

Management of Building/Premises Ventilation Systems

This Policy outlines the Trust's management arrangements for Ventilation Systems within its properties including operational procedures to ensure it meets its statutory obligations.

	I			
Key Words:	Ventilation			
Version:	3			
Adopted by:	Quality Assurance	ce Committee		
Date Adopted:	17 September 20	019		
Name of Author:	Health and Safet	Health and Safety Compliance Team		
Name of responsible committee:	Health & Safety Committee			
Date issued for publication:	November 2022			
Review date:	April 2023			
Expiry date:	February 2024			
Target audience:	All staff			
Type of Policy	Clinical Non Clinical $\sqrt[]{1}$			
Which Relevant CO Fundamental Stand				

Version Control and Summary of Changes

Version number	Date	Comments (description change and amendments)
1	June 2014	Harmonised Policy
2	March 2016	Policy extended due to no legislative updates or changes to arrangements
3	September 2019	Reference to Interserve and LLRFMC removed. Document formatted to current Trust format

All LPT Policies can be provided in large print or Braille formats, if requested, and an interpreting service is available to individuals of different nationalities who require them.

Did you print this document yourself?

Please be advised that the Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version.

For further information contact:

Health and Safety Compliance Team 0116 295 1662 <u>healthandsafety@leicspart.nhs.uk</u>

Management of Ventilation Systems

Contribution List:

Key Individuals involved in reviewing the document

Name	Designation
Health and Safety Compliance Team	

Circulated to the following individuals for consultation:

Name	Designation
Members of the Health and Safety Committee	Trust agreeing committee
Members of the Divisional Health, Safety and Security Action Groups	Sub-group of the Agreeing Committee

Trust Associated Policies:

All Health & Safety Policies; All Estates & Facilities Policies Water Management Code of practice

Definitions that apply to this Policy

All procedural documents should have a definition of terms to ensure staff have clarity of purpose (refer to Policy for Policies for assistance)

In this Management of Ventilations Systems Policy, unless the context otherwise requires, the following words shall have the following meanings.

Environment	The totality of a patient's surroundings when in healthcare premises. This includes the fabric of the building and related fixtures, fittings and services such as air and water supplies.
Ventilation	A means of removing and replacing the air in a space. In its simplest form this may be achieved by opening windows and doors etc. Mechanical ventilation systems provide a more controllable method. Basic systems consist of a fan and collection of distribution ductwork; more complex systems may include the ability to heat and filter the air passing through them. Ventilation equipment may be required in order to remove smells, dilute contaminants and ensure that a supply of 'fresh' air enters a space.
Air Conditioning	Air-conditioning is the ability to heat, cool, humidify, dehumidify and filter air. This means that the climate within a space being supplied by an air-conditioning plant can be maintained at a specific level regardless of changes in the outside air conditions or the activities within the space. Air-conditioning may be required in order to provide comfort conditions within a space.
Due Regard	 Having due regard for advancing equality involves: Removing or minimising disadvantages suffered by people due to their protected characteristics. Taking steps to meet the needs of people from protected groups where these are different from the needs of other people. Encouraging people from protected groups to participate in public life or in other activities where their participation is disproportionately low.

Contents

Equality	Statement	6
Analysis	of Equality	6
1.0	Introduction	6
2.0	Purpose	7
3.0	Organisational Responsibilities	7
3.1	Designated Person	8
3.2	Responsible Person	8
3.3	Authorised Person (Ventilation System)	8
3.4	Site Lead Person/Appropriate Manager	8
3.5	Employees	9
3.6	Maintenance Manager	9
3.7	Contractors	9
3.8	Patients and Visitors	9
3.9	Authorising Engineer	9 9
3.10	Competent Person	9
4.0	Implementation	10
5.0	Infection Prevention and Control	10
6.0	Maintenance of Ventilation Systems	10
7.0	Records	11
8.0	System Modification and Changes	11
9.0	Training	11
9.1	Training (Estates and Maintenance Staff)	11
9.2	Training (Users/System Operators	12
10.0	Policy Monitoring and Review	12

Appendix A	Ventilation Systems	13
Appendix B	Policy Monitoring Section	14
Appendix C	Policy Training Requirements	16
Appendix D	Due Regard Screening	17
Appendix E	The NHS Constitution	18
Appendix F	Privacy Impact Assessment	19

Equality Statement

Leicestershire Partnership NHS Trust (LPT) aims to design and implement policy documents that meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others.

It takes into account the provisions of the Equality Act 2010 and promotes equal opportunities for all.

This document has been assessed to ensure that no one receives less favourable treatment on the protected characteristics of their age, disability, sex (gender), gender reassignment, sexual orientation, marriage and civil partnership, race, religion or belief, pregnancy and maternity.

In carrying out its functions, LPT must have due regard to the different needs of different protected equality groups in their area.

This applies to all the activities for which LPT is responsible, including policy development and review.

Analysis of Equality

An analysis of equality review found the activity outlined in this policy to be equality neutral.

This policy describes the Trust's health and safety arrangements. The factors within the policy will be taken into account in identifying staff to undergo the required training and may disadvantage on the grounds of disability. Steps being taken and implemented to remove any perceived or actual barriers are that the following factors are and will be taken into account in identifying staff to undergo training.

1.0 Introduction

The Ventilation Systems Management Policy applies to all staff employed by Leicestershire Partnership NHS Trust

The organisation has a wide range of teams and services operating from a large number of properties making up our overall estate. The combination of mix and ageing condition of the estate means that the organisation has a number of properties that contain Ventilation systems of varying types and for various purposes including legal and best practice requirements.

The organisation has made a commitment to manage all of its estates and all tasks carried out within in a safe and appropriate manner to reduce the risk to health of all staff, patients and visitors.

2.0 Purpose

The purpose of this policy is to establish mandatory requirements for the management of Ventilation Systems.

Ventilation is provided in healthcare premises for the comfort and safety of the occupants of buildings. More specialised ventilation will also provide comfort but its prime function will be to closely control the environment and air movement of the space that it serves in order to contain, control and reduce hazards to patients and staff from air borne contaminants, dust and harmful microorganisms.

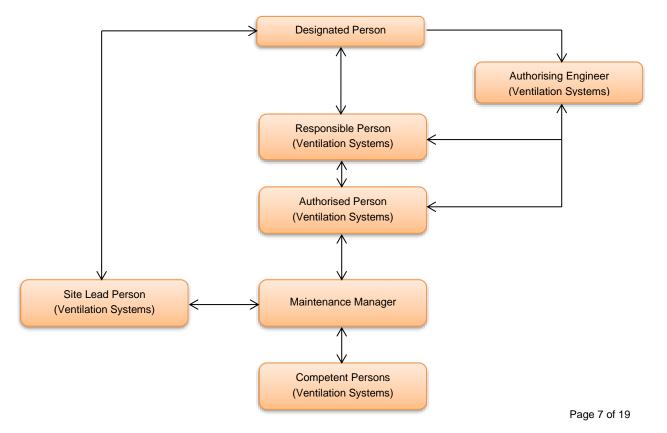
This Policy applies to all premises owned by the Trust or where the Trust holds maintenance responsibilities and to all employees and contractors involved in the construction, management, design, upgrading, refurbishment, extension, maintenance and operation of ventilation plant and equipment.

3.0 Organisational Responsibilities

Everyone is responsible for complying with the organisations arrangements for the management of ventilation systems, including the implementation of local management controls. In order to comply with this policy, all staff must be aware of the lines of communication and levels of responsibility, which exist to ensure that all matters of ventilation systems management are dealt with effectively.

In order to ensure that ventilation systems are managed efficiently within the organisation, the following organisational responsibilities have been allocated.

Management Hierarchy of Responsibility for the management of Ventilation Systems



3.1 Designated Person

The Designated Person shall be the Chief Executive of the Trust. LPT have outsourced the management of their ventilation systems. The contract is a self monitoring contract that is overseen by an informed client (NHS Horizons) acting on behalf of LPT. Contract management/monitoring arrangements are set out in the monitoring section of the policy.

3.2 **Responsible Person (Ventilation Systems)**

The designated Director with responsibility for Estates Management has overall responsibility for all matters relating to ventilation systems management. This responsibility includes ensuring that all ventilation systems management matters are seen as an important priority for the Trust and addressed through comprehensive policies and procedures that are effectively implemented and appropriately resourced within the overall financial position of the Trust.

The designated Director will ensure that financial resources are made available to support this Policy based upon a risk assessment of priorities.

The designated Director has responsibility for ensuring that the aims and objectives of the organisation's Ventilation Systems Management policy are implemented and will nominate a lead officer. The Director with designated responsibility for Ventilation Systems will:

- Publicly endorse the organisation's "Ventilation Systems policy";
- Empower staff to take the necessary actions;

3.3 Authorised Person (Ventilation Systems)

The Authorised Person (AP) shall be an appointed qualified technical engineer who has the key operational responsibility that the Trust complies with its statutory obligations.

The person will be qualified, sufficient experienced and skilled to fully operative the specialist service.

3.4 Site Lead Person/Appropriate Managers (Ventilation Systems)

All managers are responsible for the implementation and monitoring of the policy within their specific area of responsibility, ensuring that:

- Management procedures and safe working practices resulting from them are produced, documented and implemented for their area(s);
- Arrangements with regard to Ventilation Systems are included in induction and regular refresher training for all staff;
- Undertaking regular monitoring and recording their findings;
- Where revalidation/ certification of the performance of a given system is required e.g. local exhaust ventilation then this is undertaken by

competent individuals and provided within the specified / required timescales

3.5 Employees

All employees have an individual responsibility for Ventilation Systems management in line with their duties and working environment. Each employee or agent of the organisation has an individual responsibility to:

- Co-operate with the organisations management in the implementation of this policy;
- Report any poor management of Ventilation Systems to their supervisor/ manager;
- To undergo appropriate training as required.

3.6 Maintenance Manager

Operational Maintenance Managers who are responsible for day to day operational maintenance of LPT properties.

3.7 Contractors

Other employers or individuals providing goods and/or services to the Trust shall be required to comply with Trust policies and procedures with regard to Ventilation Systems management.

Specific requirements for Contractors will be detailed in The Policy for the Control of Maintenance and Construction Activities

3.8 Patients and Visitors

Patients and visitors will be advised of all procedures in place for the Ventilation Systems management and will be expected to comply with all reasonable requests.

3.9 Authorising Engineer (Ventilation Systems)

Authorising Engineers (AE) act as external assessor and is appointed with a brief to provide services in accordance with Health Technical Memorandum guidance. The AE will make recommendations for the appointment of Authorised Persons, monitor the performance of the service, and provide an annual audit report.

3.10 Competent Person (Ventilation Systems)

Trade staff or contractors will have sufficient technical knowledge, training and experience to carry out their defined duties, and to understand fully any dangers involved and will be directed, appointed, or authorised to work (if a contractor), by the Supervisor or Authorised Person (AP) dependant on the

work involved. Maintenance Assistants provide support to this role with direction from more senior grades of staff.

4.0 Implementation

In order to implement this policy effectively there is a need to encourage all staff to play their part in the organisations overall goal. Senior management will be seen to take the lead in implementing and encouraging effective and efficient operation and maintenance of ventilation systems.

5.0 Infection Prevention and Control

It is the responsibility of the Infection Prevention and Control Team to provide input for all matters relating to the hospital environment, maintenance of hospital buildings and engineering systems and to work with the Facilities Management Services Team including:

- Provide education for maintenance staff and management on infection control and reduction in Healthcare Associated Infections (HCAI's)
- Provide guidance and support when advice on controlling the environment is required
- Provide advice on risk assessments for controlling the environment decisions.

6.0 Maintenance of Ventilation Systems

All ventilation air handling units (AHU), plant, ductwork and systems shall be included in the planned preventative maintenance (PPM) system Inspections and maintenance shall be carried out in accordance with the following:

Heating and ventilation systems Health Technical Memorandum 03-01: Specialised ventilation for healthcare premises Part A & B.

Health and Safety Commission's Approved Code of Practice and guidance document

'Legionnaires' disease: the control of Legionella bacteria in water systems' (L8). Health Technical Memorandum 04-01 – 'The control of *Legionella*, hygiene, "safe" hot water, cold water and drinking water systems'.

The general frequency of inspections and verification for ventilation systems shall consist of:

- All ventilation systems are to be subject to a programme of routine inspection and maintenance which shall be as a minimum frequency of annually.
- Ventilation systems serving critical care areas shall be inspected and maintained quarterly with actual performance measured and verified

annually by competent individuals Local Exhaust Ventilation (LEV) systems to be examined and tested every 14 months.

- Annual checks/tests to be carried out in order to demonstrate the continuing efficiency of the fire detection and fire containment equipment/systems/arrangements used within the ventilation system continue to provide the required levels of protection.
- A summary schedule of ventilation systems is shown in Appendix A.

7.0 Records

In order that ventilation systems can be correctly operated and maintained it is essential that "as-fitted drawings", operating manuals, maintenance instructions and commissioning manual are available. Log books should be kept for each ventilation system consisting of maintenance records, test and validation data. Copies of inspection and servicing records should be retained and available for inspection locally.

8.0 System Modification and Changes

When considering building refurbishments and/or the modification of any ventilation system it is essential that these changes do not adversely affect the performance of the rest of the system and the benefits / protection provided to building users. As such careful consideration must be given to this as testing and measurement may be required prior to design and/or works where existing records may not provide the required level of detail.

Where changes are made to ventilation systems all records should be updated as prescribed records section 7.0 of this policy and this must include any new operating parameters/ arrangements, complete with any new automated control strategies.

9.0 Training

A Training needs analysis has been undertaken and this policy has identified specific training requirements.

All training delivered within the Trust will be part of an endorsed model of training relevant for the service area.

The governance group responsible for monitoring the training is Health and Safety Committee.

9.1 Training (Estates and Maintenance Staff)

Personnel carrying out maintenance of Ventilation Systems will receive suitable training which includes information about any significant hazards arising due to their maintenance activities which may either affect them personally or any other person who may be affected by their actions or omissions. Training records shall be kept up to date for all staff. The Estates and Facilities provider will maintain these and make available on request.

Role	Training Requirement
Authorised Person	Ventilation and air conditioning for the
	authorised person (HTM 03)
Competent Person	Ventilation and air conditioning for the
	competent person (HTM 03)
Site Lead Person	Ventilation Systems Overview

9.2 Training (Users/System Operators)

For these systems to be able to perform their intended purpose and be of benefit to the users / occupiers of the various facilities especially where these systems is of a specialist nature (eg lev's and operating theatres) it is essential that the users are aware of how to operate the systems, and how to ensure that the correct environmental conditions are present for any prescribed time prior to commencing with their intended activities.

10.0 Policy Monitoring and Review

This policy shall be reviewed at a minimum frequency of bi-annually. It should also be reviewed when substantial changes occur in the organisational structure of the organisation or property portfolio or when significant changes to legislation occur.

Appendix A – Ventilation systems

Ventilation systems include (but are not restricted to) the following summary:

System / Type Typical Area of Use General (Extract)

- Operating theatres
- Hospital wards and departments
- Toilets
- Bathrooms
- Kitchens
- Mortuary

General (Supply)

- Operating theatres
- Hospital wards and departments
- Office areas

Ultra Clean Ventilation Systems

• Operating theatres

Local Cooling / Refrigeration Units

- Laboratories
- Clinical areas
- Specialist areas

Local Exhaust Ventilation (LEV)

- Operating theatres (exhaled gas)
- Laboratories
- Dental
- Mortuary
- Workshops
- Specialist areas

Fume Cupboards

•

- Pharmacy
- Laboratories

Microbiological Safety Cabinets

• Laboratories

Policy Monitoring Section

NHSLA Criteria Number & Name (if applicable): Where applicable NHSLA duties outlined in the policy will be evidenced through monitoring of the other minimum requirements.

Reference	Minimum Requirements to	Evidence for self	Process for	Responsible	Frequency of
	be monitored	assessment	Monitoring	Individual / Group	monitoring
Not	Authorising Engineers		Quarterly Statutory	Health and Safety	Quarterly /Annually
Applicable	Annual Report		Compliance Report	Committee	
			received into the		
	External review undertaken		Health and Safety		
	and reported on		Committee who		
	compliance presented to		monitor KPIs for		
	NHS Horizons		compliance and		
			performance on behalf		
	Authorised Persons Annual		of LPT for the external		
	Review		facilities management		
			contract		
	Appointment of Authorised				
	Person		Annual Statutory		
			Compliance Report		
	Authorising Engineer				
	Annual Review		Corresponding		
			remedial action plans		
			Authorised Person		
			Annual Review		
			Reports received through Contract Management Panel		

		Authorising Engineer Appointment Record		
		Authorised Persons report of annual review		
Not Applicable	Incident Reports	Review of incidents received	Risk Assurance Team	Quarterly

Where monitoring identifies any shortfall in compliance the group responsible for the Policy (as identified on the policy cover) shall be responsible for developing and monitoring any action plans to ensure future compliance.

(please add as many lines as required)

Where monitoring identifies any shortfall in compliance the group responsible for the Policy (as identified on the policy cover) **An explanation of the requirements is as follows:**

Reference – NHSLA standard where applicable.

Minimum Requirements to be monitored – for NHSLA policies these are laid out in the standards. For all other policies these will have to be determined by the policy owner.

Evidence for self assessment – the paragraph references and page numbers for the minimum requirements within the policy. **Process for monitoring** – how the minimum requirement will be monitored eg audit.

Responsible Individual / Group – usually a group; who is responsible for monitoring the minimum requirements.

Frequency of monitoring- how often the monitoring should be reviewed.

Policy Training Requirements

The purpose of this template is to provide assurance that any training

implications have been considered

Training topic:	Management of Ventilation Systems	
Type of training:	$\sqrt{-}$ Mandatory training, to be covered as part of the health and safety component	
Division(s) to which the training is applicable:	 √ Adult Learning Disability Services √ Adult Mental Health Services √ Community Health Services √ Enabling Services √ Families Young People Children √ Hosted Services 	
Staff groups who require the training:	 Mandatory – basic ventilation systems awareness for all staff Role specific - Technical Posts as identified within the HTMs within the policy 	
Update requirement:	Three yearly	
Who is responsible for delivery of this training?	1. LPT 2. NHS Horizons	
Have resources been identified?	Text to be included in new starter staff handbook, to commence January 2015	
Has a training plan been agreed?	No	
Where will completion of this training be recorded?	$\sqrt{-}$ Trust learning management system Other (please specify)	
How is this training going to be monitored?	Via Annual Review	

Due Regard Screening Template

Section 1				
Name of activity/proposal		Management of	Ventilation Systems	
Date Screening commenced		August 2014		
Directorate / Service carrying o	ut the		ty Compliance Team	
assessment				
Name and role of person under	taking	Vijay Patel		
this Due Regard (Equality Anal				
Give an overview of the aims, o		purpose of the	proposal:	
AIMS: To set out the arrangement				
OBJECTIVES:		0	2	
1) Provide ventilation for the	comfort and saf	ety of occupants	in buildings	
2) Where specialist ventilation	n, provide comf	ort but also to co	ntrol the environment and air	
movement of space that it				
patients, staff and others fi	rom air borne co	ontaminators, due	st and harmful micro-organisms	
Ventilation systems meet I	egal and best p	ractice guidance.		
PURPOSE: To establish mandat	ory requiremen	its for the manage	ement of ventilation systems	
Section 2				
Protected Characteristic	Could the pro	-	Could the proposal	
	have a positi		have a negative impact	
	Yes or No (g	ive details)	Yes or No (give details)	
Age	No		No	
Disability	No		No	
Gender reassignment	No		No	
Marriage & Civil Partnership	No		No	
Pregnancy & Maternity	No		No	
Race	No		No	
Religion and Belief	No		No	
Sex	No		No	
Sexual Orientation	No		No	
Other equality groups?				
Section 3				
Does this activity propose maje				
example, is there a clear indica				
a major affect for people from a	an equality gro	oup/s? Please tic		
Yes			No	
High risk: Complete a full EIA starting click here to		to Low risk: Go to Section 4.		
proceed to Part B				
Section 4				
It this proposal is low risk please give evidence or justification for how you				
reached this decision: All staff receive appropriate training therefore risks will be eliminated.				
Sign off that this proposal is low			Equality Analysis:	
Head of Service Signed: Bern	auette Keavney	/		
Date: September 2019				

The NHS Constitution

Leicestershire Partnership

NHS Core Principles –

Checklist

Please tick below those

principles that apply to this policy

The NHS will provide a universal service for all based on clinical need, not ability to pay. The NHS will provide a comprehensive range of services

Shape its services around the needs and preferences of individual patients, their families and their carers	
Respond to different needs of different sectors of the population	\checkmark
Work continuously to improve quality services and to minimise errors	
Support and value its staff	\checkmark
Work together with others to ensure a seamless service for patients	
Help keep people healthy and work to reduce health inequalities	\checkmark
Respect the confidentiality of individual patients and provide open access to information about services, treatment and performance	

PRIVACY IMPACT ASSESSMENT SCREENING

Privacy impact assessment (PIAs) are a tool which can help organisations identify the most effective way to comply with their data protection obligations and meet individual's expectations of privacy. The first step in the PIA process is identifying the need for an assessment.

The following screening questions will help decide whether a PIA is necessary. Answering 'yes' to any of these questions is an indication that a PIA would be a useful exercise and requires senior management support, at this stage the Head of Data Privacy must be involved.

Name of Document:	Health and Safety Personal Pro	otective Equ	uipment Policy
Completed by:	Christian Knott		
Job title	Health and Safety Advisor	Date	12/02/19
			Yes / No
new information about in	ibed in the document involve the dividuals? This is information in e out the process described within	excess of	of No
provide information about	ibed in the document compel ind at themselves? This is information at to carry out the process descri	n in	No
people who have not pre	individuals be disclosed to organ viously had routine access to the process described in this docun	;	No
	tion about individuals for a purpo a way it is not currently used?	se it is not	No
	ined in this document involve the be perceived as being privacy int netrics.		
	ed in this document result in dec ainst individuals in ways which ca m?) No
7. As part of the process about individuals of a kin expectations? For examp	outlined in this document, is the d particularly likely to raise privac bles, health records, criminal reco vould consider to be particularly p	cy concerns ords or othe	s or
	e you to contact individuals in wa		No
Privacy Tel: 0116 29509 Lpt-dataprivacy@leicsp	n of a procedural document wil		

Acknowledgement: Princess Alexandra Hospital NHS Trust