Electric shocks

A guide to prevention, common warning signs and what action to take



Immediately report tingling or shocks, or unexplained light fluctuations

KEY INFORMATION



Seek medical attention for <u>all</u> electric shocks, even if they seem minor



Use electrical goods safely, check RCDs and call a licensed electrician

What is an electric shock?

An electric shock occurs when a person makes contact with live electricity, causing a dangerous electrical current to run through their body.

The effects of an electric shock can range from tingling and mild discomfort through to burns, severe internal/external injuries (including heart damage), unconsciousness and death from electrocution.

Medical attention should be sought for any electric shock – regardless of how minor it may seem – as the effects may not be apparent straight away.

What immediate action should I take?

- Seek medical attention for all electric shocks. Call 000 for an ambulance.
- Contact the network operator to report the incident (see next page).
- **Do not touch** any metal appliances, water taps or gas fittings until the network operator advises that it is safe to do so.

If a person is still in contact with the electrical current, do not touch the injured person or nearby objects. If it is essential to make contact with the person, use a dry and non-conductive material (such as wooden broom handle).

Stay at least 8 metres away from fallen power lines or damaged green domes containing electrical wires.

What are common causes of electric shocks?

- Incorrect or deteriorated household wiring
- Faulty (high-resistance) or failed (open-circuit) neutral connections
- Faulty or defective electrical appliances
- Exposed electrical wires, including damaged cords and leads
- Electrical equipment coming into contact with water
- Cutting through a live cable
- Fallen power lines

Will my RCD protect me?

Residual current devices (RCDs) are compulsory safety switches that offer protection against some – **but not all** – electrical hazards.

See our website (<u>commerce.wa.gov.au/building-and-energy/residual-current-devices-rcds-safety-switches</u>) for detailed information on RCD testing and requirements.

A correctly operating and maintained RCD should instantly stop the electricity supply when it detects an earth fault in certain parts of the circuit, such as where appliances are used.

But RCDs won't protect against electrical issues in other parts of the circuit, such as problems with the incoming neutral connection or faults upstream of the RCD.

What warning signs should I act on?

While some incidents occur without warning, you should immediately take action if you notice signs of problems with connections or equipment before an electric shock occurs or becomes more serious. Warning signs include:



Tingles or electric shocks from taps, pipes or equipment. Don't ignore shocks or tingles, no matter how minor.



Unexplained brightening or dimming of lights.

Regardless of whether you rent or own the home, you should **report these issues immediately to the network operator** (in most cases, Western Power).

Avoid touching any metal appliances, taps or gas fittings until the fault is addressed.

Other electrical safety advice

See our website (<u>commerce.wa.gov.au/energysafety/safe-use-electricity</u>) for detailed information on safe use of electricity, including:

- Do not do any electrical work yourself always use a licensed electrician. Our online licence search (via energysafety.wa.gov.au) will show if your electrician is licensed.
- Do not use damaged or incorrectly connected electrical equipment, including loose switches or frayed power cords.
- Follow the official installation, use and maintenance instructions for electrical goods.
- Buy electrical goods from a reputable supplier. Be wary of online purchases, especially from overseas, as they may not comply with Australian safety standards. Look for a regulatory compliance mark (tick inside a triangle) or other official sign.
- Install and maintain RCDs (see above).
- Do not use electricity near water or in wet weather conditions.
- Before entering a roof space, switch off all electricity at the main switchboard.

Network operator contacts

Western Power	Horizon Power	Rio Tinto
13 13 51	13 23 51	1800 992 777
BHP 1300 632 483 (Newman) (08) 9026 5262 (Nickel West)	Peel Renewable Energy (Zenith Energy) 1800 571 211	Indian Ocean Territories Power Service (08) 9164 7111

If your network operator is not known, contact **Building and Energy:** (08) 6251 1900 (general inquiries) or 1800 678 198 (after-hours incidents)