

## Medical Gases Policy (F-031)

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Name of approving body:	EMT
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<i>Minor amendments made prior to full review date above (see appended document control sheet for details)</i>	
<i>Date approved by Lead Director:</i>	
<i>Date EMT as approving body notified for information:</i>	

*Policies should be accessed via the Trust intranet to ensure the current version is used*

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## 1. INTRODUCTION

The purpose of this policy is to establish mandatory requirements for the management of Medical Gas Pipeline Systems (MGPS) in Humber Teaching NHS Foundation Trust.

The MGPS provides the safe, convenient and cost-effective supply of medical gases to points where these gases can be used by clinical and nursing staff for patient care.

Humber Teaching NHS Foundation Trust recognises its obligations to take necessary measures in the provision of effective maintenance of engineering plant, systems and services.

The main reasons for this policy are:

- a) Compliance with statutory requirements
- b) Compliance with the Health Technical Memorandum 02-01: Medical Gas Pipeline Systems Part B: Operational Management and associated documentation
- c) To define the controls for the management of Medical Gases.

### **Employers Duties**

The Humber Teaching NHS Foundation Trust management, as employers have a general duty under The Health and Safety at Work etc. Act (HSWA), in particular Section 2, to ensure that, so far as is reasonably practicable, the health, safety and welfare of all their employees and others who may be affected by their undertaking.

### **Employees Duties**

Under Section 7 of the HSWA, employees have a duty to take reasonable care for their own health and safety and of others who may be affected by their acts or omissions at work. Section 7 also requires the employee's co-operation with their employer to enable the employer to comply with statutory duties for health and safety.

### **Responsibility**

Responsibility for the effective implementation of this policy principally resides with a collection of staff as referred to in the management hierarchy diagram identified in HTM 02-01 Part B and more recently, the organogram as identified later in this document.

## 2. SCOPE

This policy is intended for use by all staff involved with MGPS in Humberside Teaching NHS Foundation Trust.

It applies throughout the Hospitals to all fixed medical gas pipeline systems and includes all ward areas and other areas connected to the medical gas supply system at Humberside Teaching NHS Foundation Trust.

Medical Gases, Dental compressed air and vacuum supplies to general engineering workshops and pathology department equipment are separate from the general MGPS, and are not included in this policy, although the general principles in this document should be followed for these departments.

Equipment connected to the terminal units is not covered by this policy other than where its mode of use may affect system operation or safety.

Medical equipment connected to the terminal units is NOT covered by this policy and is specifically the responsibility of the EBME department, other than where its mode of use may affect system operation or safety.

Medical gases should not be used for non-medical purposes other than as a test gas for medical equipment.

Medical air should be used as the power source for ventilators; the routine use of oxygen as a driving gas is to be avoided.

MGPS management responsibility for Humber Teaching NHS Foundation Trust resides with the Estates & Facilities department.

It is Humber Teaching NHS Foundation Trust's policy that before work on the MGPS can commence; a permit-to-work form signed by an Authorised Person (MGPS) must be completed and issued to the operative.

This policy covers the management and maintenance of systems for the supply by pipeline of:

- Oxygen (O<sub>2</sub>),
- Medical Vacuum

NB: Dental compressed air and vacuum systems are also referenced in this Policy.

### 3. DEFINITIONS

Abbreviations:

Designated Person (Medical Gas)	CE (MGPS)
Authorised Person (Medical Gas)	AP (MGPS)
Authorising Engineer (Medical Gas)	AE (MGPS)
Quality Controller (Medical Gas)	QC(MGPS)
Competent Person (Medical Gas)	CP(MGPS)
Infection Control Team	ICT
Designated Medical/Nursing Officer	(DMO/DNO)
Designated Porter	DP (MGPS)

#### 4. DUTIES AND RESPONSIBILITIES

The following generic titles are from NHS Estates & Facilities 2006 edition of Health Technical Memorandum (HTM) 02-01 'Medical Gas Pipeline Systems' and refer to the key personnel who are required to be identified and appointed within this Operational Policy;

- Chief Executive (CE)
- Authorising Engineer (AE)
- Coordinating Authorised Person (Co AP) (required if more than one AP)
- Authorised Person (AP)
- Competent Person (CP)
- Quality Controller (QC)
- Designated Nursing Officer (DNO)
- Designated Porter (DP)

Please Refer to HTM 02 01 For Specific Roles and Duties and Responsibilities

#### 5. PROCEDURES RELATING TO THE POLICY

Formal procedures will be held on file and be the responsibility of the Authorised Person to ensure full compliance with the safe management of this service is maintained. Where Risk Assessments and Method Statements (RAMS) are required and pose a risk, Safe Systems of Work (SSOW) will be adopted to ensure all risk have been mitigated to an acceptable level. These formal procedures will follow the ethos of the health and safety requirements adopted within the Trust.

#### 6. CONSULTATION

Consultation of any activities pertaining to medical gas safety will be addressed by the Medical Gas Group with representatives in line with the Terms of reference (ToR).

Any other issues that are of a clinical nature will be discussed with members of the Medical Gas Group and the nursing directorate to ensure satisfactory resolutions are found.

In line with the requirements of HTM 02-01, the Authorising Engineer is available to be called upon as and when required to assist in the resolution of any Medical Gas Issues.

#### 7. IMPLEMENTATION AND MONITORING

The Executive Manager is responsible for the operational policy, although responsibility for policy preparation and implementation will usually be delegated to the Authorised Person (AP) (MGPS).

To ensure that the policy is regularly updated, it will contain a protocol for the review process. Fundamental to this is the establishment of a medical gas Group, members as per the ToR.

A medical gas Group shall meet Quarterly or as required by circumstance.

Other signatories to this document shall also be invited to join the group when appropriate.

The Medical Gas Group shall report to the Health and Safety Group.

## 8. MEDICAL GAS GROUP RESPONSIBILITIES

The responsibilities of the Medical Gases Group will be to:

1. Develop, review and monitor the MGPS Operational Policy content, staff and system compliance with the policy (via survey/audit) and its implementation in line with HTM 02-01 and the Health and Safety at Work Act, with particular reference to:
  - Control and maintenance of MGPS supply systems within the hospitals.
  - Operation of the MGPS Permit to Work system.
  - Emergency actions and staff reporting mechanisms.
  - Cylinder management (including audit of usage at ward level).
2. Implementation of the training requirements of all staff groups working with medical gases either in cylinders or from piped supply systems. (This will include ward staff responsibilities/actions related to piped medical gas systems and alarms; the use and management of medical gas cylinders at ward/department level; assessment of available training courses and mechanisms for assessing the effectiveness of training provided).
3. Ratify and monitor implementation of Health and Safety measures associated with medical gas usage (especially at ward/departmental level). This will include storage of medical gas cylinders, provision of warning signs and instructional safety information for staff, patients receiving gas therapy and patient visitors and assessment of compliance with Health & Safety issues relating to medical gases and their usage.
4. Act as a forum for all other medical gas related matters.

The group will aim to meet:

- Quarterly to review Policy implementation progress
- Quarterly to review the Operational Policy
- On an ad hoc basis if any work is planned that requires significant shut-downs or disruption, or if any hazards arise requiring Trust actions, or on the introduction of new technologies or guidance which may affect MGPS in the Trust.

### 8.1. Infection Control

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

- Provide support if a Medical Gas Pipeline System becomes contaminated with aspirated blood, body fluids or toxic agents,
- Provide support for the replacement of bacterial filters on vacuum systems,
- Provide advice on risk assessments for controlling the environment,

### 8.2. Training and Support

Management aims to control work related risks and ensure safe working practices by training staff in the safe management, use and application of medical gases. All training needs will be identified and a programme of training, monitoring and control will be followed as detailed below.

It is essential that personnel at all levels have a sound general knowledge of the principles, design and functions of MGPS. All staff shall be trained in relationship to their particular responsibilities. The relevant line manager for staff within the areas of responsibility should ensure that all staff have received this training prior to using the MGPS and that refresher courses are arranged in accordance with the table below.

Individual training records will be held and used to determine compliance with policy obligations, future training events and requirements.

Training on MGPS will be provided as follows:

Personal	Retraining	Re-assessment
Authorising Engineer	Every 3 Years	Every 3 Years
Coordinating Authorised Person	Every 3 Years	Every 3 Years
Authorised Person	Every 3 Years	Every 3 Years
Competent Person	Every 3 Years	Every 3 Years
Designated Nursing Officer	Every 3 Years	Every 3 Years
Quality Coordinator	Every 5 Years	Every 5 Years
Designated Porter	Every Year	Every Year
General Nursing Staff	Every Year	N/A (See note)

The training requirements outlined above should cover the course content and training outcomes as detailed in HTM02-01 Part B chapter 7, the requirements the Department of Health and the MHRA.

**Note**

A medical equipment “driving” license for nursing staff may be introduced during the lifetime of this policy. Training and competence requirements are likely to be related directly to the terms of such a license.

**9. REFERENCE TO ANY SUPPORTING DOCUMENTS**

*Statutory Requirements*

All of the statutory requirements are listed within the HTM 02-01 and this should be used to reference the required documents. Please note to check any updates on the listed documentations.

**10. MONITORING COMPLIANCE**

Appendix 1 - Document Control Sheet

## APPENDIX 1 - DOCUMENT CONTROL SHEET

This document control sheet, when presented to an approving committee must be completed in full to provide assurance to the approving committee.

Document Type	Medical Gas Policy		
Document Purpose			
Consultation/ Peer Review:	Date:	Group / Individual	
<i>list in right hand columns consultation groups and dates - &gt;</i>	April 2023	Health and Safety Group	
Approving Committee:	EMT	Date of Approval:	26 June 2023
Ratified at:	Board	Date of Ratification:	To be updated
Training Needs Analysis:  <i>(please indicate training required and the timescale for providing assurance to the approving committee that this has been delivered)</i>		Financial Resource Impact	
Equality Impact Assessment undertaken?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/> Rationale:
Publication and Dissemination	Intranet <input checked="" type="checkbox"/>	Internet <input type="checkbox"/>	Staff Email <input type="checkbox"/>
Master version held by:	Author <input type="checkbox"/>	Health Assure <input checked="" type="checkbox"/>	
Implementation:	<i>Describe implementation plans below - to be delivered by the Author:</i>		
	<ul style="list-style-type: none"> <li>Will be placed on the intranet and update information in Midweek Global</li> </ul>		
Monitoring and Compliance:	<ul style="list-style-type: none"> <li>AE annual audit.</li> <li>Risk assessment review</li> <li>Refresher training in line with HTM guidance</li> <li>Regular reviews in line changes to relevant HTM and legislation.</li> </ul>		

<b>Document Change History:</b>			
Version Number / Name of procedural document this supersedes	Type of Change i.e. Review / Legislation	Date	Details of Change and approving group or Executive Lead (if done outside of the formal revision process)
1.0	New Policy	June 2023	New Policy. Approved at EMT (26 June 2023) and ratified at Trust Board 26 <sup>th</sup> July 2023.



## APPENDIX 2 - EQUALITY IMPACT ASSESSMENT (EIA)

For strategies, policies, procedures, processes, guidelines, protocols, tenders, services

1. Document or Process or Service Name: **MGPS Policy**
2. EIA Reviewer: **???**
3. Is it a Policy, Strategy, Procedure, Process, Tender, Service or Other? **Policy**

Main Aims of the Document, Process or Service		
Please indicate in the table that follows whether the document or process has the potential to impact adversely, intentionally or unwittingly on the equality target groups contained in the pro forma		
Equality Target Group 1. Age 2. Disability 3. Sex 4. Marriage/Civil Partnership 5. Pregnancy/Maternity 6. Race 7. Religion/Belief 8. Sexual Orientation 9. Gender re-assignment	Is the document or process likely to have a potential or actual differential impact with regards to the equality target groups listed?  Equality Impact Score <b>Low = Little or No evidence or concern (Green)</b> <b>Medium = some evidence or concern (Amber)</b> <b>High = significant evidence or concern (Red)</b>	How have you arrived at the equality impact score? a) who have you consulted with b) what have they said c) what information or data have you used d) where are the gaps in your analysis e) how will your document/process or service promote equality and diversity good practice

Equality Target Group	Definitions	Equality Impact Score	Evidence to support Equality Impact Score
<b>Age</b>	Including specific ages and age groups: Older people Young people Children Early years	<b>Low</b>	Generic policy for actions to be taken in the event of an incident and measures to be proactive in mitigating fire related accidents. Policy is not age specific.
<b>Disability</b>	Where the impairment has a substantial and long-term adverse effect on the ability of the person to carry out their day to day activities: Sensory Physical Learning Mental Health (and including cancer, HIV, multiple sclerosis)	<b>Low</b>	Policy has a generic approach but is adaptable to groups of persons with requirements to ensure a safe working environment whilst working on Medical Gas systems. (visual alarms, buddy systems)
<b>Sex</b>	Men/Male Women/Female	<b>Low</b>	Policy is not gender specific
<b>Marriage/Civil Partnership</b>		<b>Low</b>	Policy covers all groups.
<b>Pregnancy/Maternity</b>		<b>Low</b>	Not applicable to policy.
<b>Race</b>	Colour Nationality Ethnic/national origins	<b>Low</b>	Generic policy covers all ethnic/national groups.
<b>Religion or Belief</b>	All Religions  Including lack of religion or belief and where belief includes any religious or philosophical belief	<b>Low</b>	Generic assessment, not religion based
<b>Sexual Orientation</b>	Lesbian Gay Men Bisexual	<b>Low</b>	Policy covers all groups.

<b>Gender re-assignment</b>	Where people are proposing to undergo, or have undergone a process (or part of a process) for the purpose of reassigning the person's sex by changing physiological or other attribute of sex	<b>Low</b>	Not applicable to policy
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**Summary**

<i>Please describe the main points/actions arising from your assessment that supports your decision above:</i>	
<p>The policy is an organisational document covering all aspects of MGPS related matters to ensure full compliance with the Health and Safety, British Compressed Gases Association, HTM, British Compressed Gases Association &amp; British Standards</p> <p>The policy will ensure that information governance training is provided appropriately to all staff in line with the requirements of the toolkit and will not have a negative effect on any of the above target groups.</p>	
EIA Reviewer – <b>Andrew Cole</b>	
Date completed; <b>June 26<sup>th</sup> 2023</b>	Signature 