Employees changing light bulbs and fluorescent tubes

The Department of Education (DoE) recognises the potential risks associated with working with and around electricity, and specifically the potential risks associated with changing lightbulbs or fluorescent tubes. Even though replacing a light bulb in a light fitting is not considered to be ‘electrical work’, it is still vital that DoE employees and contractors identify, assess hazards and associated risks, and put in place control measures prior to undertaking these tasks.

DoE employees are not to undertake any ‘electrical work’, e.g. replacing a power point switch, replacing a plug on the end of a lead or rewiring. If there is electrical work to be undertaken, this must be performed by a qualified electrical contractor. Additionally, DoE employees are not to undertake electrical testing of any circuits.

Scope
This Quick Reference Guide addresses the following tasks if undertaken by DoE employees:

- replacing bulbs or tubes in lighting systems, e.g. in the ceilings of classrooms/offices
- replacing bulbs or tubes in appliances with plugs and leads, e.g. lamps, lead lights, refrigerators.

Changing light bulbs or tubes in complex environments may present additional risk, and as such, must only be performed by suitably competent persons with appropriate equipment. These tasks are outside the scope of this Guide and include, but are not limited to, changing bulbs in:

- gym or school hall lighting
- sports field or court lighting
- high ceiling space lighting, e.g. where there is a fall hazard of two metres or more (from the feet).

Requirements – lighting systems (lights in ceilings)

With assistance from your Regional Facilities Manager or an electrical contractor, schools are to ensure that:

- all switchboards/distribution boards are clearly labelled as ‘switchboard’/‘distribution boards’
- each switch within the switchboard is adequately labelled with a description of what is on the circuit (classroom lights B Block, air conditioner, etc.).

Before the power is turned off to change the light bulbs:

- let other staff in the area know that power is about to be turned off to change bulbs
- if the school server or computer labs are in the building where work is to be undertaken, advise the Business Services Manager or IT Officer to make sure the server and computers are ‘powered down’ appropriately before the power is turned off
- determine an agreed time to do this work if staff object to the power being turned off.
Requirements – Lighting Systems

Ensure these steps are followed:

1. Turn power off at wall (switch)
2. Access switchboard and turn off power (isolate)

Is the circuit labelled?
Can you identify the correct circuit to safely isolate at the switchboard

- No
  - STOP the task
  - Principal or BSM to contact the Regional Infrastructure Manager for advice
  - Follow advice provided

- Yes
  - Continue and isolate circuit at the switchboard
  - Identify and control other foreseeable hazards including pedestrian traffic, working at height, housekeeping, environmental factors
  - Prevent access to the circuit until the light bulb is changed

Can the switchboard be locked?

- No
  - Maintain line of sight to the switchboard
    AND / OR
  - Use a second person at the switchboard
    AND / OR
  - Place a sign to prevent switchboard access

- Yes
  - If there is a lock or lock-out kit – the person doing the task is to lock the switchboard and keep the key
  - Change the bulb
  - Turn circuit on at switchboard
  - Test light is working
  - Return area to use
Requirements – Lighting Appliances (plug and lead)

Lighting devices and other appliances must be ‘unplugged’ from the ‘power point’ (General Purpose Outlet - GPO) prior to replacing the bulb or fluorescent tube. For example:

1. unplug the lamp
2. remove the bulb
3. replace the bulb
4. plug in the lamp and check if the bulb works.

Planning

Before starting the task, the person should take a couple of minutes to consider the task, the environment, the equipment and tools available, their capability and whether there is a need for additional specific controls. This should include consideration of the following:

- Is the replacement bulb the right size, type and wattage?
- Do I know how to turn off the power safely?
- Is the electric circuit under my control while conducting the task, or do I have a process in place to ensure it remains isolated?
- Can I reach the bulb holder from the ground or appropriately manage any fall risks?
- Is the right equipment available to complete the task and safely access the bulb?
- Do I have adequate light to enable me to complete the task safely or do I need another light source?
- Is there enough room to conduct the task?
- Is it indoor or outdoor?
- Is it dry or wet, hot or cold?
- What other activity is going on in the area?
- Has this activity been done before, or is this the first time?
- Am I working alone?
- Am I physically capable of doing the task today?

This list is NOT exhaustive, there may be other matters that require consideration for your location before work commences.

For more information:

Register your interest to attend electrical safety awareness courses through your Regional Infrastructure Advisor.

- [Guide to Managing Electrical Safety in Education Queensland Schools](#)
- [Hazards and Risks](#)
- [Health and Safety Fact Sheet: Disposal of Energy Efficient Lighting Tubes and Bulbs](#)
- [Health and Safety Fact Sheet: Schools Officers and Electrical Safety](#)
- [Working at heights](#)

For further information, contact your Regional Infrastructure Services Branch or Organisational Safety and Wellbeing team.