

Electrical Safety Policy

V4.0

September 2024

Summary

All staff are responsible for:

- All managers need to ensure that staff carry out a visual check (e.g. plug not damaged, lead insulation not broken, appliance looks in good condition) before using any electrical appliance in their area. In the event of an unsatisfactory check, equipment must not be used (and should be labelled to this effect) and immediately reported to the Estates Helpdesk (Tel: 01872 25 3400 Email: Rch-tr.RCHTEstatesHelpdesk@nhs.net) or for medical equipment the Medical Physics and Clinical Technology Department (Tel 2491).
- The Trust discourages use of any electrical equipment brought in from home. If this unavoidable, the user must ensure that the visual check is carried out.
- The use of extension leads is not generally permitted, unless approved by the Trust Electrical Safety Group, except in an emergency where patient safety could be compromised or for business continuity. If an extension lead is required for this purpose, it must be approved by the Estates operations team in conjunction with the Medical Physics and Clinical technology team where applicable.
- Only competent and authorised staff can work on electrical equipment or the Trust electrical distribution network and systems, no other staff should attempt repairs, and this would include fusible link replacement or the re-setting of circuit breakers.
- Authorised Persons are available to manage, advise and provide general information on all electrical distribution network and systems and their associated risks where applicable.
- A maintenance management regime to record, test, operate, monitor electrical services, distribution and control systems operate in a safe and effective manner has been implemented.
- Work on the Low Voltage (LV)/High Voltage (HV) electrical network and systems must be completed under the procedures and safe systems of work as set out in HTM 06-02 and HTM 06-03.
- Written documentation, drawings and records for inspection must be maintained and provided on request.

Table of Contents

Summary	2
1. Introduction.....	5
2. Purpose of this Policy/Procedure	5
3. Scope.....	6
4. Definitions/Glossary.....	6
5. Ownership and Responsibilities	7
5.1. Role of the Chief Executive Officer	7
5.2. Role of the Director of Estates and Facilities.....	7
5.3. Role of the Head of Estate Operations	8
5.4. Role of the Authorising Engineer – Low / High Voltage.....	8
5.5. Role of the Authorised Person – Electrical Officers.....	8
5.6. Role of Project Managers.....	8
5.7. Role of Estates Electricians/Craftsperson (Competent Person)	9
5.8. Role of the Estates Department.....	9
5.9. Role of the Electrical Safety Group.....	9
5.10. Role of Trust Associate Directors / Heads of Department / Senior managers	10
5.11. Role of Staff Members.....	10
5.12. Role of Contractors	10
6. Standards and Practice.....	11
6.1. Electrical Users.....	11
6.2. Those working with electricity.....	12
6.3. Permit to Work System	12
6.4. Low Voltage Safety Rules	12
6.5. High Voltage Safety Rules	13
6.6. Information and Instructions	13
6.7. Reporting of Incidents and Dangerous Occurrences.....	13
6.8. Safety Equipment and Protective Clothing	13
6.9. Records	14
6.10. Electrical Testing (Portable and Transportable Equipment).....	14
6.11. Final Circuit Protection	16
6.12. Emergency Supplies	17
6.13. Temporary Supplies for Building Work etc.....	17
6.14. Extension Leads	17

7. Dissemination and Implementation	18
8. Monitoring compliance and effectiveness	19
9. Updating and Review	20
10. Equality and Diversity	20
Appendix 1. Governance Information	21
Appendix 2. Equality Impact Assessment	24

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

1. Introduction

- 1.1. The Trust has a responsibility to ensure that their Low Voltage and High Voltage networks and systems are safe by ensuring that all safe working practices are followed, and adequate precautions are taken to reduce as far as is reasonably practicable the risk of personal injury or death from electrical shock to all patients, employees, contractors, and the public.
- 1.2. The main hazards associated with the use of electricity are electric shock, flash burns, overheating due to overloads, fire and explosions caused through the ignition of flammable vapours and the risk of falls that may occur because of contact with electrical equipment.
- 1.3. In addition to the obvious risks from exposure to electricity, there are also the risks associated with the loss of such a critical utility in a healthcare environment.
- 1.4. It is important that electrical services and equipment function safely and correctly, have adequate protection and are not operated outside of their design limits. The assurance of safe and reliable operation can only be achieved through a regime of regular inspection and testing of such systems and equipment and the implementation of appropriate maintenance works.
- 1.5. This version supersedes any previous versions of this document.

2. Purpose of this Policy/Procedure

- 2.1. This policy sets out the commitment of Royal Cornwall Hospitals NHS Trust (The Trust) to provide a safe and secure environment for patients, visitors and staff. It applies to all persons who have access to, use of, or are responsible for the maintenance of Trust premises or equipment.
- 2.2. All work, maintenance and day to day task need to comply with the:
 - Electricity at Work Act 1989.
 - The following Health Technical Memorandum:
 - Guidance on electrical services supply and distribution (HTM 06-01 2017 edition).
 - Electrical safety guidance for low voltage systems (HTM 06-02).
 - Electrical safety guidance for high voltage systems in healthcare premises (HTM 06-03).
 - BS7671 IET Wiring Regulations (18th Edition).
 - All relevant Health Building Notes.
- 2.3. The policy also provides guidance and references to assist staff in implementing

the requirements set out within it.

- 2.4. The procedures set out within this document should be regarded as a guide to minimise to an acceptable level the risks associated with electrical systems and equipment.

3. Scope

- 3.1. This Policy applies to all members of staff and contractors employed by or working for the Trust.
- 3.2. There is specific information contained in this policy on safe working practices and procedures for the Estates Department and Estates contractors (Appendix 3.).
- 3.3. This policy should be read in conjunction with the Health and Safety General Policy, and other relevant estates policies.

4. Definitions/Glossary

Voltage - the change in electric potential (meaning potential energy per unit charge) between two positions. The voltage is always measured between two points, for example between the positive and negative ends of a battery, or between a wire and ground.

IEC ¹ Voltage Range	AC	DC	Defined Risk
High Voltage (HV)	>1000 V	>1500 V	Electrical arcing
Low Voltage (LV)	50-1000 V	120 – 1500 V	Electrical shock
Extra Low Voltage (ELV)	<50 V	<120 V	Low Risk

Transformer - A device that transfers electrical energy from one circuit to another through inductively coupled conductors.

Isolated Power supply System (IPS) - IPS system provides continuity of electrical supply to "life-supporting" equipment. Faulty equipment (short to earth) will not trip a breaker or blow a fuse. Instead, an alarm is raised to the clinical user informing them of a problem with the supply status.

Electric Generator - a device that converts mechanical energy to electrical energy.

Uninterruptable Power Supply (UPS) or Battery Backup - an electrical apparatus that provides emergency power to a load when the input power source, typically the utility mains fail.

Switchgear - as used in association with the electric power system, or grid, refers to

¹ IEC is the International Electrotechnical Commission responsible for preparing and publishing standards for electrical and electronic systems.

the combination of electrical disconnects, fuses and/or circuit breakers used to isolate electrical equipment.

Fixed Wiring - the installed wiring in a building, running from and including, a consumer unit / final distribution board, out to a 13A socket, light fitting or other low current outlet.

Portable Appliance - an appliance of less than 18kg in mass that is intended to be moved whilst in operation or an appliance which can easily be moved from one place to another and is not permanently fixed electrically (connected by the plug-socket arrangement), e.g. vacuum cleaner, toaster, food mixer, etc.

Low Voltage System (LV) - the term used to describe the electrical infrastructure to include all primary plant such as the Main Switches, Isolators, Distribution Boards, etc.

Health Technical Memorandum (HTM) - a suite of guidance documents issued by the Department of Health.

Authorising Engineer (AE) - Provides independent advice to the Trust on all aspect of management and maintenance of the high and low voltage systems. An Authorising Engineer is appointed in writing by the Designated Person to take responsibility for the effective management of the safety guidance. The person appointed should possess the necessary degree of independence from local management to act within the guidance of HTM 06-02 and 06-03.

Authorised Person (AP) - a member of staff with suitable training and who has been appointed in writing by the Executive Manager on the recommendation of the AE.

Competent Person (CP) - A Competent Person for low voltage (LV) is approved and appointed in writing by an Authorised Person (LV) for defined work, possessing the necessary technical knowledge, skill and experience relevant to the nature of the work to be undertaken, who is able to prevent danger or, where appropriate, injury, and who is able to accept a permit-to-work from an Authorised Person (LV).

5. Ownership and Responsibilities

5.1. Role of the Chief Executive Officer

The Chief Executive Officer holds the overall responsibility for Trust Health and Safety and implementation of this policy. This responsibility for Health and Safety is delegated to the Chief Operating Officer. The responsibility as designated person is delegated to the Director of Estates and Facilities.

5.2. Role of the Director of Estates and Facilities

The Director of Estates and Facilities has delegated responsibility from the Chief Executive for ensuring that the Trust demonstrates compliance with this policy and will:

- As the designated person appoint suitably qualified Authorising Engineers as recommended by the Head of Estates and Senior Electrical Manager.

- Ensure that suitably qualified persons are in place to assess and advise the Trust on all aspects of Electrical Safety.
- Ensure that the suitably qualified persons carry out their roles effectively and report regularly on risk and other issues.

5.3. Role of the Head of Estate Operations

- 5.3.1. The Head of Estate Operations shall possess adequate professional knowledge, with appropriate training, to devise and manage the necessary procedures to ensure that electrical safety within the Trust is well managed.
- 5.3.2. The Head of Estate Operations shall recommend the appointment, in writing, of the Authorising Engineer (AE) for the low and high voltage services that exist in the Trust.

5.4. Role of the Authorising Engineer – Low / High Voltage

The Authorising Engineer who is appointed in writing by the CEO, to advise the Trust on safety arrangements for defined low / high voltage electrical systems. The Authorising Engineer will be independent of the Trust and will also assess the suitability and appointment of all Authorised and Competent Persons - Electrical.

To be eligible for appointment, a prospective Authorising Engineer should be a chartered or an incorporated engineer with practical and relevant technical engineering experience of the types of system and equipment relative to their appointment.

5.5. Role of the Authorised Person – Electrical Officers

- 5.5.1. Authorised Persons for “Electrical Services” are to be Estates Personnel or an individual of a similar status who possess adequate knowledge, sufficient experience and has received the necessary training within this field.
- 5.5.2. Authorised Persons should be appointed in writing by the Designated Person to control and manage Low Voltage / High Voltage Electrical services including standby generators.
- 5.5.3. Authorised Persons are responsible for the implementation, maintaining, testing, and inspecting all Low Voltage / High Voltage electrical services. They are to liaise with all necessary parties and provide any information to enable this Policy to be fully implemented.

5.6. Role of Project Managers

- 5.6.1. Project Managers will comply with this policy for all capital and project work undertaken by the Trust.
- 5.6.2. Project Managers shall be responsible for:

- Requesting in writing as soon as is reasonably practicable, any additional load to the system to the Electrical Officer to ensure the LV Network can be sustained safely and robustly. Any foreseen stresses on the system due to load growth may result in the request being denied.
- Liaising with the Electrical Officer to discuss any new equipment which will be connected to Trust network.
- Design and management of all capital/strategic schemes.
- Commissioning and the provision of the electrical services drawings.
- Liaising with the Authorising Engineer for any adaptation / alteration to the electrical infrastructure, prior to the services being brought into use by the trust.
- Ensuring all appropriate commissioning and test certificates are issued and retained by the Trust.

5.7. Role of Estates Electricians/Craftsperson (Competent Person)

Competent Persons are individuals who in the opinion of the Authorising Engineer have sufficient technical knowledge and relevant experience to prevent danger to him/her and others, whilst carrying out work on defined LV electrical services, equipment or standby generators and associated systems. Their role is to undertake safely both planned and reactive electrical work.

5.8. Role of the Estates Department

The Estates Department shall be responsible for the provision of appropriate advice and guidance to the Trust users in respect of the disruption of the electrical service; dangers from electrical shock any other risks which can occur from electrical installations.

5.9. Role of the Electrical Safety Group

- 5.9.1. The Electrical Safety Group are responsible for ensuring that all electrical safety issues are monitored, recorded, and acted on, in line with this policy, and the relevant legislation and guidance.
- 5.9.2. The Electrical Safety Group will report to the Health and Safety Committee through the Estates Department Health and Safety Report.
- 5.9.3. The Electrical Safety Group will be chaired by the Senior Estates Manager (Electrical) and operate in accordance with separate Terms of Reference (TOR) which will define operation, membership and frequency of meetings which will tend to be in accordance to presented risk but at a minimum of quarterly.

5.10. Role of Trust Associate Directors / Heads of Department / Senior managers

The Associate Directors, Heads of Departments and Senior Managers across the Trust are responsible for ensuring, that all staff under the direction of their line managers are made aware of, and comply with, the requirements of this policy.

5.11. Role of Staff Members

In accordance with the Health and Safety at Work Act 1974 and the Trust's Health and Safety policy any employee is required to:

- Co-operate with managers to meet statutory requirements.
- Work in a safe manner, making full and proper use of any control measures provided.
- Report faults / hazards and or defects and any failure of control measures to managers immediately and to wear all relevant PPE and use all safety equipment as supplied by the Trust.
- Report all incidents as soon as practically possible.
- Ensuring the safety of themselves and others by NOT using or repairing equipment which is obviously defective (repairing includes the replacement of fusible links or the resetting of circuit breakers) – work on any electrical equipment must only be carried out by Authorised and Competent persons who must comply with the Electricity at Work Regulations 1989 and the relevant Codes of Practice.
- Ensure the electrical equipment that they use on a regular basis is used appropriately and in accordance with any relevant training.
- Ensure that they avoid where possible bringing any mains-operated electrical equipment onto site, any such equipment must be subject to a safety inspection/test, by the relevant technical team, e.g., Estates Operations or Clinical Technology teams, before use.
- Ensure that they DO NOT use any electrical equipment outside its operating limits e.g. in wet conditions.
- Ensure that all equipment is made available for its annual Portable Appliance Test.

5.12. Role of Contractors

- 5.12.1. All contractors (not just those working under the instruction of the Estates department) are required to comply with the Trust Control of Contractors Policy.

- 5.12.2. Competent Persons in the employ of contractors shall undergo competency tests with a Trust appointed Authorised Person to be able to receive Permits to Work under the Trusts safe system of work.
- 5.12.3. Only approved contractors and sub-contractors with a suitable level of competence are to be used. All contractors must ensure that their employees who work on RCH NHS Trust managed properties possess the appropriate level of technical knowledge and experience to enable them to discharge their duties.
- 5.12.4. Approval of electrical contractors to undertake work for Royal Cornwall Hospitals NHS Trust shall be by the Estates Department only.
- 5.12.5. The ability of a contractor to safely undertake the required work shall be the prime consideration when approving a contractor to work on a Trust site.
- 5.12.6. The following factors should be considered when assessing a contractor:
- Qualifications and training of employees.
 - Approval by industry body (NICEIC, NAPIT etc.).
 - Technical references from previous client's.
 - Incident records.
 - Insurance cover.
 - The companies Safety policy.
- 5.12.7. Contractors will liaise with the Trust's high voltage or low voltage Authorised Person(s) who will agree isolation procedures for work on the electrical system.
- 5.12.8. Where practicable all portable and transportable equipment must by preference be battery operated (typically under 20 volt) or operate at 110 volts AC via a centre tapped to earth transformer, reducing the shock voltage to 55 volts. If low voltage equipment is not available, double insulated tools must be used via an RCD (Residual Current Device). Air tools can be used if available.

6. Standards and Practice

6.1. Electrical Users

All users should undertake an initial risk assessment when preparing to use electricity:

- Consider the environments - wet or cramped conditions can increase the risk of electrocution.
- Undertake visual inspection of equipment and any leads.

- If a fault is suspected with a device or socket take out of use and label “DO NOT USE”. If possible, remove to a safe place away from other persons.
- Where possible switch off power to socket outlets when not in use, mindful of equipment that may need to remain on to maintain charging etc.
- Report any faults to Estates Helpdesk.
- Report faults with medical devices to the Medical Physics and Clinical Technology Department.

6.2. Those working with electricity

Only members of staff qualified and authorised to do so may work on the electrical systems within the Trust.

- All Competent Persons must comply with safe systems of work created by reference to, and in compliance with, HTM 06-02, 06-03, IET BS7671 current edition, and the Electricity at Work Regulations 1989.
- No live working is permitted. (Except testing, fault finding, etc. but having first completed an LW1 risk assessment. For any other form of live working, Method Statements and Risk Assessments must be approved by the Trust’s Authorising Engineer and a Certificate of Authorisation for Live Working Safety Document issued by the Authorised Person.
- All staff must undertake visual checks before using electrical equipment, staff must not remove any cover/wires/fuses unless competent to do so.
- It is expected that all electrical contractors or other persons authorised to work on electrical systems or equipment, must not put themselves or others at risk. Contractors whose work is unsatisfactory or unsafe will be instructed to cease work whilst an investigation is undertaken by the Authorised Person (Electrical).

6.3. Permit to Work System

- 6.3.1. A Permit to Work system is operated by the Trust in line with the requirements of HTM 06-02 and HTM 06-03.
- 6.3.2. All HV and LV Authorised Persons shall carry out their respective duties at a minimum of 6 monthly intervals to maintain their competencies.

6.4. Low Voltage Safety Rules

- 6.4.1. The recommendations of the Department of Health’s publication ‘HTM 06-02 - Electrical Safety Guidance for Low Voltage Systems’ have been considered and are adopted by The Trust as the method of achieving the legal requirements for electrical safety on low voltage systems.
- 6.4.2. All requests for LV Isolations and Switching on or around the LV Network must be formally requested in writing to the Electrical Officer at least 5 working days prior to the work/switching taking place.

- 6.4.3. If works are taking place around the LV Network that may be deemed unsafe then the duty Authorised Person has the authority to stop the work and instigate a formal investigation (supported by the Authorising Engineer if needed) into the breach of this Electrical Safety Policy.

6.5. High Voltage Safety Rules

- 6.5.1. The Trust has adopted the Department of Health's publication "HTM 06-03 – Electrical Safety Guidance for High Voltage Systems" as its method of achieving a safe system of work on its high voltage systems.
- 6.5.2. All requests for HV Isolations and Switching on or around the HV Network must be formally requested in writing to the Electrical Officer at least 5 working days prior to the work/switching taking place.
- 6.5.3. If works are taking place around the HV Network that may be deemed unsafe then the duty Authorised Person has the authority to stop the work and instigate a formal investigation (supported by the Authorising Engineer if needed) into the breach of this Electrical Safety Policy.

6.6. Information and Instructions

Arrangements shall be made by the appropriate manager to ensure:

- That all employees concerned with work activities are adequately informed as to the systems, plant and apparatus which are affected and instructed in all necessary safety procedures.
- As far as is reasonably practicable, that other persons who are not employees but may be affected by the work activities also receive adequate information and/or instruction.

6.7. Reporting of Incidents and Dangerous Occurrences

- 6.7.1. Staff and contractors employed by Trust must comply with the Trust's RIDDOR policy on the reporting of incidents and dangerous occurrences.
- 6.7.2. Incidents shall be reported on the Trust electronic incident reporting system (Datix).

6.8. Safety Equipment and Protective Clothing

When any work under Trust safety rules or related documents and procedures takes place appropriate safety equipment and clothing of an approved type shall be used in accordance with management instructions. At all times, employees are expected to wear corporate clothing and safety footwear having regard to the work being carried out. Arc proof clothing shall be worn when accessing HV substations for any purpose and when fault switching on the HV systems arc proof gloves, visor and balaclava will also be worn.

6.9. Records

Adequate records shall be maintained for the following:

- Staff training and authorisation under HTM requirements
- All installation and minor new works which shall be installed, tested and certified as detailed in BS7671.
- Tests/work associated with commissioning, maintenance, inspection, testing and repair of fixed and portable electrical equipment, wiring, switchgear and plant.
- The electrical distribution system circuit routes, conductor sizes, switchgear and usage ratings, protection relay settings and control/isolation/final outlet positions.
- Location of portable uninterruptible power systems.
- All portable appliance test results are held on a database within the Estates Department. A certificate of all appliances tested with the complete test results of each piece of equipment, are sent to the relevant site/department after the testing has been completed. This must be retained within the Maintenance Manual.

6.10. Electrical Testing (Portable and Transportable Equipment)

6.10.1. Before Purchase.

- All equipment must comply with relevant British and/or European standards and carry a BS Kite mark, CE, or UKCA markings.
- All equipment must be purchased following the Trusts Purchasing Policy which must be initially agreed with an Estates Officer for conformity.
- Trailing leads must be kept to a minimum and protected from mechanical damage.
- Please also see the Medical Equipment Management Policy and note that medical devices are not subjected to routine Portable Appliance Testing (PAT) but are instead subject to medical grade electrical safety testing as part of their routine maintenance.

6.10.2. Action Before Use and Planning.

- It is the Users responsibility to advise the Estates Department of all newly acquired/installed electrical equipment (including portable and stationary appliances) whether used by the Trust, its staff or its clients/patients, who will ensure the equipment is checked for safety prior to its initial use on Trust premises and assessed whether maintenance can be carried out by the Estates Department or included within a maintenance contract agreement.

- It is the Users responsibility to identify equipment for Portable Appliance Testing (PAT). The equipment must be available when Portable Appliance Testing (PAT) is being carried out by the Estates Department.

6.10.3. During Use

- Portable and transportable tools and equipment must be visually examined before being switched on by the operative, and on each occasion used.
- The visual checks to be conducted include ensuring:
 - That the lead is effectively secured to both the plug and equipment.
 - There is no physical damage to the equipment (cracks, loose screws or fixings, scorch or other signs of overheating etc), lead (cuts, abrasions, tape repairs etc) and plug (cracks, bent or missing pins, loose covers etc).
 - That the equipment is functioning correctly.
 - Electrical Equipment Faults are reported immediately to the Estates Department.
 - Medical devices faults are be reported to Department of Clinical Technology (DCT).
 - Defective equipment is taken out of use until repaired and re-tested.
 - Any equipment without a test sticker should not be used.
 - If the date on the sticker has expired the equipment should be taken out of use and Estates Department informed.

6.10.4. Estates Department Testing Responsibilities

- The Estates Department will provide a complete list of all tests carried out previously which will be presented to the relevant work area Manager to ensure that all equipment is made available and all new equipment will be included in the PAT testing procedure.
- A combined inspection and test for portable appliance equipment is included in the Estates Department Planned Maintenance Programme and is carried out on electrical equipment as detailed below:

Portable Hand Tools	Quarterly
Electrical irons, toasters, and kettles	Annually
IT Equipment	Annually

All other portable electrical equipment ²	Annually
Fixed Electrical equipment	Annually

- The Electrical Safety Check and tests that will be carried out by the Estates Department will be in accord with relevant standards and regulation including.
 - Examination of flexible cables, plugs, grommets and cable clamps for physical damage.
 - Examination of the plug tops and casings of equipment for physical damage.
 - A check on the fuse rating of plugs and examination of the terminals to ensure that there are no loose terminals and that the wiring is correct.
- Earth continuity and installation of the equipment.
- If the above tests are satisfactorily completed, visual identification will be left by applying a sticker to the equipment that identifies its suitability for use and when the next test is due. If all tests are not satisfactorily met, the equipment will be taken out of service and repaired by the Estates Department.

6.10.5. Management of non-trust owned small electrical appliances.

Please reference 'fire safety policy and procedures, incorporating the arson prevention policy' section 7.11 'Management of small electrical appliances', and its associated appendices.

6.11. Final Circuit Protection

6.11.1. Residual Current Protection

- Final circuits installed within the Trust estate shall be provided with RCD protection, where applicable, and in accordance with the requirements of BS 7671 and HTM 06-01.
- However, where existing circuits are identified where portable and fixed electrical apparatus is used in potentially hazardous environments, for example, test and repair areas, where there is the possibility of physical damage to conductors or damp/wet surfaces, then residual current devices (earth leakage circuit breakers) must be installed to protect this equipment to trip at no greater than 30 milliamps leakage to earth. Where transportable equipment is used on circuits that are not provided with fixed RCD's, portable electrical

² Food Regeneration Trolleys are the responsibility of the Facilities Management Contractor

safety devices (RCDs etc.) should be utilised.

6.11.2. USB Provision in socket outlets

All USB provision within socket outlets must be supplied independently to other bedhead services.

6.11.3. Independent USB devices

All USB devices other than those incorporated in socket outlets shall be fed via their own local means of isolation and protection.

6.11.4. Surge Protection Devices

Devices shall be installed in accordance with BS7671 to cover all final circuits. Consideration should be made as to their location; the preferred solution would be to install on primary distribution.

6.12. Emergency Supplies

Emergency supplies, including tertiary power supplies (UPS) and secondary power supplies (standby generators) shall be managed, operated and maintained in accordance with the recommendations of HTM 06-01.

6.13. Temporary Supplies for Building Work etc.

6.13.1. Temporary electrical supplies for construction and similar sites must be supplied and maintained to comply with HSE guidelines. Note: PM – Electrical Safety on Construction Sites.

6.13.2. Low Voltage AC Portable and Mobile Generators (Electrical Safety of Independent Low Voltage AC Portable and Mobile Generators)

- Safe procedures for the operation of Trust owned mobile generators are included in the manual supplied by the manufacturer.
- Where a generator is hired from a plant hire company, the company shall be responsible for providing the hirer with information for the safe use of the equipment.
- Generator users shall operate the equipment in accordance with the manufacturer's instructions.

6.14. Extension Leads

The use of extension leads is not generally permitted, unless approved by the Trust Electrical Safety Group, with a preference given to correctly sited outlets and equipment supply cables of an appropriate length. However, it is accepted that they may need to be used in an emergency where patient safety could be compromised or for business continuity. If an extension lead is required for this purpose, an appropriate risk assessment should be completed, and the use must be approved by the Estates operations team in conjunction with the Department of Clinical Technology when supplying medical equipment.

7. Dissemination and Implementation

- 7.1. Full risk assessments and safe working method statements (RAMS) will be required from all contractors.
- 7.2. All staff will be made aware of the contents of this policy and any associated guidance by corporate communications and local briefings.
- 7.3. Training

7.3.1. Management Responsibilities

Management has a duty to ensure that their employees receive training necessary to allow them to safely perform their duties.

7.3.2. Authorised Person (AP)

- 7.3.2.1. Prospective APs should be nominated by the Estates Senior management team, assessed by the AE and appointed by the Designated Person. The appointment is to be for defined systems and installations and be registered on a Certificate of Appointment signed by the AP and the AE.

7.3.2.2. Training Requirements of Authorised Persons

- To be eligible for appointment the prospective AP should be over 23 years of age and be electrically qualified within the following governing bodies:
 - Degree.
 - HND/HNC.
 - OND/ONC.
 - B Tec Level 4 or 3.
 - NVQ at level 3 or above.
- Candidates should have successfully completed an approved training course for APs as described by HTM 06-02 Appendix 7.
- An AP should attend an appropriate training course for APs at intervals not exceeding 3 years.

7.3.3. Competent Person (CP)

- 7.3.3.1. Prospective CPs should be nominated by the Estates management team and assessed and appointed by the APs. The appointment is to be for defined systems and installations and will be registered on a Certificate of Appointment signed by the CP and the AP.

7.3.3.2. Training Requirements of Competent Persons

- To be eligible for appointment the prospective CP should be qualified within the following range:
 - BTEC Level 3.
 - NVQ Level 3.
 - IET Regulations (BS7671).
 - CandG2381 (If required to install or alter circuits).
 - CandG2391 (If responsible for testing circuits).
- Prospective CPs should be:
 - Competent to undertake work on, and testing of, the types of system and equipment for which the appointment is sought.
 - Be familiar with the types of installation and equipment that they will be required to work on or test.
 - Possess the necessary technical knowledge, skill, and experience relevant to the nature of the work or tests to be undertaken to prevent danger or injury.
 - Have an adequate knowledge of, and within the last 3 years have successfully completed, an emergency first-aid training course.

8. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Electrical Permits to Work will be audited as part of the annual AE audit. Contractors will be subject to reassessment at significant contract change. Estates will be subject to an annual electrical management audit by an AE as per the HTMs.
Lead	Electrical Safety Group.
Tool	Electrical Permits to Work.
Frequency	The electrical AE will complete an audit on an annual basis.

Information Category	Detail of process and methodology for monitoring compliance
Reporting arrangements	The findings of the assessments, audits, and reports will be presented to the Electrical Safety Group and escalated where relevant to the relevant Trust committees.
Acting on recommendations and Lead(s)	Senior Estates Manager (Electrical) – Trust Senior Authorised Person (Electrical).
Change in practice and lessons to be shared	Any opportunities for improvement (OFIs) identified through any of the audits and reviews will be updated in the procedures and additional training or awareness provided where appropriate.

9. Updating and Review

- 9.1. This policy will be reviewed every three years or sooner where there has been a change to legislation or guidance, or where there has been an incident involving electrical safety.
- 9.2. Any revision activity is to be recorded in the Version Control Table as part of the document control process.

10. Equality and Diversity

- 10.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the [Equality Diversity And Inclusion Policy](#) or the [Equality and Diversity website](#).

10.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Electrical Safety Policy V4.0
This document replaces (exact title of previous version):	Electrical Safety Policy V3.0
Date Issued/Approved:	September 2024
Date Valid From:	September 2024
Date Valid To:	September 2027
Author/Owner:	Bob Davies, Senior Electrical Manager
Contact details:	01872 253400
Brief summary of contents:	This document sets out the electrical safety policy and procedures in operation within the Trust. The procedures should be regarded as a guide to minimise to an acceptable level the risks associated with electrical systems and equipment
Suggested Keywords:	Estates, Electrical Safety, Electricity, Health and Safety
Target Audience:	RCHT: Yes CFT: No CIOB ICB: No
Executive Director responsible for Policy:	Director of Estates and Facilities
Approval route for consultation and ratification:	Estates and Facilities Performance and Governance Group
Manager confirming approval processes:	Head of Estates

Information Category	Detailed Information
Name of Governance Lead confirming consultation and ratification:	Performance Improvement, Governance and Compliance Manager, Estates and Facilities
Links to key external standards:	As detailed in document
Related Documents:	Health and Safety Policy Management of Contractors Policy
Training Need Identified:	Yes – The Learning and Development department are aware of the training requirements.
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	EstatesandFacilities / Estates

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
November 2013	draft	Draft issued.	
12 March 2014	V1.0	Update header to new Trust branding	J. Robin Gatenby, Health and Safety Manager
1 June 2016	V2.0	Major update to policy.	Phil Bond, Governance Lead Alex Bray, Electrical Officer
October 2019	V3.0	Update to the information on Portable Appliance Testing, changes to roles and responsibilities, include information on USB devices and charging	Alex Bray, Estates Manager (Electrical)

Date	Version Number	Summary of Changes	Changes Made by
May 2024	V4.0	Routine review and transfer to new template.	Bob Davies Senior Estates Manager (Electrical) Rob Harris Senior Safety Adviser

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust [The Policy on Policies \(Development and Management of Knowledge Procedural and Web Documents Policy\)](#). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team
rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy/policy/proposal/service function to be assessed:	Electrical Safety Policy V4.0
Department and Service Area:	Estates and Facilities
Is this a new or existing document?	Existing
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Bob Davies, Senior Estates Manager (Electrical)
Contact details:	01872 253400

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	Aim is to provide electrical safety direction for all staff and contractors.
2. Policy Objectives	To ensure the adequate control and management of electrical works and to ensure adequate risk assessment and risk control.
3. Policy Intended Outcomes	To ensure the safety of all persons at the RCHT in relation to Electrical Safety.

Information Category	Detailed Information
4. How will you measure each outcome?	To ensure that staff and contractors have the knowledge and understanding of the risks, mitigation and safety of Electrical activity.
5. Who is intended to benefit from the policy?	Audit and review process.
6a. Who did you consult with? (Please select Yes or No for each category)	- Workforce: Yes - Patients/visitors: No - Local groups/system partners: No - External organisations: Yes - Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	Please record specific names of individuals/ groups: Estates and Facilities Performance and Governance Group Electrical Safety Group Authorising Engineer (Electrical)
6c. What was the outcome of the consultation?	Agreed
6d. Have you used any of the following to assist your assessment?	National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys: No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Bob Davies, Senior Estates Manager (Electrical)

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:

[Section 2. Full Equality Analysis](#)