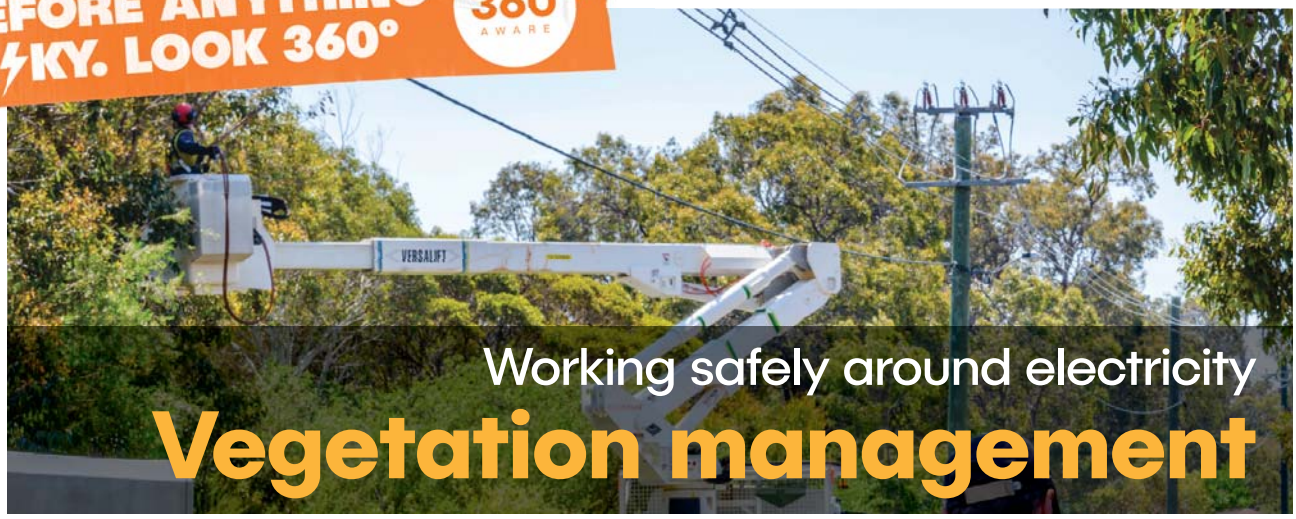
BEFORE ANYTHING RISKY. LOOK 360° AWARE



Working safely around electricity

Vegetation management

Working near electrical infrastructure can be extremely dangerous and can cause serious injury or death. Public safety is a shared responsibility for Western Power and for the people who need to work near our network. When trees come into contact with powerlines, they can cause power failures, bushfires or serious accidents.

Home owners and occupiers are responsible for ensuring trees on their property stay clear of powerlines all year round. If you are a professional carrying out vegetation management it is very likely that you are working around electricity throughout your work day.

This factsheet provides information about how to conduct your work to ensure you, your workmates and the community remain safe and the power remains on.

Your duty of care

Working around electricity, whether underground or overhead, is high risk work. All workers have a duty of care to ensure that no person, plant or materials enter the danger zone of any electrical network asset. The danger zone is set out in the Occupational Safety and Health Regulations, 1996 - Reg 3.64.

Danger zone

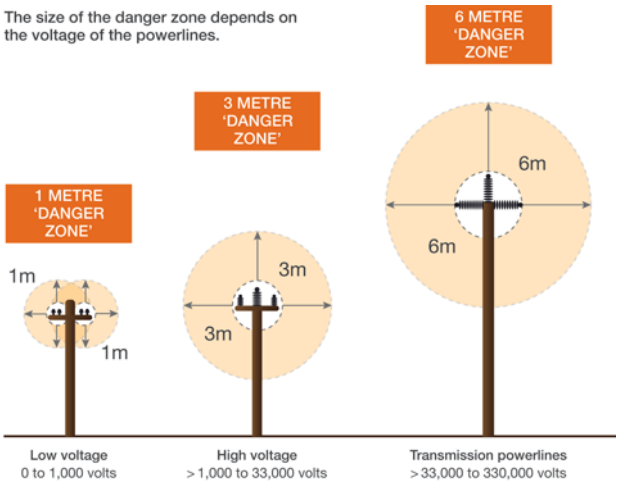
A danger zone is a specific area surrounding live electrical apparatus that ordinary persons, equipment and materials must not enter (prescribed by OSH reg. 3.64). Be aware that there are special requirements for some vegetation management work.

If your works enter the danger zone you put yourself at risk of injury and may be prosecuted and be liable for any damage to the network.

The danger zone should be applied in conjunction with the standards and regulations applicable to your industry. If a greater danger zone is stated you must adhere to those requirements. Consult Code of Practice for Personnel Electrical Safety for Vegetation Control Work near Live Powerlines for safe approach distances based on the type of work and equipment you are using.

Working overhead

If your works enter the danger zone you put yourself at risk of injury and may be prosecuted and be liable for any damage to the network.



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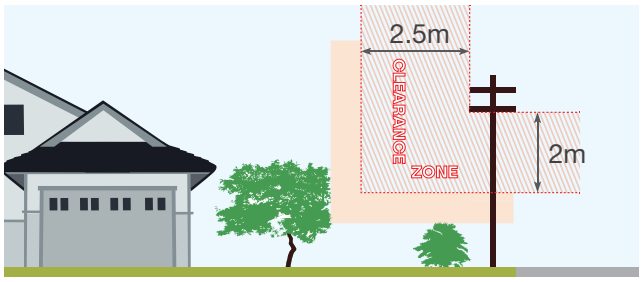
Vegetation clearance zones in urban areas

The minimum required distances are shown in the diagram below. It is recommend that you allow for reasonable regrowth.

Clearance zones may vary depending on the type of conductor, fire risk areas and distance between poles.

Minimum clearance distance around insulated low voltage service line is 300mm.



What are the risks?

- Unexpected movement of mobile plant or vegetation around the electrical infrastructure
- Conductors may sway due to wind and cause contact with each other or you
- Site conditions may compromise the safety of your work due to factors such as traffic, pedestrians and livestock interfering with the work
- Direct or indirect contact with live overhead lines via vegetation or uninsulated tools and equipment
- Electrical current may be presents in all parts including the base of vegetation where it is in contact with live overhead line, especially during wet and/or windy conditions, or with high voltage powerlines.

How to minimise the risks

This may be achieved by, but not limited to, one or more of the following methods:

- Make arrangements to de-energise the electrical infrastructure in proximity to your work area
- Ensure you are using fully insulated mobile plant, tools and equipment
- Making arrangements with Western Power to install appropriate temporary barriers/covers to highlight overhead lines
- Provision of a suitably trained and equipped safety observer
- Increase the minimum distances required to carry out the vegetation management work safely, including allowance for unexpected conductor movement
- The use of suitable personal protective equipment.

Changing weather conditions

Vegetation management work near live overhead lines must not proceed in the event of the following weather conditions:

- An electrical storm is observed from the worksite
- Any significant rain, mist, or fog, unless using methods and equipment specifically designed and tested as being able to operate while wet
- Wind velocities that may cause conductor, EWP or vegetation unexpected movement sufficient to breach safe approach distances
- Excessive wind such that work cannot be carried out safely (work must not be carried out where constant winds exceed 40 km/h)
- Lighting is not adequate.

Trees or branches contacting energised overhead electric lines

Trees that have grown into contact with energised overhead electric lines should not be cut by a person who is in an earthed situation, for example standing on the ground or working from within the tree. Do not proceed with the work and contact Western Power for assistance.

Vegetation in contact with energised overhead lines may be conductive due to the high water content held within its branches.

Never assume a tree branch can safely rest on or against overhead electric lines—they can conduct electricity even in dry conditions.

Contact with any part of the tree may result in electrocution and burns. If this occurs immediately contact Western Power immediately and keep all people at least 8m clear of the area while waiting for help.

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Prohibited work methods

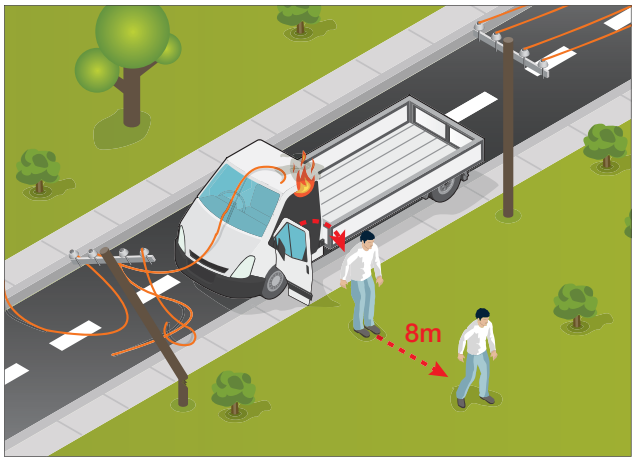
- Working while standing on a metal ladder
- Working near high voltage conductors
- Working on vegetation that is near high voltage conductors while standing on a wooden or fibreglass ladder
- Moving a high voltage conductor or low voltage conductor to enable work to be carried out
- Working before dawn or after dusk, unless there has been a full risk assessment undertaken
- Using an insulated EWP or high voltage insulated tool where proof cannot be produced that it has been electrically tested within the previous six months and has passed that test.

Vegetation above powerlines

Work can only be carried out on vegetation that is above a high voltage powerline, where techniques are used to ensure falling vegetation is of a size that cannot bridge the conductors. Work can only be carried out using insulated mobile plant, insulated tools and equipment. If this cannot be achieved safely contact Western Power to discuss your options.

What to do in a vehicle in contact with electricity

1	**Stay in the vehicle.** Call 000 immediately.
2	If there's an immediate danger, like fire, and **evacuation is absolutely necessary**, access your escape route and check for fallen powerlines.
3	Exit the vehicle by jumping - make sure to land with both feet together.
4	When jumping, **don't touch the vehicle and the ground** at the same time.
5	**Once you've landed with both feet together (be careful not to stumble or fall), jump or shuffle with your feet together away from the vehicle.**
6	Move in this way until you are at least 8 metres away from the vehicle. **Do not go back.**



Safety observer

A safety observer should alert workers and crane or plant operators when approach distances are likely to be breached or other unsafe conditions arise. A safety observer must be able to communicate effectively at all times with crane and mobile plant operators.

Safety observers should monitor the work activity and have the authority to stop the work at any time and be competent enough to implement control measures.