

Topic 2 – March 2018: Electrical Safety in the Workplace

Instructions: Read out the questions to prompt discussions. Read out the answers provided to structure discussion and prompt further thinking.

Q. What electrical hazards do we have in our workplace?

A. While every workplace is different, there are always electrical hazards. They may include direct electrical work (connecting wiring or servicing equipment), indirect work (using computers, power tools, lights, kitchen equipment – microwaves, kettles, etc.), or working near electricity (overhead cables, electrical poles). It is difficult to find a workplace without some electrical hazards.

Q. How do we control electrical risks in the workplace?

A. There are many ways to reduce the risk of exposure to electricity. If you work with electricity directly, you must have safe work procedures in place to manage risks. For indirect exposure, the following may be in place:

- Residual Current Devices (Safety Switches): to cut power in the event of an electrical issue/failure). These may be built into your power supply system, or portable (for use on client sites). RCD's are vital to protect people from electrical equipment failure and it is therefore important that they are tested. This includes a 6 month "push button" test and an annual "trip time" test, the latter of which should be conducted by a qualified electrician.
- A Test-Tag program: where a qualified 'tester' checks each power cord/lead to make sure there are no faults in the cord.
- A planned inspection program: to check that power cords, electrical plugs and sockets are placed tidily to prevent damage, clean, away from water, and have no obvious issues (e.g. no frayed or burnt cords, broken plugs, cracked outlets, scorch marks from sparking).

There is no substitute for being alert and aware of electrical equipment. Look after equipment, and make sure it is serviced appropriately.

Q. How often do we need to test-tag electrical equipment?

A. For office environments, every two years is a good rule. For 'hostile' environments (construction sites, workshops), every six months. Hired equipment should be tested every three months (if you're hiring equipment, before you use it make sure it has been tested!).

NOTE: As a rule of thumb, the more often you plug and unplug portable electrical equipment and leads the higher the frequency of testing. Why? Because people have a habit of pulling equipment out of a socket by the cord, thus increasing the possibility of damage to the cord. Also, if you are in an environment where the cords can be walked on, have wheels roll over them, etc., you may need to test more frequently.

Q. What needs to happen after someone gets an electric shock?

A. Electric shocks can range from serious to apparently minor, but they are NEVER minor. It is important to remember the following:

- Even a minor electrical shock can lead to physical consequences (e.g. may trigger an underlying heart condition).
- Electric shocks MUST be reported to SafeWork NSW or the relevant State/Territory regulator.

Q. What procedures should we follow after an electric shock?

A. Follow these as a general guide:

1. Call 000.
2. Report the incident to your managers/the company director(s).
3. Make sure to report the incident to SafeWork NSW. You will never be penalised for reporting something unnecessary. You'll just be told it's ok, and it won't be followed up. If you fail to report something serious, it won't look good, and there are significant fines for non-reporting. (Check your procedures. Your director might be the only person authorised to report an incident to SafeWork NSW in your organisation).
4. Complete an incident report and investigate the incident.

A Case Study:

A microwave stops working. The power cord has come loose at the socket. Do you:

- A) Fix it yourself?
- B) Throw the microwave away?
- C) Have a licenced electrician visit the site to repair the microwave?
- D) Send the apprentice in with a screwdriver?

It might seem obvious, but the test of 'reasonably practicable' applies. You don't necessarily have to throw everything away. Repair it first or see how much it will cost to repair. Is it a safety issue? Have it checked. C is the correct answer. Never attempt to repair it yourself, even if you have an electrical background.

Remember, the workplace is not your home. We often take ridiculous risks in our own homes. It's not good, but we do. At work, others may be affected by our actions, and that's why the legislation is so clear on our duty not take unnecessary risks.

A Recent Prosecution: Safe Work NSW v WGA Pty Ltd

This case made headlines because it was the first million-dollar prosecution, where the company was convicted and fined one million dollars for failing to provide a safe workplace.

A contractor had gone to an upper-storey room of a construction site to install a window. The window was too close to railway electrical overhead lines. It is unclear what happened, but electricity travelled from the power lines to the worker, leading to catastrophic injury.

SafeWork NSW had visited the site previously and had expressed concern regarding the potential for this incident to occur, issuing improvement notices and prohibition notices. WGA knew the risk, but did not warn the contractor or effectively control the risks.

The lessons: electricity is one of the most dangerous risks in our workplaces. Take the risk seriously. If a particular risk is identified, you must control it appropriately.

Safety / Toolbox Meeting Minutes

DATE: _____

COMPANY/SITE _____

MEETING FACILITATOR: _____

Discussion Topic: (review/read the topic above). Are there any questions? Record comments raised, or issues identified.

Safety Review: Are there any issues or concerns to raise about our workplace?

Incident Review: What has happened since the last meeting? What can we learn?

Resolving previous issues: What was discussed in the last meeting or identified in previous site inspections/incidents? Have issues been resolved?

Corrective Actions (If Required):	Action By:	Completed?	
		Sign	Date
1.			
2.			
3.			

