

Electrical Safety

Target Audience				
Who Should Read This Policy	 Mental Health	 Learning Disabilities	 Children, Young People & Families	 Corporate
All Trust Staff	✓	✓	✓	✓
Contractors	✓	✓	✓	✓



Honesty and Transparency

Integrity

Empowerment

Compassion & Kindness

Dignity & Respect

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Explanation of terms used in this policy

Low Voltage (LV) - A potential not exceeding 1000V ac or 1500V dc between conductors, or 600V ac or 900V dc between a conductor and earth

High voltage (HV) - A potential normally exceeding low voltage

Portable Electrical Equipment - An item of equipment which is not part of a fixed installation but is, or is intended to be, connected to a fixed installation, or a generator, by means of a flexible cable and a plug and socket

1.0 Introduction

This Policy sets out the commitment of Black Country Partnership NHS Foundation Trust (hereafter referred to as the Trust) to provide a safe and secure environment for service users, visitors and staff. It applies to all persons who have access to, use of, or are responsible for the maintenance of Trust occupied premises.

It is important that electrical systems function safely and correctly, have adequate protection and do not exceed 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.

This Policy applies to all persons (service users, staff, members of the public and contractors) who may be affected by the use of electricity in Trust occupied premises or by the use of Trust's electrical equipment in these premises. It also applies to all activities associated with electricity when employees and/ or contractors undertake works at Trust occupied premises.

2.0 Purpose

The purpose of this policy is to enhance the safety of all employees, patients and visitors with respect to electrical systems and equipment by making all employees aware of their responsibilities and duties under the Electricity at Work Regulations.

3.0 Objectives

The combined objectives of this policy are to ensure:

- Continued availability of supply
- Integrity and safety in design
- Good installation and commissioning practice
- Adequate maintenance and safe systems of use

4.0 Process

The Trust and its management have a duty, so far as is reasonably practicable; to ensure that there is a management regime for the proper design, installation, and operational management of electrical plant, equipment and systems.

The Trust has a number of different arrangements in relation to the properties that they occupy.

The accountability for the management of electrical systems is devolved to the organisation with overall control of the building. These can be categorised as follows:

- Properties managed by other organisations - other NHS organisations, Local Authorities, private landlords
- properties managed by the Trust

For Properties managed by other organisations the Trust has devolved the management of the electrical systems to its host organisations, under a Service Level Agreement, Section 75 Agreement, or occupation agreement. The Trust, however, retains a duty of care in relation to the management of the electrical systems.

4.1 Written Scheme

The Written Scheme in place on each site should be established and ratified by the nominated Authorised Persons. Minimum maintenance levels to be included in these schemes are outlined below:

4.1.1 Low Voltage Fixed Equipment

The recommendations of the Department of Health's publication "HTM06-02 Electrical Safety Guidance for Low Voltage Systems" should be adopted as the method of achieving the legal requirements for electrical safety on low voltage systems. All low voltage equipment (e.g. ventilation systems, industrial boiler plant, lifts, industrial compressors etc.) shall be regularly inspected, serviced and tested to ensure it is maintained in a safe and serviceable condition. Test periods shall not exceed 12 months. A record of maintenance of electrical equipment shall be kept by the appropriate party and will contain details of inspections, routine servicing, and any repairs and modifications.

4.1.2 Low Voltage Switchgear

The recommendations of the Department of Health's publication "HTM06-02, Electrical Safety Guidance for Low Voltage Systems" should be adopted as the method of achieving the legal requirements for electrical safety on low voltage systems. All low voltage switchgear will be maintained to ensure its safety and operational capability is maintained. The test period shall not exceed 5 years.

4.1.3 High Voltage Equipment Maintenance

The Trust has adopted the Department of Health's publication "HTM06-01 and HTM06-01 Part B, Electrical Services Supply & Distribution" and its method of achieving a safe system of work on its HV systems. When establishing the maintenance regimes the Authorised Person must take into account the duty imposed on the equipment, the environmental conditions and the manufacturer's recommendations. All new high voltage work shall be fully commissioned and tested to ensure it functions correctly and to specification.

4.1.4 Standby Emergency Generators

All fixed low voltage emergency generators shall be maintained, tested and fuelled to ensure their correct operation in the event of a mains failure.

Each generator shall be tested on load at locally agreed periods.

4.1.5 Portable Electrical Equipment

All portable electrical equipment shall be maintained in a safe condition in accordance with the requirements of the Electricity at Work Regulations 1989. This will be achieved through a combination of User Checks, Formal Visual Inspections and Combined Inspection and Testing:

4.1.5.1 User Check

The primary responsibility for day-to-day safety of portable equipment when in service lies with the user(s). Any person using portable electrical equipment shall, before using it, personally check that the equipment, including the flexible cable and plug top, is free from mechanical damage and that a date test label is attached and a valid date shown.

Visual signs that the equipment is not in a sound condition may include:

- Damage (apart from light scuffing) to the cable sheath
- Damage to the plug, for example the casing is cracking or the pins are bent
- Inadequate joints, including taped joints in the cable
- The outer sheath of the cable is not effectively secured where it enters the plug or the equipment. Obvious evidence would be if the coloured insulation of the internal cable cores were showing
- The equipment has been subjected to conditions for which it is not suitable, e.g. it is wet or excessively contaminated
- There is damage to the external case of the equipment or there are some loose parts or screws
- There is evidence of overheating (burn marks or discoloration)
- These checks also apply to extension leads and associated plugs and sockets

4.1.5.2 Formal Visual Inspections

These inspections should be carried out by the user as part of the annual Health and Safety Inspection. This involves inspecting the casing, the connecting lead and the plug. The findings of the inspections must be recorded.

4.1.5.3 Combined Inspection and Testing

This needs to be carried out by a competent person and involves an Earth Continuity Test, an Insulation Resistance Test and a Load Test. The maintenance regime should be appropriate for the environment and use of the equipment. On sites where there is a service level agreement in place with a Host Trust or other third party this will be at a frequency agreed locally.

On sites where the Trust are responsible for arranging the combined inspection and testing the frequency at which tests are carried out will range between 12-48 months (see HSE INDG 236).

4.1.5.1 Defective Equipment

Any defective equipment must not be used. Upon detection of a defect the equipment should be labelled as defective. If the defect is detected on a piece of IT equipment the Trust's IT department should be notified.

If the defect is detected on any other equipment it should be logged with the organisation that is managing the site.

4.1.5.5 Modification/ Repair

Equipment which has been modified or repaired shall be tested prior to being returned to service.

4.1.6 Information, Instructions and Training

Arrangements must be made to ensure:

- That all employees concerned with particular work activities are adequately informed of the systems, plant and apparatus which are affected and instructed in all necessary safety procedures
- So 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

4.1.7 Reporting of Accidents and Dangerous Occurrences

Staff and contractors employed by the Trust must comply with the Trusts' Policy on the reporting of accidents and dangerous occurrences. The Incident Reporting Policy and Standard Operating Procedures meet the Trust's legal obligations to report all accidents, injuries, dangerous occurrences and reportable diseases. Such events may involve Trust employees, contractors, service users, visitors and other members of the public.

5.0 Procedures connected to this Policy

There are no procedures connected to this policy.

6.0 Links to Relevant Legislation

Health and Safety at Work Act 1974

This Act is the major piece of health and safety legislation in Great Britain. The Act introduced a comprehensive and integrated system to deal with workplace health and safety and the protection of the public from work activities.

The Act places general duties on employers, employees, self-employed, manufacturers and importers of work equipment and materials. Responsibilities are placed to produce solutions to health and safety problems, which are subject to the test of reasonable practicability.

Various regulations are made under the Act, which have the same scope, many of these evolving from European Directives, which enables the potential to achieve clear and uniform standards.

Electricity at Work Regulations 1989

The Electricity at Work Regulations 1989 were made under the HSAWA 1974 act; this duty of care whilst at work also applies to the use of electrical supplies, services and equipment in the course of normal work activities. The Electricity at work Regulations require particular precautions to be taken against the risk of death or personal injury from electricity in work activities.

6.1 Links to Relevant National Standards

British Standard (BS) 7621 Requirements for Electrical Installations

BS 7671 (the IET Wiring Regulations) sets the standards for electrical installation in the UK and many other countries. The IET co-publishes the Regulations with the British Standards Institution (BSI) and is the authority on electrical installation.

CQC Regulation 15: Premises and Equipment

The intention of this regulation is to make sure that the premises where care and treatment are delivered are clean, suitable for the intended purpose, maintained and where required, appropriately located, and that the equipment that is used to deliver care and treatment is clean, suitable for the intended purpose, maintained, stored securely and used properly. Providers retain legal responsibility under these regulations when they delegate responsibility through contracts or legal agreements to a third party, independent suppliers, professionals, supply chains or contractors. They must therefore make sure that they meet the regulation, as responsibility for any shortfall rests with the provider.

Where the person using the service owns the equipment needed to deliver their care and treatment, or the provider does not provide it, the provider should make every effort to make sure that it is clean, safe and suitable for use.

6.2 Links to other Key Policies

Incident Reporting Policy

The purpose of this policy is to make clear the system used for reporting incidents involving patients, staff and others undertaking activities on behalf of the Trust.

6.3 References

- HTM 06-02 Electrical Safety Guidance for Low Voltage Systems
- HTM 06-01 Part a Electrical Services Supply & Distribution (Design)
- HTM 06-01 Part b Electrical Services Supply & Distribution (Operational Management)
- Maintaining Portable Electrical Equipment in Offices and Other Low Risk Environments, HSE INDG 236
- 18th Edition IEE Wiring Regulations BS7671

7.0 Roles and Responsibilities for this Policy

Title	Role	Key Responsibilities
Employees	Adherence	<ul style="list-style-type: none"> - Ensure that appropriate maintenance and adherence to guidance is delivered by alerting authorised/ authorising officers of concerns/ issues arising
Contractors	Adherence	<ul style="list-style-type: none"> - Competent and be responsible for ensuring that they, and any subcontractor reporting to them, carry out their activities in a way that complies with this Policy - Ensure all work undertaken on sites occupied by the Trust comply with the requirements of the 17th Edition IEE Wiring Regulations BS7671 - Complete Minor Electrical Installation Works Certificates in line with the requirements of 17th Edition BS7671
Competent Persons	Operational	<ul style="list-style-type: none"> - Operate, maintain, inspect and test low voltage electrical systems in a safe and effective manner (These people should be contractors and trades staff who have received adequate training and have sufficient experience) - Ensure that all procedures, safe working practices, risk assessments and permits to work are followed and that written records for maintenance, inspection and test work are completed - Prompt reporting of all defects, unusual occurrences and other anomalies - Work with appropriate parties to identify hazards and reduce risks by following safe working practices - Inform users of any planned interruptions to the electrical supply - Competent Person(s) relating to properties, whose electrical systems are managed by others, under Service Level Agreements, Section 75 Agreements, or accommodation agreements, shall be appointed by the relevant managing organisation
Estates Manager/ Officer	Operational	<ul style="list-style-type: none"> - Liaise with Authorised Persons for the design, installation and commissioning of electrical systems and equipment - Ensure that as fitted, schematic diagrams of all modified or new electrical systems and equipment are provided to the Authorised Persons and ensuring that copies of commissioning results, maintenance and test instructions and details of any specific hazards pertaining to the systems and equipment are also provided - Ensure that adequate spares are provided on initial handover of schemes
Authorised Person – Electrical (High/Low Voltage)	Operational	<ul style="list-style-type: none"> - Control and manage HV/LV electrical systems including standby generator sets associated with buildings that the Trust retain the responsibility to manage - Practical implementation of maintaining, testing and inspecting all systems - Liaise with all necessary parties and provide any information to enable the Policy to be fully implemented - Possess adequate knowledge, sufficient experience and have received the necessary training within this field - Approve electrical contractors to undertake work for the Trust (all contractors used on site must be approved).The ability of a contractor to safely undertake the required work shall be the prime consideration when appointment to the “approved list” is being considered. The following factors should be considered: qualifications and training of employees; technical references from previous clients insurance cover; Safety Policy
Trust Service Leads/Managers	Implementation	<ul style="list-style-type: none"> - Ensure that all staff are made aware of and observe the requirements of this Policy
Head of Estates and Facilities	Implementation Lead	<ul style="list-style-type: none"> - Manage electrical safety for the Trust (delegated from Director of Finance and Estates) - Provide assurance to the Trust Board regarding compliance with statutory legislation

Title	Role	Key Responsibilities
Authorising Engineer – High Voltage	Specialist Advice	<ul style="list-style-type: none"> - Advise on safety arrangements for defined high voltage electrical systems - Assess the suitability and appointment of all Authorised Persons – Electrical - Appoint in writing Authorised Persons to control and manage HV electrical systems including standby generator sets associated with buildings that the Trust retain the responsibility to manage (ideally Senior Estates Officers or of a similar status)
Authorising Engineer – Low Voltage	Specialist Advice	<ul style="list-style-type: none"> - Advise on safety arrangements for defined low voltage electrical systems - Assess the suitability and appointment of all Authorised Persons – Electrical - Appoint in writing Authorised Persons to control and manage LV electrical systems including standby generator sets associated with buildings that the Trust retain the responsibility to manage (ideally Senior Estates Officers or of a similar status)
Designated Person	Responsible	<ul style="list-style-type: none"> - Possess adequate professional knowledge (this person will be appointed in writing by the Head of Estates and Facilities) - Devise and manage the procedures necessary to ensure that electrical safety within the Trust is well managed - Liaise closely with other professionals in various disciplines - Review personnel arrangements in place in Host Trust/ Organisations with responsibility for maintaining electrical systems in buildings occupied by the Trust - Review the systems and controls in place including training needs, communications, permits to work and emergency procedures in Host Trust/ Organisations whose building the Trust occupy - Ensure the personnel arrangements in place in the Trust are suitable and sufficient - Review the systems and controls in place including training needs, communications and permits to work in the Trust - Appoint in writing an Authorising Engineer (AE) for the low voltage systems that are maintained by the Trust (this person will ideally be a Chartered Electrical Engineer and will be independent of the Trust) - Appoint an Authorising Engineer (AE) for the high voltage systems associated with buildings that the Trust retain the responsibility to manage (the Authorising Engineer will ideally be a Chartered Electrical Engineer and will be independent of the Trust) - Review the arrangements in place for the appointments of the Authorising Engineer for properties managed by other organisations, assuring that the appointed person(s) have the appropriate qualifications/experience
Director of Finance and Estates	Executive Lead	<ul style="list-style-type: none"> - Duty Holder on whom the Electricity at Work Regulations 1989 imposes a duty relating to safety (this responsibility is delegated from the Chief Executive) - Lead responsibility for the implementation of this policy - Ensure allocation of resources to support the implementation of this policy - Ensure any serious concerns regarding the implementation of this policy are brought to the attention of the Board of Directors
Chief Executive	Accountable	<ul style="list-style-type: none"> - Ensure compliance with statutory legislation, Approved Codes of Practice and Department of Health requirements regarding electrical safety - Ensure appropriate funds are available to carry out capital and revenue works

8.0 Training

What aspect(s) of this policy will require staff training?	Which staff groups require this training?	Is this training covered in the Trust's Mandatory and Risk Management Training Needs Analysis document?	If no, how will the training be delivered?	Who will deliver the training?	How often will staff require training	Who will ensure and monitor that staff have this training?
Competent Persons Course in compliance with HTM 06-02	Competent Persons employed directly by the Trust	No, staff will receive specific training in relation to this policy where it is identified in their individual training needs analysis as part of their development for their particular role and responsibilities	Externally and assessed by Authorised Person	External Approved Training Provider	Every three years	Designated Person
Competent Persons Course in compliance with HTM 06-02	Competent Persons contracted to the Trust	No, staff will receive specific training in relation to this policy where it is identified in their individual training needs analysis as part of their development for their particular role and responsibilities	Externally and training record and themselves are assessed by Authorised Person	External Approved Training Provider	Reviewed at the Authorised Persons discretion, but with a maximum period of 3 years	Designated Person
Training as per the requirements of the HTM 06-02 and 06-03	Authorised Persons	No, staff will receive specific training in relation to this policy where it is identified in their individual training needs analysis as part of their development for their particular role and responsibilities	Externally	External Approved Training Provider	Every three years	Designated Person
First Aid Training as per the HTM 06-02 and 03 requirements	All Persons working on the electrical system	No, staff will receive specific training in relation to this policy where it is identified in their individual training needs analysis as part of their development for their particular role and responsibilities	Externally	External Approved Training Provider	Every three years	Designated Person

9.0 Equality Impact Assessment

Black Country Partnership NHS Foundation Trust is committed to ensuring that the way we provide services and the way we recruit and treat staff reflects individual needs, promotes equality and does not discriminate unfairly against any particular individual or group. The Equality Impact Assessment for this policy has been completed and is readily available on the Intranet. If you require this in a different format e.g. larger print, Braille, different languages or audio tape, please contact the Equality & Diversity Team on Ext. 8067 or email bcpft.equalityimpactassessment@nhs.net

10.0 Data Protection and Freedom of Information

Data Protection Act provides controls for the way information is handled and to gives legal rights to individuals in relation to the use of their data. It sets out strict rules for people who use or store data about individuals and gives rights to those people whose data has been collected. The law applies to all personal data held including electronic and manual records. The Information Commissioner's Office has powers to enforce the Data Protection Act and can do this through the use of compulsory audits, warrants, notices and monetary penalties which can be up to €20million or 4% of the Trusts annual turnover for serious breaches of the Data Protection Act. In addition to this the Information Commissioner can limit or stop data processing activities where there has been a serious breach of the Act and there remains a risk to the data.

The Freedom of Information Act provides public access to information held by public authorities. The main principle behind freedom of information legislation is that people have a right to know about the activities of public authorities; unless there is a good reason for them not to. The Freedom of Information Act applies to corporate data and personal data generally cannot be released under this Act.

All staffs have a responsibility to ensure that they do not disclose information about the Trust's activities; this includes information about service users in its care, staff members and corporate documentation to unauthorised individuals. This responsibility applies whether you are currently employed or after your employment ends and in certain aspects of your personal life e.g. use of social networking sites etc. The Trust seeks to ensure a high level of transparency in all its business activities but reserves the right not to disclose information where relevant legislation applies. The Information Governance Team provides a central point for release of information under Data Protection and Freedom of Information following formal requests for information; any queries about the disclosure of information can be forwarded to the Information Governance Team.

11.0 Monitoring this Policy is Working in Practice

What key elements will be monitored? (measurable policy objectives)	Where described in policy?	How will they be monitored? (method + sample size)	Who will undertake this monitoring?	How Frequently?	Group/Committee that will receive and review results	Group/Committee to ensure actions are completed	Evidence this has happened
Effectiveness of Electrical Safety Policy	4.1 Written Scheme	Inspection and testing	Estates and Facilities Department	As required	Health and Safety Committee	Health and Safety Committee	Minutes of meetings/ Action plans

Policy Details

Title of Policy	Electrical Safety Policy
Unique Identifier for this policy	BCPFT-EST-POL-01
State if policy is New or Revised	Revised
Previous Policy Title where applicable	n/a
Policy Category Clinical, HR, H&S, Infection Control etc.	Estates and Facilities
Executive Director whose portfolio this policy comes under	Director of Finance and Estates
Policy Lead/Author Job titles only	Head of Estates and Facilities
Committee/Group responsible for the approval of this policy	Health and Safety Committee
Month/year consultation process completed *	n/a
Month/year policy approved	April 2019
Month/year policy ratified and issued	May 2019
Next review date	March 2022
Implementation Plan completed *	Yes
Equality Impact Assessment completed *	Yes
Previous version(s) archived *	Yes
Disclosure status	'B' can be disclosed to patients and the public
Key Words for this policy	Written scheme, Low voltage fixed equipment, High voltage equipment maintenance, Standby emergency generators, Portable electrical equipment, User check, Formal Visual Inspections

* For more information on the consultation process, implementation plan, equality impact assessment, or archiving arrangements, please contact Corporate Governance

Review and Amendment History

Version	Date	Details of Change
1.1	Mar 2019	Policy fully reviewed with minor amendment made was to section 6.3, references 17th edition IEE wiring regulations BS7671 updated to 18th edition.
1.0	Jan 2016	New policy for BCPFT