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## Farm safety - crush injuries

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### Summary

- A crush injury occurs when the body or a body part is trapped, pinched or jammed between objects.
  - On Victorian farms, the most commonly injured body parts are the hands and fingers.
  - Simple safety measures can dramatically reduce the risk of crush injuries to you, your family and other farm workers.
  - A health and safety officer from WorkSafe Victoria can offer information and advice on how to improve safety practices on your farm.
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A crush injury occurs when the body or a body part is trapped, pinched or jammed under or between objects. The pressure can harm skin, muscles, nerves or bone, depending on the degree of force. Traumatic amputation occurs if enough force is applied. On Victorian farms, the most commonly injured body parts are the hands and fingers.

Most injuries occur during cropping or workshop-based farm maintenance. While anyone of any age who works, visits or lives on a farm may get injured, older people and inexperienced people are at increased risk. The effects of ageing – such as slower reaction times, poor eyesight and reduced strength and agility – make crush injuries more likely.

Simple safety measures can dramatically reduce the risk of crush injuries to you, your family and other farm workers.

### Causes of crush injuries on farms

The causes of crush injuries on farms include:

- vehicle rollover – quad bikes and tractors can pin the driver underneath the vehicle and cause serious injury or death
- vehicle run-over – a passenger can fall from a tractor or other farm vehicle and be crushed beneath the wheel
- farm machinery – can pull fingers, hands, arms or legs into the moving parts (for example into a grain auger)
- impact with livestock – cattle may crush a farmer against stockyard rails or truck sides.

### Preventing crush injuries on farms

Crush injuries on farms can be prevented by taking simple safety precautions. Each type of crush injury hazard requires specific precautions, but some general tips apply.

### Farm machinery safety suggestions

Injuries can occur at any time when using machinery. Most machinery-related injuries are crush injuries or amputation of the fingers or hands. General safety suggestions for machinery include:

- Read the manual and pay particular attention to the safety instructions.
  - Make sure that all workers on a particular piece of equipment understand how to operate it safely.
  - Do not remove or modify safety features and guards. Lack of safety guards is a major factor in crush injuries. If necessary, fit safety shields to cover all moving parts, such as belts and pulleys.
  - Regularly maintain and check your machinery. Accidents, including crush injuries, are more common if the equipment is old. You may need to buy new machinery.
  - Make sure that clothes such as sleeves and pant legs are not loose or flapping and cannot get caught in the moving parts of a machine. Hair should also be tied up.
  - Fit safety signs.
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- Do not take shortcuts. For example, take the time to switch off machinery before you make any adjustments.
- Avoid working alone. If this isn't possible, then tell someone when to expect you so they can come looking for you if necessary. Make this a safety rule for everyone who works on the farm.

### **Tractor safety suggestions**

Tractors cause around 11 per cent of workplace deaths in Victoria. Human error is a major factor. Studies of tractor accidents show that, in most cases, at least one person performed an action that led directly to the injury or death.

Safety suggestions for preventing crush injuries from tractors include:

- Make sure your tractor conforms to current Australian Safety Standards.
- Buy a tractor with safety features such as a seatbelt, reversing beepers and dead man's seat brake (also known as an operator presence sensing system or OPSS). An OPSS turns power sources off and brakes the tractor when the operator leaves the seat with the engine on and the tractor in gear.
- Install a certified rollover protective structure (ROPS) if your tractor does not have an enclosed cabin.
- Keep the tractor properly maintained and check it regularly.
- Make sure that children and visitors are kept well away from the tractor when it is operational.
- Only start the tractor when you are safely seated. Deaths have occurred when farm workers start the tractor from outside the vehicle.
- Always wear the seatbelt.
- Ban passengers if the tractor does not have a purpose-built seat with a seatbelt. Passengers riding on the mudguard may fall and get crushed by the rear wheel.
- Do not leave the motor running when you are off the tractor making adjustments.
- To avoid crush injuries to the hands, be particularly careful when adding attachments to the tractor and follow all recommended safety precautions.

### **Quad bike safety suggestions**

Quad bikes are the number one cause of death on Australian farms and a major cause of trauma on Victorian farms. Most injuries and deaths involve the quad bike rolling over the rider.

Safety suggestions for using quad bikes include:

- Take a quad bike training course.
- Use the quad bike strictly as instructed by the operator's manual.
- Only ride on familiar and even tracks.
- Install an appropriate and suitably tested crush protection device (CPD). These are commercially available – contact **Farmsafe** or your state work health authority (such as **WorkSafe**).
- Never let children under 16 years of age ride quad bikes.
- Never put passengers on quad bikes.

### **Grain auger safety suggestions**

Safety suggestions for grain augers include:

- Do not remove the intake guard – while removing it may improve the flow of grain, it dramatically increases the risk of crush injuries.
- Use the grain auger strictly as directed. Inappropriate use increases your risk of harm.
- Make sure the emergency stop is near the grain auger inlet.

### **Livestock safety suggestions**

A common type of crush injury from livestock occurs when a body part, such as an arm, gets pinned between an animal and a stockyard or in a crush. The larger the animal, the greater the risk of injury. Safety suggestions include:

- Do not work alone.
- Ensure the animals know you are approaching.
- Minimise the time you spend in the same enclosure as farm animals.
- Be aware that frightened mothers will protect their young if they perceive a threat. For example, alarmed cows may charge.
- Always use appropriate equipment. For example, use bail heads and crushes.
- If you need to yard stock during mating, use separate yards for bulls whenever possible.
- Install a vet gate into your cattle crush to make getting in and out safer.
- When vaccinating or drenching, do not put your arms through the railings – go over the top where possible.

### **Draw up a farm safety emergency plan**

Suggestions for a farm safety emergency plan include:

- Ensure easy access to a suitable and well-stocked first aid kit. Place first aid kits around the farm.
- Ensure that at least one farm worker is trained and current in first aid.
- Keep emergency contact numbers and a copy of your correct (official) address next to the telephone and in farm vehicles.
- Plan routes to the nearest hospital emergency department.
- Talk through your emergency plan with your family, other farm staff and visitors.
- Make sure everyone knows what to do in an emergency.

### **Where to get help**

- Your **GP (doctor)**
- In an emergency, always call triple zero (000) for an ambulance
- **NURSE-ON-CALL** Tel. **1300 60 60 24**
- **National Centre for Farmer Health – Farming Fit videos** Tel. **(03) 5551 8533**
- **WorkSafe Victoria** Tel **1800 136 089** (advisory service) or **13 23 60** (24-hour emergency line to report serious workplace injuries)
- WorkSafe Victoria Emergency Response Line Tel. **13 23 60** (24-hour emergency line to report serious workplace injuries)
- **Farmsafe Australia** Tel. **(02) 6269 5622**
- **AgHealth Australia** Tel. **(02) 6882 1486**
- **Department of Environment, Land, Water and Planning** Tel. **136 186**

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National Centre for Farmer Health

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