

Effective: February 2011

Review: February 2012

1. Background

Following several serious incidents involving oxygen, the National Patient Safety Agency (NPSA) issued a Rapid Response Report in September 2009 focussing on oxygen safety in hospitals. It outlined areas for immediate action, incorporating prescribing, monitoring, administration and equipment.

Key points:

- Minimise the use of oxygen cylinders, and increase the amount of piped gas used, where necessary
- Reliable systems should be in place for stocktaking and checking of oxygen cylinders, ensuring adequate supplies are always available
- Minimise risks of confusing oxygen and medical compressed air
- Prescribe oxygen in all situations in accordance with BTS guidelines (acknowledging that the BTS guidelines do not cover critical care)
- Ensure pulse oximetry is available in all locations where oxygen is used
- A multidisciplinary team should be responsible for review oxygen-related incidents, developing a policy and a training programme.

The report and supporting documentation can be found at:

www.nrls.npsa.nhs.uk/resources/?entryid45=62811

2. Introduction and Scope of the Policy

This policy covers the prescribing, cylinder supply, administration, monitoring and equipment relating to oxygen for all inpatients within the Newcastle Upon Tyne Hospitals NHS Foundation Trust.

This policy should be read in conjunction with the document "[Clinical Guidance: The Prescription and Administration of Oxygen in Adult Hospital In-Patients](#)".

3. Roles and Responsibilities

3.1 Staff groups

All staff who are involved in prescribing, administering, handling and managing oxygen and oxygen equipment should receive training. This includes nursing, medical, pharmacy, midwifery, allied health professional, portering, clinical engineering and estates staff. The following staff group have specific responsibilities relating to medical gases.

Pharmacy is responsible for the procurement and quality of medical gases used in the Trust. In addition, Pharmacy monitor stock holding arrangements as outlined in the policy.

Trained porters are responsible for the delivery of gas cylinders to clinical areas.

“Gas” porters are responsible for the replacement of empty cylinders on manifolds

Authorised Persons (MGPS) and Quality Controllers (MGPS) are fully defined in the [Medical Gas Pipeline Systems \(MGPS\) Policy](#).

3.2 Governance

The Medical Gases Committee is responsible for:

- Overseeing all policies and protocols relating to oxygen
- Monitor oxygen training provision for all staff.
- Reviewing all oxygen-related incidents within the Newcastle Upon Tyne Hospitals NHS Foundation Trust.

Further information regarding the role of the Medical Gases Committee may be found in their Terms of Reference (Appendix 1).

4. Provision of Piped Oxygen and Oxygen Cylinders

Where possible, piped oxygen should be used in preference to cylinders.

Within NUTH, areas with a high use of oxygen have a piped supply; this includes all inpatient ward areas and theatres. Where this does not exist, for example through a change of use, clinical areas must highlight their usage to the medical gas committee who will assess their need and where appropriate support the development of a business case to provide piped oxygen.

Cylinders must be appropriately stored at all times; this includes the use of storage racks. Advice from the MHRA on care and handling of cylinders may be found at: www.mhra.gov.uk/Publications/Postersandleaflets/CON014865. Clinical areas should under take a departmental risk assessment with respect to safe storage and where necessary contact the Trust Health & Safety team for advice.

Oxygen cylinders may be obtained from the gas cylinder store by contacting the Trust portering service.

All medical gas cylinders in the Trust’s medical gas stores or connected to manifolds are reviewed on a monthly basis by the Pharmacy department to ensure that they are in date.

Medical gas cylinders in clinical areas are audited every 2 years by Pharmacy as part of a review of total stock holding; expiry date of all cylinders is checked at this time. In addition oxygen cylinders on resuscitation trolley are checked on a daily basis. Similarly, back up oxygen cylinders on anaesthetic machines are checked daily prior to use by the anaesthetic teams.

All short dated cylinders are returned to Pharmacy where they are marked for return and replacement.

In general, patients who require oxygen during transfer from one area to another should be accompanied by a trained member of the nursing staff though this may not be necessary in patients who are clinically stable. The need for trained supervision should be assessed prior to transfer. If the patient is not accompanied

by a nurse clear instructions must be provided for personnel involved in the transfer. These should include the oxygen delivery device and flow rate.

5. Management of Piped Oxygen Supplies

If both piped air and oxygen are available, particular care should be taken to ensure that the correct flow meter is used and attached to the correct supply. When not in use medical air flow meters should be removed from the wall outlets.

See [Medical Gas Pipeline Systems \(MGPS\) Policy](#).

6. Prescribing and Administration of Oxygen to Adult Inpatients

The “Clinical Guidance: the Prescription and Administration of Oxygen in Adult Hospital In-Patients” covers all aspects of oxygen prescribing and administration and is available on the intranet.

With the exception of an emergency situation, oxygen should always be administered against a prescription.

Oxygen should be prescribed using the Trust electronic prescribing system. This details method of delivery, flow rate to be delivered, and target saturations (including both upper and lower limits). Frequency of monitoring should also be specified. Areas without electronic prescribing are exempt from prescribing oxygen until e-prescribing is rolled out.

7. Pulse Oximetry

Pulse oximetry is accessible in all areas where oxygen is regularly administered. Additional pulse oximetry meter are available from the equipment library.

8. Training

All staff who are involved in prescribing, administering, handling and managing oxygen and oxygen equipment should receive training. This includes nursing, medical, midwifery, allied health professional, portering, clinical engineering and estates staff.

Training Domain	Staff Groups	Delivery Method
General Awareness Training: Medicines Identification Cylinder storage and transportation Basic clinical usage	All who come in contact with medical gases; All Nursing staff (qualified and unqualified) Porters Pharmacy Staff Medical Electronics Physiotherapists Occupational Therapists Operating Department Practitioners (ODPs)	Mandatory Breeze package, every 3 years <i>(In development)</i>
Manifolds	Gas Porters Pharmacy Stores staff	BOC trainers <i>(In development)</i>
Pharmacy Role	All Pharmacists, particularly those covering out of hours	Local Session and then as part of local induction. Essential for all Pharmacists and Technicians.
Medical Gas Pipeline Systems	Approved Persons (APs) (Estates)	External Training
Medical Gas Testing	Qualified Persons (QPs) (Pharmacy)	External Training

9. Monitoring

Compliance with this policy will be monitored by the Medical Gas Committee, in particular:

- Oxygen checks including manifolds are reviewed by Pharmacy on a monthly basis. This information will be presented to the Medical Gases Committee to ensure compliance with the policy.
- Prescribing and administration of oxygen will be audited annually and the audit results will be reviewed by the Committee, with action plans for any areas of non-compliance, and follow up for completion of actions.

This policy will be reviewed annually or sooner if required.

Author: Director of Pharmacy

THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST

MEDICAL GASES COMMITTEE

CONSTITUTION AND TERMS OF REFERENCE

Membership

Director of Pharmacy (Chair)
Estates and Facilities Maintenance Manager
Estates Officer – RVI
Estates Officer – FRH
Quality Controller
Clinical Director – Anaesthesia/Theatres (or designated officer)
Director of Nursing – (or designated officer)
Head of Medical Engineering -RVI
Head of Medical Engineering – FRH
Trust Health and Safety Advisor
Head of Portering and Security (or designated officer)
Risk Manager

Quorum Three members of the Committee will constitute a forum. Deputies may be appointed to represent members who are unable to attend.

Frequency The Medical Gas Committee will meet at least quarterly, with other meetings convened as necessary.

Co-opted Members Other Trust staff may be co-opted onto the Committee when necessary, or may be asked to provide expert advice and help on specific issues that may arise.

Accountable to The Committee will be accountable to the Trust Medicines Management Committee

Liaison with Health & Safety Committee
Medicines Management Committee

Overall Purpose:

The Medical Gas Committee will oversee the development and implementation of the Trust's operational management responsibilities in accordance with HTM 02-01: Medical Gas Pipeline Systems Part B.

The Medical Gas Committee will improve communication on Medical Gas issues within the Trust.

The Medical Gas Committee will ensure that the Trust's medical gas operational policy and procedures conform to current legislation.

The Medical Gas Committee will monitor the training and education of staff responsible for day to day operation of medical gas piped systems (MGPS).

The Medical Gas Committee will identify areas of best practice – both within and outside the Trust. This will improve working practices, thereby reducing risks to patients.

The Medical Gas Committee will review all medical gas related incidents on a quarterly basis.

THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST
IMPACT ASSESSMENT – SCREENING FORM A

This form must be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval.

Policy Title:	Oxygen Management Policy	Policy Author:	Neil Watson
		Yes/No?	You must provide evidence to support your response:
1.	Does the policy/guidance affect one group less or more favourably than another on the basis of the following: (* denotes protected characteristics under the Equality Act 2010)		
	• Race *	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender *	No	
	• Culture	No	
	• Religion or belief *	No	
	• Sexual orientation including lesbian, gay and bisexual people *	No	
	• Age *	No	
	• Disability – learning difficulties, physical disability, sensory impairment and mental health problems *	No	
	• Gender reassignment *	No	
	• Marriage and civil partnership *	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination which can include associative discrimination i.e. direct discrimination against someone because they associate with another person who possesses a protected characteristic, are any exceptions valid, legal and/or justifiable?		
4(a).	Is the impact of the policy/guidance likely to be negative? <i>(If "yes", please answer sections 4(b) to 4(d)).</i>		
4(b).	If so can the impact be avoided?		
4(c).	What alternatives are there to achieving the policy/guidance without the impact?		
4(d)	Can we reduce the impact by taking different action?		

Comments:	Action Plan due (or Not Applicable):
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Name and Designation of Person responsible for completion of this form: Neil Watson, Director of Pharmacy.....

Date: 10/02/2011.....

Names & Designations of those involved in the impact assessment screening process:

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 (If any reader of this procedural document identifies a potential discriminatory impact that has not been identified on this form, please refer to the Policy Author identified above, together with any suggestions for the actions required to avoid/reduce this impact.)

For advice on answering the above questions please contact Frances Blackburn, Head of Nursing, Freeman/Walkergate, or, Christine Holland, Senior HR Manager. On completion this form must be forwarded electronically to Steven Stoker, Clinical Effectiveness Manager, (Ext. 24963) steven.stoker@nuth.nhs.uk together with the procedural document. If you have identified a potential discriminatory impact of this procedural document, please ensure that you arrange for a full consultation, with relevant stakeholders, to complete a Full Impact Assessment (Form B) and to develop an Action Plan to avoid/reduce this impact; both Form B and the Action Plan should also be sent electronically to Steven Stoker within six weeks of the completion of this form.