

Electrical Equipment Safety Management

1. Purpose

The purpose of this procedure is to provide a framework for managing electrical equipment safety in West Moreton Health's (WMH) work environment and for ensuring protection from the risks associated with the use of electricity.

This procedure outlines the standards for procurement, safe use and testing of electrical equipment and appliances within WMH to ensure that the person or property is *electrically safe* (refer [Section 10 of the Electrical Safety Act 2002](#)).

The procedure also outlines the process for reporting and managing electrical incidents that arise from the use of electrical equipment and appliances within WMH.

2. Scope

This document relates to all WMH staff, contractors, consultants, labour hire workers and others engaged in work activities under the *Electrical Safety Act 2002*, the *Electrical Safety Regulation 2013* and the Electrical safety code of practice 2013 at any WMH workplace, whether it is an owned, managed or controlled location.

3. Statement of Commitment

WMH is committed to the health, safety and wellbeing of all staff, patients and visitors and will ensure all workplace hazards and electrical risks are eliminated or minimised, using a risk management approach, in accordance with this procedure.

WMH is committed to providing a work environment that is electrically safe and free from electrical risk.

4. Principles

This Procedure is underpinned by the principles outlined in the [Queensland Health's Health, safety and wellbeing Policy](#) which states:

- Queensland Health is committed to the highest standards of staff and patient safety and uses best practice methodologies to create a safe work environment for our staff and others
- The safety of our people is our highest priority. We strive for and are committed to continuous and sustainable improvement of health and safety risk management.

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5. Process

5.1 What are Electrical Risks?

Electrical risks are risks of death, electric shock or other injury caused directly or indirectly by electricity.

Even the briefest contact with electricity at low voltages can have serious consequences to a person's health and safety. High voltage shocks can cause contact burns and damage to internal organs.

Electric shocks from faulty electrical equipment may also lead to related injuries, including falls from ladders, scaffolds, or other elevated work platforms. Other injuries or illnesses may include muscle spasms, palpitations, nausea, vomiting, collapse, and unconsciousness.

Workers using electricity may not be the only ones at risk—faulty electrical equipment and poor electrical installations can lead to fires that may also cause death or injury to others.

It is important that all staff maintain awareness of the hazards and risk associated with the use of electricity at WMH facilities. All staff are responsible for:

- Undertaking a visual inspection of electrical equipment/appliances before use
- Removing any damaged or faulty electrical equipment/appliances from service and placing an out of service tag on the item
- Reporting damaged or faulty electrical equipment to Sustainability Infrastructure and Asset via a work requisition in S4 HANA.
- Report any incident involving the use of electricity
- Switch off portable electrical equipment/appliances before Inserting or removing the plug from the power outlet

5.2 Procurement of Electrical Equipment or Services

All electrical goods and services procured by WMH must comply with the *Electrical Safety Act 2002*, the *Work Health and Safety Act 2011* and all associated Regulations, Codes of Practice, and relevant Australian Standards.

Importers, designers, manufacturers, retailers, wholesalers, and other suppliers of electrical equipment are also required to comply with *Electrical Safety Act 2002*, the *Work Health and Safety Act 2011* and all associated Regulations, Codes of Practice and relevant Australian Standards to ensure the equipment they supply is electrically safe and meets the relevant Australian Standards (references section 1.2 of the "[Managing electrical risks in the workplace Code of practice 2021](#)").

Consideration of electrical risk prior to purchase must meet the following requirements:

- Suitability of equipment / service for use
- Compatibility with existing electrical systems and processes
- Electrical loads and requirements
- Installation, placement, ease of use and maintenance considerations
- Certification and compliance with Australian electrical safety regulations
- Environmental, noise and ventilation considerations

Electrical equipment acquired by loan or hire is required to be electrically safe. The responsibility for inspection, testing and tagging of such equipment falls to the nominal equipment owner (the hirer).

5.3 The Risk Management Process

A risk assessment must be undertaken of electrical risks associated with the design, construction, installation, protection, maintenance and testing of electrical equipment and electrical installations at WMH to ensure that all persons and property are free from electrical risk from the operation or use of the equipment, installation or works. The risk management process should be undertaken in

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accordance with the section 2 of the "[Managing electrical risks in the workplace Code of practice 2021](#)"

Risk controls that are put in place to ensure electrical safety should be reviewed regularly to make sure they work effectively. Risk control measures shall be reviewed in the following circumstances:

- Where there has been an electrical incident
- When the control measures are identified as not effectively controlling the risk
- Before a change at the workplace that is likely to give rise to a new or different risk to health or safety
- If a new relevant hazard or risk is identified
- If the results of consultation indicate that a review is necessary
- If a health and safety representative request's a review

5.4 Specific Hazards and Risk Control

Safe use of Electrical Equipment and Installations

- Electrical switchboards - all switchboards or cupboards that contain switchboards within WMH facilities shall be locked to prevent unauthorised access. Switchboards can only be accessed by SIA staff or authorised contractors.
- Work on Electrical Equipment and Installations within WMH can only be undertaken by licenced SIA electrical workers or authorised electrical contractors.
- New specified electrical equipment purchased by WMH must be tagged (in service) with the date of purchase or date of first use to identify when future testing and tagging is required.
- Power outlets must be turned off before connecting and disconnecting electrical leads or appliances. The lead should be removed by grasping the plug, not by pulling the lead.
- Electrical leads and plugs must be protected from damage, including damage by liquids. All electrical plugs should also be either the moulded type (integral part of the cord) or transparent.
- Multi outlet power boards are permitted in non-clinical areas however these should only be considered as a temporary solution. Where additional power outlets are required in these locations a work request should be submitted through S4 HANA for additional power outlets. (Nb: Only multi-outlet power boards inclusive of a 10 Amp overload cut out circuit breaker, and individual outlet switches are permitted to be used).
- Electrical appliances designed for food preparation, such as sandwich makers, toasters, jugs, kettles etc, must only be used in designated kitchen / kitchenette areas only.

All defective or damaged electrical equipment must be removed from service immediately and be tagged "Out of Service" with a 'Do Not Operate' label in accordance with the [WMHHS2016090 Work Safety and Wellbeing Lock out – Tag out \(LOTO\) Procedure](#).

Prohibited uses of Electrical Equipment and Installations

- Double adaptors and piggyback plugs are not permitted to be used within any WMH site.
- Heating appliances - (such as portable bar, fan, or any personal heaters), are not permitted to be used on any WMH site due to the significant fire risk.
- Multi-outlet power boards are not permitted in Body Protected and Cardiac Protected areas.
- Do not connect power boards in series e.g. 'daisy chaining', as this process risks overloading of the power board.
- No electrical equipment is to be used or installed into WMH sites by any staff member or others that could cause electrical damage or reduce the reliability of electrical supply.

5.5 Unsafe electrical equipment and electrical installations at the workplace

WMH must ensure that any unsafe electrical equipment at the workplace is disconnected (or isolated) from its electricity supply and, once disconnected, is not reconnected until it is repaired or tested and found to be safe or is replaced or permanently removed from use

Defective or damaged electrical equipment must be removed from service immediately and be

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tagged “Out of Service” with a ‘Do Not Operate’ label in accordance with the WMHHS2016090 Work Safety and Wellbeing Lock out – Tag out (LOTO) Procedure. All staff are required to disconnect the equipment from its power source if it has a plug, to prevent the equipment being used, until it has been repaired or replaced by a competent person or has been tested by a competent person to confirm that it is safe to use.

All staff are responsible for reporting faulty or damaged WMH electrical equipment to SIA through S4 HANA as soon as possible after the fault or damage is identified.

Where an electrical hazard or risk has been identified staff should also log the issue through the RiskMan reporting process.

Out of Service Tags (see *Appendix A*) are available from SIA or through your manager / supervisor.

Note: In clinical areas electrical equipment such as PowerPoints maybe tagged “Out of Service” by using an adhesive “Do not operate tag”

5.6 Inspection of in-service electrical equipment

Regular visual inspection of electrical equipment prior to its use helps determine whether it is electrically safe. Visual inspection of electrical equipment can be performed by any person, and may involve, in part:

- looking for obvious damage, defects, or modifications to the electrical equipment, including accessories, connectors, plugs or cord extension sockets
- looking for discolouration that may indicate exposure to excessive heat, chemicals, or moisture
- checking that flexible cords are effectively anchored to equipment, plugs, connectors, and cord extension sockets
- looking for damage to flexible cords
- checking that operating controls are in good working order i.e., they are secure, aligned and appropriately identified
- checking that covers, guards, etc. are secured and working in the manner intended by the manufacturer or supplier
- checking that ventilation inlets and exhausts are unobstructed
- checking that the current rating of the plug matches the current rating of the associated electrical equipment.

Note: Equipment that fails inspection should be immediately removed from service and an out of service tag attached to the item indicating that the item cannot be used.

5.7 Inspection and Testing of Specified Electrical Equipment

The *Electrical Safety Regulation 2013 (ESR)* requires certain items of electrical equipment to be inspected and tested by a competent person at intervals according to the type of work they are used for, as per *AS/NZS 3760 (In-service Safety Inspection and Testing of Electrical Equipment)* to confirm they are electrically safe.

The frequency of testing for specified electrical equipment shall be in accordance with the *Electrical Safety Regulation 2013* and *Technical Specification ESO1 - Test and Tag* (refer Corporate Services Division of Qld Health under the *Asset Maintenance Task Specifications for Electrical Safety*).

Specified electrical equipment and safety switches need to be tested at intervals according to type of work they are used for.

- For construction work the requirement is set out under Part 6, Division 6, Sub-division 3 of the ESR and refers directly to AS/NZS 3012 Electrical installations – Construction and demolition sites
- For manufacturing work, service or office work, amusement work and rural industry work, the requirement is set out under Part 6 Division 6 of the ESR.

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- Additional information is available in *AS/NZS 3760 In-service safety inspection and testing of electrical equipment*.

Note: RCDs have been installed in the majority of electrical circuits throughout WMH facilities. Where this cannot be confirmed WMH may require inspection and testing of specified electrical equipment in identified areas within the facility. This is due to the difficulty of tracking or preventing the movement of specified electrical equipment from a protected to a non-protected area.

Appendix B outlines the requirements for Inspection and Testing of Specified Electrical Equipment within WMH facilities.

5.8 Inspection and Testing of Biomedical Electrical Equipment

Biomedical Technology Services (BTS) is an agency of Queensland Health who supplies and maintains a comprehensive range of health technology. The medical equipment and systems supplied for use by BTS in WMH are fully maintained as electrically safe, effective, and available for patient care and diagnosis, when required.

BTS systems are certified to comply with ISO9001 Quality Management Systems and accredited to NATA standards. They also comply with Australian and New Zealand standards AS/NZS:3351 Management Programs for Medical Devices.

A higher standard of testing applies to testing of medical electrical equipment under AS/NZS 3551: *Management programs for medical devices*. A Competent Person who is testing an item of medical equipment must have completed the standard training unit UEESS00174 for inspection and testing and must also have completed the course of instruction *UEEEEC0030 - Fault find and repair electronic medical equipment*.

5.9 Testing of Residual Current Devices (RCDs) or Safety Switches

All new lighting, socket outlet circuits and fixed wired equipment within WMH controlled workplaces rated at $\leq 32A$ must be protected by a type 2 safety switch residual current devices (RCD's) rated at least to 30mA.

All electrical circuits rated at $\leq 32A$ in patient care areas must be protected by a type 1 safety switch (10mA RCD).

Existing lighting, socket outlet circuits and fixed wired equipment that are rated at $\leq 32A$, wherever practicable, when maintenance or other works are carried out on those circuits, must also be fitted with a non-portable type 2 RCD's, rated at least to 30mA.

Sustainability, Infrastructure and Assets (SIA) must ensure that RCDs are tested regularly by a competent person in accordance with Appendix C.

5.10 Use of Personal Electrical Equipment/Appliances

Patients, consumers and staff bringing privately owned electrical equipment/appliances into the facility must obtain permission of the appropriate manager (Nurse Unit Manager for clinical areas and appropriate Director for non-clinical areas).

Patients, consumers and staff are not permitted to use their own electrical equipment/appliances at a WMH facility unless the appliance has been inspected and tested by a competent person.

Specifically:

- All appliances must undergo an initial inspection and test and must have durable tag attached prior to use.
 - o a Work Order Request is to be submitted to SIA for appliances requiring the initial inspection and test
 - o the appliance cannot be used until the inspection and test has been performed.

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- After the initial inspection all appliances which patients use on this site will be checked in accordance with the inspection schedule to ensure that it is safe to use.
- The Park – this facility reserves the right to withdraw permission to use, and to confiscate any privately owned electrical equipment/appliance that is not electrically safe or where its use may be a general risk to staff or other consumers. Any appliances confiscated will be treated as a patient 'Valuable' and returned on discharge or at the discretion of the Nurse Unit Manger.

5.11 Electrical incident Reporting and Notification Process

All electrical incidents and hazards, including near misses, must be reported as soon as possible to line managers (reference [WMHHS2019028 Work Safety and Wellbeing Incident Management Procedure](#)). Workers should enter incident details into RiskMan as soon as possible after reporting to their line manager. If they are unable to do so, the line manager should enter it on their behalf.

Contractors and their workers must also report all incidents to WMH and their principal contractor or their WMH representative or responsible person

Where these incidents meet the definition of a Notifiable Incident (Appendix D), there are requirements to preserve the incident scene. For these incidents, verbally advise the Manager, Work Safety and Wellbeing immediately (or, after hours, notify the Executive Director (ED) on call).

5.12 Managing Responses to Electrical Incidents

Where an electrical incident has been reported to Sustainability, Infrastructure and Assets, the Facility Maintenance Manager (or delegate) will obtain the details of the incident and provide advice to the manager of the affected work area about the immediate action that should be taken to make the work area safe.

Where it is determined that a response is required the Facility Maintenance Manager (or delegate) will arrange for a licenced electrical worker to attend the site where the electrical incident has occurred and to complete an "Electrical Incident Safety Report".

The role of the electrical worker is to:

- make the site electrically safe to prevent further injury or incident and will isolate and lock out the electrical system/ equipment/appliance (LOTO) where practicable.
- The electrical worker will assist other workers responsible for the investigation to identify the hazards and risks leading to the incident. The site should remain isolated until the fault/damage has been identified and/or repaired.
- Where the incident is, or is likely to be, a notifiable electrical incident the electrical worker will continue to isolate and lock out the electrical system/ equipment/appliance until the investigation is completed or until they are advised by a manager to return the electrical system/ equipment/appliance to service.
- The electrical worker will complete a report of their inspection and testing of the electrical system/equipment /appliance in accordance with the [Electrical Incident Safety Report](#). The report shall also include an associated [Electrical Test Certificate](#) where required.
- The Electrical Incident Safety Report is to be provided to the electrical workers line manager and/or to the investigator responding to the incident within 24 hours of the incident occurring. The report should include photographs of equipment / circuitry with commentary, findings and remedial action taken.

5.13 Emergency Preparedness regarding Electrical Safety

In an electrical emergency, call the Ipswich Hospital Switch Board on 1111. Stay on the phone until told to hang up from the operator. The importance of effective emergency preparedness and response regarding an electrical and response regarding an electrical safety incident, should be identified within area emergency procedures, documented after consultation with the Emergency Control Organisation (ECO) team (comprised of the WMH Fire Wardens and WMH First Aid Officers) and regularly reviewed. The ECO Team input is critical in determining what action or controls may be required to safely manage and evacuate people during an electrical emergency event or to extinguish an electrical fire.

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6. Roles and Responsibilities

Effective electrical equipment safety management relies on clear processes and defined roles and responsibilities to ensure an integrated and consistent approach is applied throughout WMH. These are outlined in the table below.

Role	Responsibility
All Staff	<ul style="list-style-type: none"> • Maintain awareness of the requirements of this procedure. • Remove from service and report to SIA any damaged or faulty electrical equipment via a works requisition in S4 HANA. • Remove from service and report to SIA any damaged or faulty electrical equipment via a works requisition in S4 HANA. • Report any incident involving the use of electricity • Switch off portable electrical equipment/appliances before removing plug from the power outlet
Clinical Staff interfacing with patients	<ul style="list-style-type: none"> • Communicate to the patients <ul style="list-style-type: none"> ○ the requirements to have the equipment inspected and tested prior to use ○ that West Moreton is not liable for any damage to personal equipment • arrange for the inspection and testing of the privately-owned equipment.
Nurse Unit Manager (Clinical space use of equipment)	<ul style="list-style-type: none"> • Confirm that equipment has been inspected and tested prior to authorising its use (West Moreton Tag attached to the lead). • Briefing new staff on the requirements of this procedure.
Appropriate Director (non-clinical space)	<ul style="list-style-type: none"> • Establish a system to ensure that electrical equipment is electrically safe and processes to ensure that electrical equipment has been inspected and tested prior to authorising its use (West Moreton Test Tag attached to the lead).
Sustainability, Infrastructure and Assets	<ul style="list-style-type: none"> • Assess the installation, appliances and electrical equipment • Complete a report relating to reported electrical incidents • Maintenance of electrical infrastructure

7. Definition/s

Term	Definition
Appliance	<ul style="list-style-type: none"> • An appliance is a device that consumes electricity at a voltage greater than extra low voltage and in which the electricity is converted into heat, motion or another form of energy or is substantially changed in its electrical character. (Note: Although a light fitting, including its bulb or tube, is an appliance, the bulb or tube, taken alone, is not an appliance).

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Term	Definition
Competent Person (Electrical)	<ul style="list-style-type: none"> • Electrical Work License - a person who has acquired through training, qualification, licensing and experience the required national proficiencies to be deemed competent to work with, near or on electrical infrastructure and equipment under the Electrical Safety Act 2002, Electrical licensing eligibility policy. • The minimum training requirement for test & tag licensing competency, is certification - UEESS00174 (or equivalent) from an appropriate Registered Training Organisation (RTO), to enable workers to safely test electrical cord connected equipment and cord assemblies to AS/NZS 3760. • If test and tag is required for medical equipment, a Competent Person must also complete a course of instruction to AS/NZS 3551-2012. (UEEEEC0030 - Fault find and repair electronic medical equipment, or equivalent).
Electrical Equipment	<p>Apparatus, appliance, cable, conductor, fitting, flexible supply cord, insulator, material, meter, power board, cable, or wire that:</p> <ul style="list-style-type: none"> • is used for controlling, generating, supplying, transforming, or transmitting electricity at a voltage greater than extra-low voltage • is operated by electricity at a voltage greater than extra-low voltage • is part of an electrical installation located in an area in which the atmosphere presents a risk to health and safety from fire or explosion
Electrical Installation	<p>A group of items of electrical equipment (e.g. switchboards, distribution boards, wiring etc.) that:</p> <ul style="list-style-type: none"> • are permanently electrically connected together <p>can be supplied with electricity from an electricity supply authority or from a generating source</p>
Electrical Lead	<p>An assembly of a plug intended for connection to a mains socket outlet, a double insulated sheathed flexible cord, and a cord extension socket.</p>
Electrical Power board	<p>A device other than a cord extension set which has a single plug for connection to a mains socket outlet, a double insulated sheathed cord, and an assembly of one or more socket outlets.</p>
Free from Electrical Risk	<p>for a person or property, it means that:</p> <p>(a) electrical risk to the person or property has been eliminated, so far as is reasonably practicable; or</p> <p>(b) if it is not reasonably practicable to eliminate electrical risk to the person or property, the risk has been minimised so far as is reasonably practicable.</p>
Electrically Safe	<p>(a) for a person or property, that the person or property is free from electrical risk; and</p> <p>(b) for electrical equipment or an electrical installation, that all persons and property are free from electrical risk from the equipment or installation; and</p> <p>(c) for the way electrical equipment, an electrical installation or the works of an electricity entity are operated or used, that all persons and property are free from electrical risk from the operation or use of the equipment, installation or works; and</p> <p>(d) for the way electrical work is performed, that all persons are free from electrical risk from the performance of the work; and</p>

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Term	Definition
	<p>(e) for the way a business or undertaking is conducted, that all persons are free from electrical risk from the conduct of the business or undertaking; and</p> <p>(f) for the way electrical equipment or an electrical installation is installed or repaired, that all persons are free from electrical risk from the installing or repairing of the equipment or installation.</p>
Hierarchy of Hazard Control	<ol style="list-style-type: none"> 1. Eliminate the hazard, if at all possible. e.g. working de-energised eliminates significant electrical risks and should be the first preference. 2. Substitute the hazard with something less hazardous e.g. use battery operated electrical equipment, rather than a mains power device. 3. Isolate the hazard from the operator or other person e.g., by using barriers or fences to prevent workers from coming into contact an electrical hazard or risk i.e. locked switch rooms etc. 4. Use Engineering controls, e.g. installing / using safety switches (RCD's). 5. Administrative Controls. Provide rules, training and supervision of the person performing that task. e.g. establishing exclusion zones, use of permit to work and Safe Work Method Statements (SWMS). 6. Wear personal protective equipment (PPE) such as safety footwear, gloves, eye protection, hearing protection, etc. <p>Ensure through review, that the chosen control measure does not introduce a new hazard or risk.</p>
Residual Current Device	A mechanical / electrical switching device intended to isolate an electrical circuit when a current imbalance attains the rated operating leakage current value of the device. E.g. 10mA or 30mA
Workplace	A place where work is carried out for WMH and includes any place where a worker goes or is likely to be while working.
Specified Electrical Equipment	<p>Any equipment that meets the following criteria:</p> <ul style="list-style-type: none"> • Extension leads (cord extension sets with a current rating of not more than 20amps) • All power boards (portable outlet devices with a current rating of not more than 20 amps) <p>OR</p> <ul style="list-style-type: none"> • Electrical equipment that is connected by flexible cord and plug to low voltage supply, has a current rating not more than 20 amps and is used to perform manufacturing work (e.g. bench grinder, drill press, etc.) <p>OR</p> <ul style="list-style-type: none"> • Equipment that is connected by a flexible cord and plug to a low voltage supply AND is used to perform service or office work AND is moved during its normal use for the purpose of its use <p>(Note: this does not apply to items such as computers, fridges etc.)</p>

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8. Non-Compliance

Failure to adhere to this procedure, may result in penalties being applied under the *Electrical Safety Act 2002* and *Work Health and Safety Act 2011*.

9. Monitoring and Evaluation

Level of risk	Low
What will be monitored	That electrical equipment safety is appropriately managed in WMH's work environment.
How (method)	Ensure that all staff/contractors who use or come into contact with electrical equipment are fully trained and inducted into how to identify safe electrical equipment as per this procedure.
Frequency	Annual inspection and testing program – Sustainability, Infrastructure and Assets Annual inspection and testing audit – Sustainability, Infrastructure and Assets
Responsible officer	An authorised Sustainability, Infrastructure and Assets who has been deemed competent in the management of Electrical Equipment.
Reporting to	The Sustainability, Infrastructure and Assets Facility Maintenance Manager.

10. Related West Moreton Documents

Policy and Procedure Documents <i>Located on the WMH Policies and Procedures A-Z Listing page</i>	<ul style="list-style-type: none"> • WMHHS2016090 Work Safety and Wellbeing Lock out – Tag out (LOTO) Procedure • WMHHS2019028 Work Safety and Wellbeing Incident Management Procedure • WMHHS2014123 Work Safety and Wellbeing Hazard Identification and Risk Management Procedure
Clinical Guidelines/Pathways	<ul style="list-style-type: none"> • Nil
Other	QH:POL-401:2020 Health, safety and wellbeing policy

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11. Compliance Requirements and Obligations

Legislation and other compliance requirements	<ul style="list-style-type: none"> • Electrical Safety Act 2002 • Electrical Safety Regulation 2013 • Work Health and Safety Act 2011 • Work Health & Safety Regulation 2011 • Electrical safety code of practice 2021 - Managing electrical risks in the workplace • Hazardous Manual Tasks Code of Practice 2021 • How to Manage Work Health and Safety Risks Code of Practice 2021 • Work health and safety consultation, co-operation and co-ordination - Code of Practice 2021
National Safety and Quality Health Service (NSQHS) Standards	<ul style="list-style-type: none"> • Nil
Other Standards	<ul style="list-style-type: none"> • AS/NZS 3000 - Electrical Installations (known as the Australian/New Zealand Wiring Rules). • AS/NZS 3003 - Electrical installations - Patient areas. • AS/NZS 3200 - Medical Electrical Equipment - general requirements for safety. • AS/NZS 3760 - In-Service safety inspection and testing of electrical equipment. • AS/NZS 4417 - Regulatory compliance mark for electrical equipment ("RCM" mark). • AS/NZS 4513 - Medical Electrical Equipment - fundamental aspects of safety standards. • AS/NZS 4836 - Safe working on or near low-voltage electrical installations and equipment. • QH-IMP-401-1:2020 - Health, safety and wellbeing planning standard • QH-IMP-401-2:2020 - Health, safety and wellbeing consultation standard • QH-IMP-401-3:2020 - Health, safety and wellbeing risk management standard • QH-IMP-401-4:2020 - Health, safety and wellbeing monitoring, evaluation and performance review standard • QH-IMP-401-5:2020 - Workplace rehabilitation standard • QH-IMP-401-6:2020 - Health, safety and wellbeing governance standard • QH-IMP-401-7:2020 - Work health and safety incident response standard

12. References and Resources

Nil

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13. Development, Revision and Approval History

ID & Version No.	Approval Date	Effective Date	Review Date	Document Custodian / Author	Endorsing Committee	Approving Authority
WMHHS2019052v1	24.06.2019	24.06.2019	24.06.2022	Director Sustainability, Infrastructure and Assets		Chief Finance Officer
WMHHS2019052v2	22/06/2022		22/06/2025	Director Sustainability, Infrastructure and Assets		Chief Finance Officer
Summary of changes						
<input checked="" type="checkbox"/> Scheduled review, minor changes including: <ul style="list-style-type: none"> • Minor Additional Information included in Sections 5.1, 5.15, 6, 7 & 14 • Further clarification of terminology with reference to The Electrical Safety Act 2002. • Alignment of the sections to reflect the terminology and the layout of the Electrical safety code of practice 2021 • Inclusion of information into appendices 						

14. Key Words

Sustainability, Infrastructure and Assets, Electrical equipment, multi outlet power board, extension lead; electrical appliance; infrastructure; assets; risk assessment; test and tag; Residual Current Device (RCD), Safety Switch, Electrically safe, Electrical Risk, Competent Person.

15. Appendices

[Appendix A - Example of Tag out \(Out of Service / Do not operate\)](#)

[Appendix B - Inspection and Testing of Specified Electrical Equipment](#)

[Appendix C - Testing of Residual Current Devices \(RCDs\) or Safety Switches](#)

[Appendix D - Notifiable Incidents \(Extract: Procedure – WMHHS2016090 Work Health and Safety Incident Management Procedure\).](#)

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Appendix A – Example of Tag out (Out of Service / Do not operate)



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Appendix B - Inspection and Testing of Specified Electrical Equipment

The type of work being performed determines how often specified electrical equipment is tested. Specified electrical equipment is defined by *section 97 of the Electrical Safety Regulation 2013* as electrical equipment with a current rating of not more than 20 amps. Specified electrical equipment also includes cord extension sets.

Work within the clinical or office areas of WMH is classed as service or office work and the specified electrical equipment is limited to equipment that is moved during its normal use for the purpose of its use.

Only a person appointed as competent by their employer can inspect and test electrical equipment. Competence is based on knowledge and skills gained from training, experience, qualifications or a combination of these.

The minimum training requirement for inspection and test licencing competency is certification to UEESS00174 – Electrical Safety Testing of Electrical Cord Connected Equipment and Cord Assemblies Skill Set. Certification is obtained from a Registered Training Organisation (RTO), to enable workers to safely test electrical cord connected equipment and cord assemblies to AS/NZS 3760.

Type of work and/or equipment	Inspection and Test interval (Maximum)
Construction work – transportable structures, fixed and transportable equipment and construction wiring	6 months
Construction work – other equipment	3 months
Manufacturing work – double insulated equipment	12 months
Manufacturing work – equipment not double insulated	6 months
Office work (<i>If no safety switch</i>)	5 years
Service work (<i>If no safety switch</i>)	12 months

Table 1: reference AS/NZS 3760 - *In-service Safety Inspection and Testing of Electrical Equipment*

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Appendix C - Testing of Residual Current Devices (RCDs) or Safety Switches

Table 2 below sets out the testing frequency for RCDs as per AS/NZS3760 to ensure the devices are working effectively.

SIA must ensure, that the RCD testing is completed as required.

Records must be maintained by SIA as evidence of the RCD testing currency.

- RCDs and portable RCDs must be tested at the prescribed intervals described in **Table 2** by a competent person and removed from use and tagged out of service if not working correctly or safely.
- In locations such as "Patient Treatment Areas", RCD protected areas must be clearly identified and labelled in accordance with AS/NZS 3003 Electrical installations – Patient areas and shall include the dates of last test and extent of coverage.
- In some cases, portable RCDs may also be required. SIA is progressively installing RCDs on all circuits throughout WMH. Until that program of RCD installation is completed, testing and tagging of specified electrical equipment must continue to include all portable electrical items.

Type of work	Fixed RCD (safety switch)		Portable RCD (safety switch)	
	Push-button user Test	Operating time / current test	Push-button user Test	Operating time / current test
Construction work	1 month	12 months	Daily, or before each use, whichever is the longer	3 months
Manufacturing work	6 months *	12 months *	Daily, or before each use, whichever is the longer * #	12 months * #
Office work	6 months *	2 years *	3 months *	2 years *
Service work - commercial cleaning equipment	N/A	N/A	Daily, or before each use, whichever is the longer *	6 months *
Service work - other	6 months *	2 years *	6 months *	2 years *
* Longer test intervals may apply. Consult <u>AS/NZS 3760 In-service safety inspection and testing of electrical equipment</u> .				
# From 1 March 2008 portable safety switches are prohibited from use in manufacturing work				

Table 2: Reference AS/NZS 3760 - In-service safety inspection and testing of electrical equipment.

Equipment that fails testing should be immediately removed from service and an out of service tag attached to the item indicating that the item cannot be used.

If the equipment is safe to use, the qualified inspection officer must attach a tag which shows the date the next test is due.

Electrical Equipment Management Procedure
WMHHS2019052v2

Appendix D – Notifiable Incidents (Extract: Procedure – WMHHS2016090 Work Health and Safety Incident Management Procedure).

Serious Electrical Incident

Under the Electrical Safety Act 2002 a Serious Electrical Incident is defined as an incident involving *electrical equipment* if a person:

- is killed by electricity
- receives a shock or injury from electricity, and is **treated** for the shock or injury by or **under the supervision of a doctor**
- receives a shock or injury from electricity at high voltage, whether or not the person is treated for the shock or injury by or under the supervision of a doctor.

What is “treatment”?

Examples of treatment may include:

- the application of creams or dressings to burns;
- cleaning and dressing of wounds, cuts or abrasions;
- setting of broken bones or strapping of strains or sprains;
- administering/prescribing of medications.

Once treatment is administered, regardless of the level of treatment, it is reportable.

Note: treatment does not include periods of precautionary observation or non-invasive monitoring such as an electrocardiogram (ECG).

What is meant by “under the supervision of a doctor”?

For the purposes of reporting a serious electrical incident, the Electrical Safety Office considers that treatment “under the supervision of a doctor” includes:

- treatment from a registered nurse in hospital or medical centre or treatment from a paramedic under instruction from a doctor regardless of whether a doctor was in attendance when the treatment was administered.

Where a person meets the criteria above, the incident should be reported as an SEI.

High Voltage: Any electric shock or injury received from a high voltage source of electricity must be reported regardless of whether treatment for the shock or injury was received. High voltage means a voltage above 1000V a.c. or 1500V ripple-free d.c.

Dangerous electrical event

Section 12 of the ES Act defines a DEE and includes:

- when a person, for any reason, is electrically unsafe around high voltage electrical equipment, even if the person doesn't receive an electric shock or injury
- significant property damage caused by electricity or something originating from electricity e.g. electrical fire
- unlicensed electrical work
- unsafe electrical work
- unsafe electrical equipment or electrical equipment that does not have electrical equipment safety system (EESS) approval markings.

Table 3 - Extract: Procedure - WMH Work Health and Safety Incident Management Procedure

Note:

- *Untreated shock or injury - A reported incident where the person advises that they have received a shock or injury from electricity and does not receive “treatment” as defined in Table 3.*
- *Minor property/equipment damage - Property damage caused by electricity or something originating from electricity e.g. damage to electrical wall mounting, connection plugs and cables.*