Power and Electrical

Step-by-step - Safety for power and electrical equipment on your farm

Consider all the places where power is supplied and used on your farm. Your focus will most likely be around the dairy and workshop, but other powered locations such as yards, sheds, pumps and houses should be considered too.

Many of the changes required to eliminate or control the risks may be easy and inexpensive. In the longer-term it might mean making structural changes or choosing a different option when infrastructure is built or replaced.

Use this list to walk through the steps to prevent injuries from power or electrical hazards on your farm.

Resources in this section

- **Information** about power and electrical on dairy farms and legal obligations.
- **Safety Self-Assessment** for power and electrical.

Information and templates provided in this folder are also available at www.thepeopleindairy.org.au/farmsafety.

You can edit the templates to suit your farm.

1. Getting started

- [ ] **Read through this information pack** carefully and watch the relevant YouTube clips.
- [ ] Complete the power and electrical **Safety Self-Assessment** (traffic lights) page.
- [ ] **Make a list** of things to do and **set a date** to have each thing completed in the **Action Plan**.
- [ ] Read through the information quickly again.
- [ ] Pick a topic to discuss with staff or family at your next **workplace meeting** (you should have at least one safety topic each meeting)

2. Assessing the risks around power and electrical equipment on your farm

- [ ] Task someone with **identifying all the locations where power is supplied or used** on the farm and **making a list of the equipment involved.**
- [ ] Do a **risk assessment** of each location or equipment.
- [ ] Review the **location of powerlines** on your property and assess any hazards associated with them.

3. Eliminating or controlling the risks

- [ ] **Make the necessary changes** to eliminate or control the hazards you have identified.
- [ ] Arrange any **training** needed and who will participate.
- [ ] Include safe use of electrical equipment and leads in your **induction process**. Set up a record of induction and training.
- [ ] Go through the arrangements you now have in place with staff or family at your next **workplace meeting.**

Sleep well - job well done

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Exposure to electrical hazards commonly occurs through:

- Damaged installations
- Poorly maintained fixed and portable electrical leads and equipment
- Repairs and installations done by unqualified people
- Failure to isolate power when undertaking general maintenance
- Using electrical equipment in wet areas
- Overloading electrical circuits
- Safety switches not being fitted to power outlets
- Contact or working close to overhead power lines
- Contact with underground power

Electric shocks may be received by direct contact, indirect contact or by electricity arcing across space. Indirect contact occurs where a conductive part that is not normally energised (e.g. fences or steel rails in the dairy) becomes energised due to a fault.

Fires can result from electrical faults. Toxic gases and contaminants may be released by arcing of electrical equipment.

By law the person conducting the business in any workplace has Work Health and Safety obligations to manage all electricity hazards and the risks that may arise.

Work Health and Safety regulations require that you must:

- Ensure that electrical work is undertaken by a licensed or registered electrical worker.
- Ensure that, before electrical work is carried out on electrical equipment, the equipment is tested by a competent person to determine whether or not it is energised.
- Ensure that any unsafe electrical equipment is disconnected (or isolated) from its electricity supply and, once disconnected:
  - It is not reconnected until it is repaired or tested and found to be safe, or
  - It is replaced, or
  - It is permanently removed from use.
- Make sure that electrical equipment is regularly inspected and tested and tagged by a competent person if the electrical equipment:
  - Is supplied with electricity through an electrical socket outlet ('plug in' equipment), and
  - Is used in an environment in which it is exposed to operating conditions that are likely to result in damage to the equipment or a reduction in its expected life span, e.g. conditions such as exposure to moisture, heat, vibration, mechanical damage, corrosive chemicals or dust.
- Keep a record of the testing until the electrical equipment is next tested, permanently removed from the workplace or disposed of.
- Ensure that any electrical risk associated with the supply of electricity to 'plug in' electrical equipment is minimised by the use of an appropriate Residual Current Device (RCD) that is tested and tagged by a competent person.

Electrical work on energised equipment must be avoided and where circumstance require this then the person conducting the business must ensure the licenced electrician meets specific regulatory requirements including the conduct and documentation of a risk assessment and a documented safe work method statement for the task. For more information see the Code of practice Managing electrical risks in the workplace.