



Electrical safety on the farm



You should never take electrical safety for granted. The most common electrical safety risks on Queensland farms are not having safety switches installed, making contact with overhead powerlines and the use of unsafe electrical equipment.

Safety switches

Safety switches protect you, your family and anyone visiting your home or property from electric shock. Get them installed on all circuits including workshops, lights, air-conditioners, fridges, ovens, pools and hot water systems.

Eighty-seven per cent of Queensland residential fatalities caused by electricity could have been prevented if a safety switch had been installed.

Safety switches turn off the power in a fraction of a second if a current leakage is detected. This can happen if there is a faulty power point or electrical appliance or you accidentally hit a live cable while drilling into a wall.

Safety switches can fail or get stuck, so it is important to test yours are working correctly by pressing the 'Test' or 'T' button every three months. Correctly working safety switches will click to the 'off' position and cut the power to that circuit. If this does not happen then you are no longer protected and should talk to your licensed electrician as soon as possible.

Safety tip

While a safety switch may save your life, it doesn't always prevent electric shocks or secondary injuries. For example, if you are standing on a ladder, or in a roof space, your body's reaction to the small shock received before a safety switch cuts off the power may throw you off the ladder or cause you to fall through a ceiling.

Remember – switch off all power before entering a ceiling space and never do your own electrical work.

Safety switches can prevent a serious electric shock, but they are not a substitute for proper electrical maintenance and safe practices. Have a licensed electrician periodically check for any electrical issues at your property and test your safety switches.



Overhead powerlines

The risk associated with overhead powerlines should be managed using the hierarchy of risk controls. You must first try to eliminate the risk by arranging for the electricity to be switched off during work periods, changing the farming activities or by re-routing powerlines away from high risk areas. If that's not possible then try to:

1. Substitute overhead powerlines for underground lines. This however introduces a new risk so arrange for Energex, Ergon or Essential Energy to locate and mark the position of underground electricity cables and the safe exclusion zones before you start any digging or excavation. You can also contact Dial Before You Dig for advice.
2. Isolate the lines from machinery by raising or insulating them.
3. Use engineering controls such as geofencing (similar to those used for livestock) or electrical detection and alarm systems.
4. Use administrative controls if the above are not possible. These include controls such as procedures, training, safety observers, warning signs and visual indicators.

Be safe after overhead powerline contact

Ensure everyone on the farm knows what to do if farm machinery or equipment comes into contact with overhead powerlines or if powerlines fall. Note that climbing from a vehicle incorrectly may be fatal and fallen powerlines may become live without warning.

Talk to Energex, Ergon or Essential Energy about what options they can offer to assist you in applying the hierarchy of controls.

Check your electrical equipment

Buying safe equipment

When buying electrical appliances, check they have the

regulatory compliance mark (RCM). The RCM is a declaration by the supplier that the product has been tested, is compliant and meets Australian Standards.

10 per cent of retail purchases in Australia occur online. If equipment purchased online is non-compliant, it can cause electrical shock, fire, injury or death.

Check for this RCM label



Check your electrical equipment before each use

Electrical equipment can be dangerous if it is not being used as designed, or if it is damaged.

Prior to using electrical equipment always check for damage. Conduct a visual inspection to check for any damage, including:

- broken or warped casings and cracked plastic covers
- changes in colour from overheating or moisture
- water in the appliance
- frayed leads or damaged plugs
- damaged extension leads (including abrasions or cuts).

If you notice any damaged equipment, don't use it. Either have it repaired by a licensed electrician or dispose of it after cutting off leads and plugs.

Prior to carrying out any maintenance, always turn off and unplug the equipment and follow manufacturer's instructions

More information

For more information, visit electricalsafety.qld.gov.au.

Electrical Safety Office

Look up and live, know where the exclusion zones are

6m

Up to and including 330 kV

Exclusion zone for unauthorised people

3m

Up to 132 kV

For more information visit electricalsafety.qld.gov.au or call 1300 362 128.