**TOOLBOX TALK #5**

**Critical Risks – Working with electricity**

> Updated October 2017

**I AM safe**

around electricity

**Identifying, Assessing, Managing and reviewing critical risks** is a Canterbury Safety Charter commitment. Remember **I AM safe** on site where it’s up to everyone on site to understand and manage the critical risks you’ll come across.

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<tr>
<th>Project site:</th>
<th>Employer:</th>
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<tbody>
<tr>
<td>Foreman/Supervisor:</td>
<td>Date:</td>
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<td>Attendees:</td>
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*This toolbox talk is intended to help start a health and safety conversation and raise awareness about working with electricity. It is not designed as a complete risk management tool for the activity.*

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**Working with electricity on site**

Due to the short-term nature of many construction sites, electrical equipment is often taken from several different locations and contractors. This means it can be difficult to ensure electrical equipment on site has been appropriately maintained and tested. Electricity used outdoors, where water may be present, requires special precautions because an electrical shock is highly likely to be fatal.

The Electricity Safety Regulations require that installations, fittings and appliances used at construction sites are ‘electrically safe’.

**Step 1: IDENTIFY electrical hazards**

Electrical hazards should be taken into account when working on any construction site. They can arise in the following places:

- sockets and plugs
- light bulbs
- water supplies
- overhead lines
- temporary supply switch boards
- electrical cords
- electrical equipment

**Top tip**

Conduct daily visual inspections of all electrical equipment on site to ensure no new hazards have arisen.

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REMEMBER: Power tools should not be operated under the influence of alcohol or drugs – even prescription medicine can affect judgement.
Step 2: ASSESS the danger
Before doing any work make sure people using the equipment are trained and competent in its use.

- **Sockets and plugs** – must be correct. Do not use double adapters.
- **Water supplies** – should have effective drainage so that excess water can safely disperse and, where possible, be kept away from electrical tools and equipment.
- **Temporary supply switch boards** – should be readily accessible and attached to a permanent structure.
- **Electrical cords** – damaged or worn cords should be replaced immediately.
- **Electrical equipment** – all power tools should have a safety control switch which operates the ‘motor only’ option when held in ‘on position’.

Step 3: MANAGE – check regularly
All electrical tools and equipment should be inspected by a competent person every **three months**.

- **All** power tools must have an identification tag stating the date of the last inspection and when the next inspection is due.
- **Don’t use anything that may be damaged.** Take equipment or tools out of service when faulty or damaged and label them ‘DO NOT USE’.
- **Store equipment carefully, securely and safely.**
- **Light bulbs** – replace bulbs that have a higher wattage than recommended to prevent overheating.
- **Temporary supply switch boards** – should be sheltered to ensure they’re not affected by weather. Switch boards should be designed for a construction site and include a circuit breaker and RCD. No adapters or piggyback plugs should be used.
- **Electrical cords** – put cords safely away after use and store somewhere dry.

Where do we get more information?
The Safety Charter’s Critical Risk **Electricity** webpage has more information which is regularly updated. You can view it [here](#) or by clicking on Improve Health & Safety – Critical Risks – Electricity from the homepage.

If you want toolbox talks on the other 12 critical risks you can check them out [online](#).
- View the Australian/New Zealand Standard on Electrical Installations - Construction AS/NZS 3012:2010
- You may also want to look at Safety Charter toolbox talk #6 Critical Risks - Existing Services.

**Employee issues raised:**

**Date to be resolved by:**

Thank you to WorkSafe New Zealand for providing information for this toolbox talk.