

## Workplace Health and Safety Queensland

# Meat processing

These are the most common injuries to workers in the meat processing industry based on accepted workers' compensation claims

\*The meat processing industry includes organisations mainly engaged in slaughtering animals, boning, freezing, preserving or packing meat, canning meat, manufacturing meats from abattoir by-products or rendering lard or tallow.

### Shoulder

Muscle and tendon sprains and strains from handling objects

11%

### Eye

Fragments in eyes from bone dust or contact with chemicals or animal waste

3%

### Elbow

Muscle and tendon sprains and strains from repetitive use or handling of knives

4%

### Forearm

Wounds/lacerations from using knives

6%

### Back

Muscle and tendon sprains and strains from lifting or carrying objects

13%

### Wrist

Muscle and tendon sprains and strains from repetitive use or handling of knives

10%

### Knee

Muscle and tendon sprains and strains from tripping or slipping on unsafe floor surfaces

3%

26%

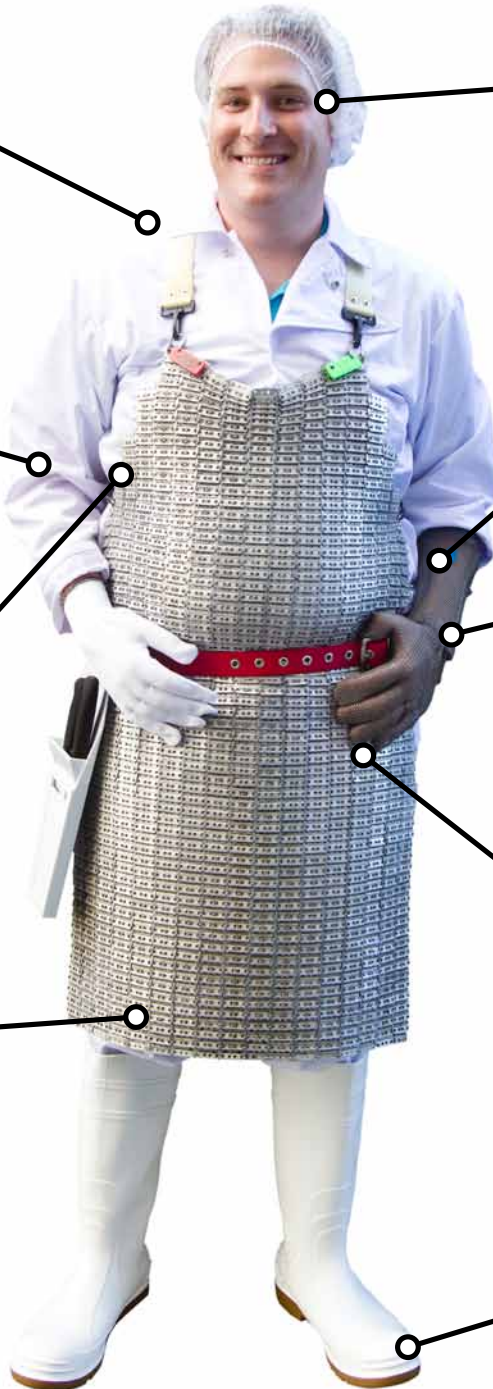
### Hand and fingers

Wounds/lacerations from using knives, bandsaws, hock and brisket cutters

### Foot and toes

Burns from contact with hot water or steam

3%



Source: Queensland Employee Injury Database. Data current as at February 2011 and is subject to change over time. Based on accepted workers' compensation claims, excluding commuting claims, between 2000-01 and 2008-09.

# Health and safety tips

Employers should work with their employees and health and safety representatives to identify hazards, assess the risk of injury and determine the most effective solutions to prevent or minimise the risk. Below are some common control measures known to reduce the risk of injury.

## Knives and saws

### Activities/instructions

- Use the correct knife for the task.
- Provide mechanical sharpening systems.
- All people using knives on the kill floor must wear hand protection to prevent lacerations and support good grip (e.g. rubber Kevlar gloves).
- Use a chain mesh apron and arm guard when using a knife for slaughtering, slicing or boning.
- Workers should receive competency-based training in the selection, use and sharpening of knives.
- Ensure carcass temperatures support the smoothest possible cutting, particularly for hard beef.
- Maintain a good working distance between other workers who are using knives.
- Use engineering design for safety barriers, guards or mechanical feeding to minimise the likelihood of injuries caused by blades or cutters. Use height adjustable guards on bandsaws, two-handed operation for hock and brisket cutters, and install feed-in systems for bandsaws.
- Avoid knife handles with ridges and contours, which can increase discomfort.
- Provide accessible first aid equipment and trained first aid officers.

## Manual tasks

### For work involving hard physical effort

- Use mechanical aids, such as meat tensioning equipment when boning meat.
- When pelting hides, use rails to present the task at heights that reduce the need to bend and reach or use a hide puller.
- For head removal, use a mechanical aid to support the weight of the head.
- Use low resistance hooks to reduce push forces.
- Transfer offal tubs using mechanical aids such as trollies and empty by mechanical means (e.g. tipping chutes or where practicable, use floor chutes and conveyors).
- If meat lumping is unavoidable (e.g. transporting from a vehicle to a retailer), use a linkage rail system.
- When unloading chillers and pushing sides of product, use overhead gravity rails set to a small gradient to reduce physical exertion.
- Eliminate carrying carcasses by hand (e.g. boxing and palletising meat, by using chain and hook systems).
- Use plate freezers or trolley systems for loading and unloading freezer frames.
- Use forklift and slipsheets with pre-palletising and use forklift push-pull attachments when stacking shipping containers.
- Use mechanical lifting devices for heavy weights in trolley bins containing viscera from the kill floor or vacuum lifters for packaged products.

### For activities involving awkward or static positions, repetition and vibration

- Design working spaces such as platforms so that workers are able to work in a comfortable upright position with arms held close to the body (e.g. tool rests and sterilizers are positioned appropriately).
- Ensure the carcass is kept as vertical and close to the platform edge as possible to reduce horizontal reach.
- Use mechanised height adjustable platforms, stands and tables and appropriate chain height to keep the carcass in a good working zone for each task.
- Adjust work spaces to allow for different working heights for different sized workers (e.g. when pelting mutton use rails that hold the beast in place and at the right height for the worker, and boning tasks are kept between worker shoulder and waist height).
- Use meat tensioning equipment when doing repetitive or long tasks such as boning.
- Use trollies to keep loads at heights that don't need workers to bend when pushing or lifting such as trollies for tubs of offal.
- Use mechanised wrapping equipment to reduce repetitive handling such as when wrapping pallets.
- Counterbalance heavy equipment to reduce the need to support the weight and sustained holding.
- Use tools which produce the least vibration or have vibration-isolated handles.
- Design jobs so that workers have a variety of tasks which allow use of different postures and muscle groups. If this is not possible consider administrative controls such as job rotation.
- Ensure loading and unloading is done at waist level or between shoulders and mid thighs. For example, use height adjustable racking and trollies, pallet lift tables or vacuum lifters.

## Slips, trips and falls

### Activities/instructions

- Ensure floor surfaces are appropriate for the work being done and are non-slip.
- Ensure footwear is suitable for the type of work and environment, has a non-slip sole and appropriate tread pattern and is checked regularly to ensure treads are not worn away or clogged with contaminants.
- A 'cleardown' procedure (involving the swift removal of blood, fats and residues, including in evisceration and sticking areas) should be followed throughout the shift, not just at the end. Ensure workers have a good understanding of the procedure.
- Restrain tool balancers and leads to prevent trip hazards.
- Use barriers and railings to prevent falls and falling objects. Use falls restraint equipment on platforms and/or restrict access where necessary.
- While cleaning, workers should wear personal protective equipment, including protection against scalding.
- Keep work areas clean and tidy.
- Keep equipment and floor surfaces clean and well maintained.
- Mark walkways and exclusion zones around work areas. Mark edges of equipment and ensure adequate lighting.
- Ensure sterilisers and wash basins are located and plumbed appropriately, to reduce water on platforms and floors.