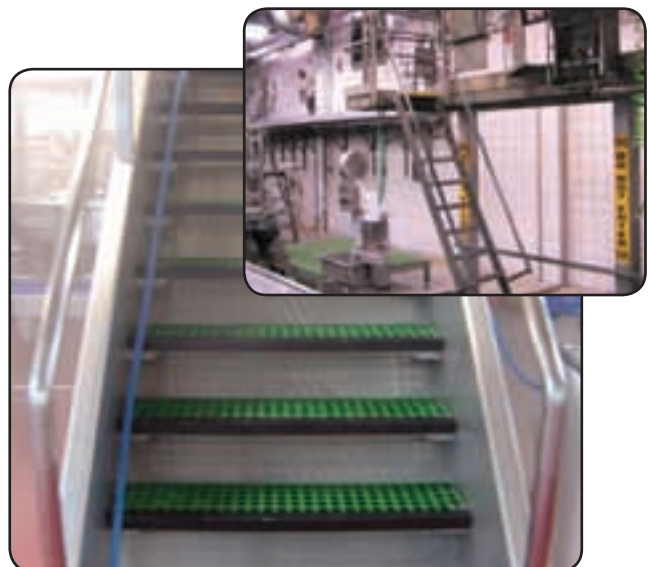
Suggestions for controlling the risk of slips and trips

The following control measures are only for consideration and are not guaranteed risk removal strategies. Each site will have to determine what is appropriate for its operations, subject to its own risk analysis results.



Non-slip flooring and boots to be provided, cleaned and properly maintained.

- All work platforms, stairways and ladders are constructed and designed to AS 1657:1992, with appropriate fencing and/or guard railing to prevent the fall of a person.
- Non-slip floor surfaces are provided on the platforms.
- Adequate lighting is provided to the platform.
- All sterilisers and washbasins are appropriately located and plumbed, to reduce the water falling onto the platform and to ensure good manufacturing practices.
- All processing equipment and tools are mounted from balancers with leads restrained to prevent trip hazards.
- All off-cuts are adequately disposed of into chutes, belts, tubs and bins as provided.
- Regular cleaning is undertaken during production to ensure platforms are clear of off-cuts and rubbish.
- Non-slip footwear is provided and properly cleaned and maintained.



Stairs to be provided with non-slip flooring and handrails as per AS 1657:1992, and free of obstructions and appropriately cleaned and maintained.

Hit by falling or moving object and/or knife injury

The operations of the meat industry are characterised by the use of sharp-edged knives and tools. The risk of injury from being hit by falling sharp-edged objects and/or falling onto sharp-edged objects (such as knives and dangerous tools) is high and should be taken into consideration. Other hazards include being hit by moving objects such as rise and fall platforms (RFPs).

Assessing the risk of being hit by a falling or moving object

Factors to consider include:

- access to areas underneath where persons are working with sharp-edged tools and equipment
- access underneath and around automated plant such as RFPs
- protective clothing and equipment.

Suggestions for controlling the risk of being hit by a falling or moving object

The following control measures are only for consideration and are not guaranteed risk removal strategies. Each site will have to determine what is appropriate for its operations, subject to its own risk analysis results.



Lines mark restricted access areas underneath and around RFPs.

- Access is restricted to areas where there is a risk of equipment or tools being dropped from above.
- Access is restricted to areas underneath and around plant such as RFPs.

- Passageways and walkways are well delineated to ensure persons are aware of access and egress walkways.
- Processing equipment and tools are adequately secured to prevent them from falling.
- Supervisors prevent workers (eg cleaners) entering the restricted areas underneath and around plant such as RFPs whilst in operation.
- Training is provided to **all** persons in relation to safe access and egress around the plant.
- Protective clothing is provided to minimise the effect of being hit by a sharp or moving object.



Clear access and egress is provided, minimising the need for workers to access areas where objects can fall from above.

Manual handling

Manual tasks are common in the meat processing industry. Musculoskeletal disorders resulting from these tasks are the most common type of injuries sustained in the workplace, and the risks associated with hazardous manual handling tasks must be considered when implementing control measures for working on processing platforms. Care should be taken to ensure that control measures implemented for specific hazards do not create new hazards.

Assessing the risk of hazardous manual handling



Reaching and poor posture should be kept to a minimum. (See next page for photo of optimum manual handling practice for this task.)



Bending and reaching should be kept to a minimum while performing the task.

Factors to consider include:

- working above shoulder height and below knee level. This can be as a result of an inappropriate height of the platform for the task, inappropriate chain height and size of the carcasses. Allowing reasonable time to complete the task is also an important factor and relates to the speed of the chain
- the position of the carcass relative to the worker. This is extremely important and there should not be an excessive horizontal reach distance between the carcass and the platform. The need for the worker to reach forward over the platform to undertake the task should be kept to a minimum as this will increase the risk of a fall and result in the worker adopting an awkward posture
- twisting, bending and reaching due to restricted space, inadequate platform space and poor design
- poor configuration and/or layout of associated equipment (such as sterilisers and tool rests). This can result in the worker adopting an awkward posture
- rotation. This is often used in the workplace to reduce the risk of musculoskeletal injuries and must be considered in any comprehensive risk assessment. However, rotation cannot be used as a reason for not appropriately controlling the risk of an injury occurring due to a fall from one of these platforms.

Suggestions for controlling the risk of hazardous manual handling

The following control measures are only for consideration and are not guaranteed risk removal strategies. Each site will have to determine what is appropriate for its operations, subject to its own risk analysis results.



Good posture with carcass close to the body and saw set up on counter balance for ease of use.

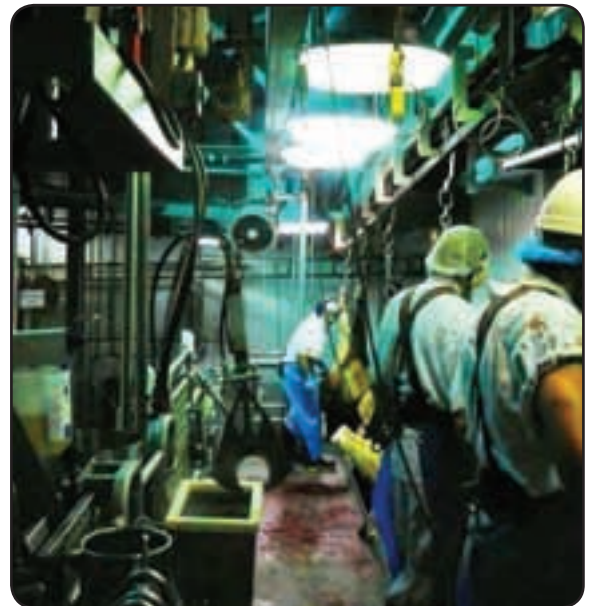


Good posture with carcass close to body.



RFP allows the worker to maintain the optimal working position to the carcass.

- Mechanised RFPs are used to keep the carcass within the good working zone for each task
- The distance from platform to carcass is kept to an absolute minimum to reduce the need for reaching
- Chain speeds are appropriate for the tasks being undertaken and the height of the chain is appropriate for carcass type
- The design and layout of the working platform is suitable for the tasks being performed, and the tool rests and sterilisers are positioned appropriately, so as to minimise the need to bend and twist.



Hock cutter attached to counter-balance and stored at good working height for ease of use.

WHERE CAN I GET MORE INFORMATION?

WorkCover NSW

Phone: 13 10 50

www.workcover.nsw.gov.au

Occupational health and safety legislation

Occupational Health and Safety Act 2000

Occupational Health and Safety Regulation 2001

www.legislation.nsw.gov.au

Code of practice

Manual Handling: National Code of Practice

Australian Standards (SAI-Global: publisher and distributor of Australian Standards)

Standards Australia

Phone: 1300 65 46 46

www.standards.org.au

Platforms, walkways and stairs

Australian Standard AS 1657: 1992 *Fixed platforms, walkways, stairways and ladders – Design, construction and installation*

Fall arrest

Australian/New Zealand Standards:

- AS/NZS 1891.1: 2007 *Industrial fall arrest systems and devices* – Harnesses and ancillary equipment
- AS/NZS 1891.2: 2001 *Industrial fall arrest systems and devices* – Horizontal lifeline and rail systems
- AS/NZS 1891.3: 1997 *Industrial fall arrest systems and devices* – Fall-arrest devices
- AS/NZS 1891.4: 2000 *Industrial fall arrest systems and devices* – Selection, use and maintenance

WorkCover NSW safety guide: *Use of fall-arrest systems* (Safety Guide no. 4512)

WorkCover NSW *Safe working at heights guide: 2006* (Publication no. 1321)

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- Burrangong Meat Processors.



Workplace Health and Safety Queensland

This publication has been reviewed and endorsed by Workplace Health and Safety Queensland.

For specific Queensland occupational health and safety (OHS) requirements, refer to the:

- *Workplace Health and Safety Act 1995*
- *Workplace Health and Safety Regulation 2008*

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