DULWICH COLLEGE
FOUNDED 1619

NITRONOX / ENTONOX GAS POLICY

Nitronox / Entonox: Nitronox / Entonox gas is a 50:50 mixture of nitrous oxide and oxygen. It is an effective analgesic agent for the treatment of pain following an injury with rapid onset and offset characteristics. It is self-administered under the direction of trained personnel. Its effects are known to be predictable, reliable and very safe with minimal side effects. Nitronox / Entonox is a medical product; there must be a Patient Specific Direction signed by a medical practitioner from the Old Dairy Health Centre before it can be used (see Appendix 1). It can be administered by a Medical Centre Registered Nurse who has undertaken the Nitronox / Entonox training within the previous year.

Training: All permanent nursing staff in the Medical Centre must undertake online training in the use and handling and storage of Nitronox / Entonox Gas.

Procedure:

- Before administration the patient is given an explanation on how the Nitronox / Entonox apparatus works and the analgesic effects of the gas and their understanding and consent are obtained.
- If there is a doctor present, the medical centre nursing staff administer Nitronox / Entonox on the doctor's direct instructions.
- In the absence of a doctor, the medical centre nursing staff follow the indications, inclusive and exclusive criteria and administrating procedures outlined in the Patient Specific Directive (PSD) (section 2).
- Nursing staff continuously monitor the patient during and after administration of Nitronox / Entonox and report to any adverse reactions to medical staff.
- The College Medical Officer or another member of the Old Dairy Health Centre is notified the following working day and shall sign the Nitronox / Entonox administration record (see Appendix 2) which is then uploaded to the pupil's medical records or, in the case of a staff member or visitor, is sent to their GP.
- The record of use including the time the Nitronox / Entonox was started and stopped is documented by nursing staff.

Policy Owner:	Deputy Head Co-curricular, Operations and Partnerships
Last Reviewed:	May 2026
Date of Next Review:	Academic Year 2027–28 (or earlier as required)

APPENDIX 1: PATIENT SPECIFIC DIRECTIVE

NITRONOX/ENTONOX – PATIENT SPECIFIC DIRECTION

Drug Details

Name, Form & Strength of medicine	Nitronox/Entonox analgesia – premixed 50% nitrous oxide, 50% oxygen cylinder for inhalation. P medicine.
Route/Method of administration	For inhalation use only. Self-administration by individual under medical supervision via a suitable anaesthetic apparatus.
Dosage (include maximum dose if appropriate)	50% Nitrous oxide with 50% Oxygen
Frequency	Patient regulated for optimal analgesia to match individual pain threshold
Duration of treatment	Until optimum analgesia effects are reached (see notes below)
Maximum or minimum treatment period	Nitrous oxide should not be given continuously for longer than 6-8 hrs or more frequently than every 4 days stop if patient is demonstrating significant side effects.
Black Triangle Drug	No
Legal Category	P medicine
Is the use out with SPC	No
Storage requirements	Locked cupboard in the Medical Centre
Warnings including possible adverse reactions and management of these	Refer to BNF for full details. Use the Yellow Card System to report adverse drug reactions directly to the MHRA
Advice to patient/carer including written information provided	Explain treatment and course of action. May experience drowsiness, euphoria, dry mouth
Monitoring (if applicable)	Continuous assessment of patient during and after administration of Nitronox / Entonox and report to medical staff and adverse reactions
Follow up	As appropriate

NITRONOX/ENTONOX – PATIENT SPECIFIC DIRECTION

Clinical Condition	Patient Specific Directive
Indication	To allow an individual self-administration of Nitronox / Entonox (50% oxygen and 50% nitrous oxide) for pain relief under the supervision of trained personnel in an on call or emergency situation where absence of medical staff may delay the relief of pain caused by an accident, injury or trauma
Inclusion Criteria	Individuals aged 5 and over where delay in medical attendance may lead to unnecessary distress/discomfort Completion of a primary survey Conducted a physical examination sufficient to exclude contraindications for the use of Entonox Assessment of pain complaint, including severity Completed baseline set of vital signs
Exclusion Criteria	Individuals under the age of 5 Inability to ventilate an enclosed treatment area Altered level of consciousness Head injury Inability to comply with instructions Maxillofacial injury Suspected inhalation injury Suspected air embolism or pneumothorax COPD Use of nitroglycerine with last 5 mins Distended abdomen Decompression sickness
Cautions/Need for further advice/ Circumstances when further advice should be sought from the Doctor	Complaint of earache is uncommon but a serious side-effect - cease inhalation and offer alternative analgesia Dizzy, drowsy or disorientated common after inhaling for a length of time, cease inhaling until the effects subside Nausea effects common but wear off. Cease inhalation if becomes too distressing Vomiting rarely happens, reassure, remove demand valve, clear obstruction and continue if willing to continue

NITRONOX/ENTONOX – PATIENT SPECIFIC DIRECTION

STAFF CHARACTERISTICS

Professional Qualifications	Registered General Nurse
Specialist Competencies or qualifications	Completion of Nitronox /Entonox online learning modules: http://discover.entonox.co.uk/learningmodules/11-entonox-administration/ Entonox Awareness Training | iHasco
Continuing Education & Training	All named persons under this PSD will be expected to maintain their competence as specified above. Annual review and competency assessment by a nominated medical professional. Practitioner should be aware of any change to the recommendations for the medicine listed. It is the responsibility of the named professional to keep up to date with continued professional development.

Referral Arrangements and Audit Trail

Referral Arrangements	As per local guidelines
Records/Audit Trail	• Patients name, address, date of birth and consent given • Contact details of GP • Diagnosis • Record of start and end times of Nitronox /Entonox • Patient response, level of pain, analgesia effectiveness, side effects • Signature/name of staff who administered, supplied and discontinued the Entonox • Details of any adverse drug reaction and actions taken including documentation in the medical record • Referral arrangements (including self-care)
References/Resources and Comments	SPC – Summary of Product Characteristics BNF – British National Formulary https://www.nmc-uk.org/Nurses-andmidwives/Regulation-in-practice/Regulation-inPractice-Topics/Patient-Group-Directions-PGDs/

NITRONOX/ENTONOX – PATIENT SPECIFIC DIRECTION

Section 2

Professional drawing up PSD/Authors

	Designation and Location
Name Signature	
Name Signature	
Name Signature	

Authorisation

Medical Lead

School Medical Officer Name in BLOCK CAPITALS	Signature	Date

Practitioner authorisation sheet

Entonox PSD Valid from (DD/MM/YYYY): _____ Expiry: _____

Before signing this PSD, check that the document has had the necessary authorisations in **Section two (page 5)**. Without these, this PSD is not lawfully valid.

Practitioner

By signing this patient specific direction, you are indicating that you agree to its contents and that you will work within it.

Patient specific directions do not remove inherent professional obligations or accountability.

It is the responsibility of each professional to practise only within the bounds of their own competence and Professional Code of Conduct.

I have read and understood the NITRONOX/ENTONOX Policy and agree to supply/administer this medicine only in accordance with this policy and Patient Specific Directive.

Name	Designation	Signature	Date

Authorising manager

I confirm that the practitioners named above have declared themselves suitably trained and competent to work under this PSD. I give authorisation on behalf of **Old Dairy Health Centre** for the above-named health care professionals at Dulwich College who have signed the PSD to work under it.

Name	Designation	Signature	Date

Note to authorising manager

Score through unused rows in the list of practitioners to prevent practitioner additions post managerial authorisation.

APPENDIX 2: NITRONOX/ENTONOX ADMINISTRATION RECORD

NITRONOX/ENTONOX ADMINISTRATION RECORD

PUPIL'S NAME:

ADDRESS:

DATE OF BIRTH:

GP CONTACT DETAILS:

DIAGNOSIS:

Exclusion criteria checked: State Yes or No:

Individual under the age of 5	
Altered level of consciousness	
Head injury	
Inability to comply with instructions	
Maxillofacial injury	
Suspected inhalation injury	
Suspected air embolism or pneumothorax	
Use of nitro-glycerine with last 5 mins	
COPD	
Distended abdomen	
Decompression sickness	
Inability to ventilate/enclosed treatment area	

Date	Start Time	Pain Score	Analgesia effectiveness/response	Side effects	Stop Time	Adverse reaction/action taken

Signature of the person who administered:

Print Name:

Doctor's Name:

Please print copy for secondary care