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| Electrical Safety Policy | Type: Policy Register No: 09087 Status: Public |
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| Developed in response to: | HTM 06, HASAWA, IET wiring Regs, HVCA, H.S.E.City & Guilds 2391 |
| Contributes to CQC Outcome | Regulation 15 - Premises and equipment |

| Consulted With | Post/Committee/Group | Date |
|-----------------------------------|---|--------------|
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| Professionally Approved By | Carin Charlton, Chief Estates & Facilities Director | October 2017 |

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| Author/Contact for Information | Ian Jackson, Principal Engineer |
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| 2.0 | Chris Churchouse | August 2011 |
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1. Purpose

- 1.1 The purpose of this policy is to ensure the provision of safe electrical equipment which is insulated, earthed or otherwise suitably protected, thereby ensuring the safety of the user.

2. Introduction

- 2.1 The Health and Safety at Work Act 1974, the Management of Health and Safety at Work Regulations 1992 and the Electricity at Work Regulations 1989 place a duty on Mid Essex Hospital Services NHS Trust to publish, issue and implement an Electrical Safety Policy which outlines the organisation and procedures required to achieve the objectives set out in those legislative documents.
- 2.2 The Trust regards Health and Safety as matters of prime importance which are to be given an equal priority with other business and operating objectives and will ensure so far as is reasonably practicable that the electrical safety of employees at work, patients and other persons is not adversely affected by any of Trust operational activities.
- 2.3 The Trust recognises that the lowest acceptable standards of electrical safety are contained in legislation and it is the aim of the Trust as an organisation committed to quality performance to improve upon these standards.
- 2.4 The Trust is committed to the safe operation of all the electrical systems for which it has a responsibility, by implementing the requirements of:
- Health Technical Memorandum 06-02 – Electrical Safety Code for Low Voltage Systems)
 - Health Technical Memorandum 06-03 – Electrical Safety Code for High Voltage Systems)
- 2.5 The Trust regards electrical safety at work as also being a responsibility of every employee in order to safeguard themselves, their colleagues and other persons within the sphere of the Trusts' interests.
- 2.6 The Trust proposes to continue to promote and develop a proactive electrical safety regime by providing information, training and instruction for all employees together with safe workplace procedures and rigorous maintenance routines for all electrical equipment.
- 2.7 The Trust review procedures for health and safety matters, identification of hazards and elimination of risks shall also take account of the electrical systems, with the safety codes' guidance, to ensure compliance with statutory legislation.
- 2.8 The effectiveness of the Electrical Safety Policy and Procedures depends to a large extent on the full cooperation and active participation of all employees to implement safe work practices and to report on any perceived risk of danger arising from the use of the electrical system and equipment.

3. Aim

- 3.1 The aim of the policy is to ensure that the Trust complies with the relevant legislation on electrical safety, to minimise the risk to staff, patients, visitors and contractors when using electrical appliances or working on electrical infrastructure on all Trusts premises.

4. Scope

4.1 This policy applies to all Trust premises and staff.

4.2 This electrical safety policy will apply wherever any Trust employees are working and to all Trust electrical equipment, wherever it is located.

5. Roles & Responsibilities

5.1 Duty Holder

5.1.1 The Chief Executive, who has overall responsibility for ensuring that the Trust premises comply with all statutory requirements, also has an overriding duty of care as the Duty Holder under the Health and Safety at Work etc Act 1974.

5.2 Designated Person

5.2.1 The Designated Person, appointed by the Chief Executive, who has the overall authority and responsibility for the electrical systems within the Trust premises and has a duty under the Health and Safety at Work etc Act 1974 to prepare and issue a general policy statement on health and safety at work including the organisation and arrangements to carry out that policy.

5.3 Authorising Engineer

5.3.1 The Authorising Engineer is appointed in writing to implement, administer and monitor the safety arrangements for the high voltage and low voltage electrical systems. He/she shall ensure compliance with statutory legislation and assess the suitability and appointment of candidates in writing to be Authorised Persons.

5.3.2 The Authorising Engineer shall be a Chartered Electrical Engineer for the high voltage electrical system and either a Chartered Engineer or an Incorporated Electrical Engineer for the low voltage systems. Each will have appropriate experience and possess the necessary degree of independence from local management. The Authorising Engineer shall:

- Appoint in writing sufficient Authorised Persons to provide the necessary cover for all the electrical systems and equipment.
- Define the extent of the systems for which each Authorised Person/s is responsible.
- Suspend or cancel the appointment of an Authorised Person/s, if deemed necessary.
- Maintain a register of all Authorised Person/s.
- Ensure that Authorised Person/s have the necessary qualifications, training, experience and knowledge of the systems and equipment to carry out the role.

5.4 Authorised Persons

5.4.1 The Authorised Person/s shall be a nominated individual who possesses adequate technical knowledge, has received appropriate training and has been appointed in writing by the Authorising Engineer to be responsible for the practical implementation and operation of management's safety policy and procedures on defined electrical systems.

5.4.2 **Authorised Person/s** shall:

- be responsible for the practical implementation of the electrical safety policy.
- be responsible for the preparation of inspection, maintenance and safety programmes.

- be responsible for maintaining and updating all relevant system records
- have responsibility for the appointment of Competent Person/
- have responsibility for establishing procedures for switching operations where inherent risks exist for patients, employees and other workers
- have responsibility for ensuring that test equipment is maintained in safe working order
- have responsibility for the issue and cancellation of safety documents
- cooperate with the authorising engineer on safety policy matters
- report any dangerous or unusual occurrences to the Designated Person

5.5 **Competent Person/s**

5.5.1 Competent Person/s are craftsmen, who, in the opinion of the Authorised Person/s have sufficient technical knowledge, training and experience to prevent danger while carrying out work on defined electrical systems.

5.6 **Skilled Person/s**

5.6.1 Skilled persons are individuals who have received the necessary training and have the necessary knowledge and experience to prevent danger while engaged in work in secure areas of electrical distribution or equipment.

5.7 **Competent Person/s and Skilled Person/s**

5.7.1 Competent Person/s and Skilled Person/s shall:

- be responsible for undertaking tasks on electrical systems, which have been clearly defined, by agreement in the Authorised Person/s instructions.
- ensure that all safety measures are taken to avoid injury and prevent danger during the course of any work on the systems.

6. **Operational System**

6.1 **Operating Systems**

6.1.1 All work on the electrical systems and equipment is to be carried out under the safety procedures which are formalised as written instructions and safety rules, as appropriate.

6.1.2 The safety procedures are to be subject to annual review with regard to safe working practices and the competence of staff for their assigned duties.

6.1.3 Programmed work and testing on the electrical systems is only to be carried out under formal safety documentation procedures using written instructions and safety rules.

6.1.4 Where the programmed work is on a complex electrical system, the prepared safety programme shall be countersigned by another Authorised Person for the system, prior to the work being carried out.

6.1.5 Safety programmes and safety documentation are to be retained on file for a period of three years after completion of the work referred to in the documents.

6.1.6 Persons undertaking work on the systems must be capable of carrying out the duties assigned to them in a safe manner, without the risk to others and with respect to these duties, they must have:

- adequate knowledge of the technicalities of electricity.
- sufficient experience of similar work on electrical systems.
- detailed knowledge of the equipment to be worked on.
- an understanding of the hazards which can arise during the work and the precautions which need to be taken.
- the ability to recognise at all times whether it is safe for work to continue.

6.1.7 Each of these requirements is of equally importance and should be carefully weighed when persons are to be appointed to carry out duties under the safety procedures.

6.2 Installation

6.2.1 All new fixed electrical systems and equipment must be checked and tested for electrical safety by a competent person before being taken into use. This may be carried out by an approved electrical contractor (those who are registered with the National Inspection Council for Electrical Installation Contracting or a member of the Electrical Contractors Association) and an electrical test certificate issued to the Project Supervisor, or an electrician from the Estates Department (who has gained the City & Guild 2391 qualification). The Head of Maintenance must be consulted. Any arrangements necessary for installation checks will be made by the Estates Department.

6.3 Inspection and Testing

6.3.1 All fixed electrical plant and installation (s) must be routinely inspected and tested, in accordance with current legislation and good electrical practice. All 'portable' equipment i.e. Hand held equipment that is connected to the electricity supply with a plug, and Moveable equipment that is 18 kgs or less and is not fixed or, equipment with wheels, castors or other means to facilitate movement by the operator as required must be inspected and/or tested at installation and thereafter determine by process of risk assessment. Records of the portable electrical testing (PAT) inspections must be managed and kept by Estates Department. This includes electrical devices brought into the hospital by patients and staff.

6.3.2 In between recorded checks, users must regularly carry out a visual inspection and report any perceived defect.

6.3.3 The appropriate manager from each area of the Trust must ensure that a comprehensive list of portable electrical equipment is kept, updated and available at time of inspection.

6.3.4 After the recorded check, and repair if necessary, the checker must attach to the equipment a label saying **Tested for Electrical Safety** and insert the date that the test is next due.

6.3.5 Equipment found with no label or a label which is overdue must not be used in any circumstances. The manager must then organise a test of that equipment.

6.4 Use (General)

- Those in charge of work involving the use of electricity must ensure that the equipment is safe to use and adequately maintained.
- They must ensure that those under their supervision are fully informed, instructed and, if necessary, trained in the safe operation of the equipment.
- They must ensure that measures are in place to prevent the use of defective equipment.
- They must ensure that equipment without a current test certificate is not used.

6.5 Live Working

- Work on or near live conductors shall only be permitted in exceptional circumstances and only when a live working permit (see Appendix 1) has been issued by an Electrical Authorised Person. In all other circumstances live working shall be strictly forbidden.
- Routine testing and adjustment of control circuits is permitted if a Risk Assessment proves that minimal hazards exist and are acceptable. The following requirements still apply:
 - No working alone;
 - Only trained, qualified and skilled persons are used to carry this out;
 - Evaluation of potential area hazards must take place to ensure safe working conditions;
 - A suitable communication device is available to summon help in an emergency.

6.6 Drawings

It is the responsibility of the Authorised Persons to keep the electrical drawing up to date and ensure all drawings and supplier information is handed over with every electrical alterations / projects.

6.7 Incident Reporting

- 6.7.1 Any incident which involves the electrical system and which compromises safety must be reported using the Trust Risk Assessment Form in accordance with the Trust Risk Policy, in the first instance to the Estates Services Department, who will inform the Authorised Person for the system and who in turn will determine what action is to be taken to prevent any risk or danger arising from the reported equipment.
- 6.7.2 All reported incidents are to be investigated by the Designated Person and a written record of the incident and action taken is to be filed in the system log book and the operational procedures manual.
- 6.7.3 The reporting of injuries or dangerous occurrences under the reporting of Injuries, Diseases and Dangerous Occurrence Regulations 2013 (RIDDOR), will be acted upon, as required, by the Designated Person.

6.8 Review

- 6.8.1 This Electrical Safety Policy and Procedures are to be formally reviewed annually by the Designated Person/ Authorised.

7. Monitoring

- 7.1. The monitoring of the Policy will be through monitoring the Trust Risk Event reporting procedure and subsequently through Health & Safety Group reporting.

8. Training

- 8.1 Training is an essential element of safe work practices and all staff must be appropriately trained, prior to being appointed or instructed to undertake duties under the safety procedures.
- 8.2 The training of an individual, which can be by formal education and by on-the-job tuition, as appropriate, is to be assessed for suitability by the person responsible for the appointment of the individual to a particular duty.
- 8.3 Examination of each person's training record is to be included in the procedures review process and where necessary, periodic retraining is to be arranged to cover the technical aspects, electrical safety and first aid matters, as appropriate for each individual's duties.
- 8.4 Records of all training activities are to be held in the operational procedures manual for each particular system. This will include the records of each individual who has received the necessary training appropriate to the duties to be undertaken.

9. Communication & Implementation

- 9.1 The policy will be made available on the Trust's intranet and website by the Estates Department. The Principal Engineer will be responsible for issuing copies to senior operational managers for them to disseminate within their wards and departments.
- 9.2 The Head of Maintenance will be responsible for ensuring all Estates staff read and fully understand the policy and is read in conjunction with the Control of Contractors Policy.
- 9.3 The PFI (Bouygues) Contract Manager for Broomfield hospital and PFI Grosvenor FM Estates Manager Braintree community hospital will be responsible for ensuring all PFI Estate staff read and fully understand the policy and is read in conjunction with the Control of Contractors Policy.
- 9.4 The approved policy will be notified in the Trust's Staff Focus that is sent via e-mail to all staff.

10. Equality & Diversity

- 10.1 The Trust is committed to the provision of a service that is fair, accessible and meets the needs of all individuals.

11. References

Health Technical Memorandum HTM 06 01, 02 & 03

Electricity at Work Regulations 1989 HSE Guidance HSR25 (Third edition)

Model safety programmes and documents – Live-Working Permit

Front - original

**Certificate of authorisation
for live working**

(Complete precisely and legibly in BLOCK CAPITALS)

Serial No

Location

Part 1: Issue

Issued to:

I hereby authorise the above-named authorised or competent person to work on the low voltage electrical equipment specified below whilst it is **live** but only if accompanied by one or more members of the working party while the work is in progress.

| | |
|--|--|
| Working Part members | |
| Location of equipment | |
| Details of equipment to be worked on | |
| Precautions to be taken, for example rubber gloves, mats, insulated tools, screening etc | |
| Details of work to be undertaken live | |

No other works shall be carried out

Authorised Person

Signed _____ Time _____ Date _____

Note: the back of the original of this form is blank

Back - copy

Part 2: Receipt

I hereby declare that I accept responsibility for carrying out the work on the electrical equipment as detailed on this Certificate of authorisation for live working and fully understand the precautions to be taken..

Signed _____ Status _____
Time _____ Date _____

Part 3: Clearance

I hereby declare that the work for which this Certificate of authorisation for live working was issued is now suspended/completed* and that all persons under my charge have been withdrawn, all gear, tools etc have been removed and the electrical equipment has been left in a safe condition.

Signed _____ Status _____
Time _____ Date _____

Reason for suspending work and action taken (if applicable)

**Delete as appropriate*

Part 4: Cancellation

This Certificate of authorisation for live working is hereby cancelled. The original has been returned to me and destroyed in the presence of the signatory to Part 3.

Signed _____ Authorised Person _____
Time _____ Date _____