

# What is Entonox?

① For more information, please contact:

York Orthopaedic Outpatients 01904 726537  
Plaster Room 01904 726523

Scarborough Orthopaedic Department 01723 368111  
Plaster Room 01723 342042

---

## What is Entonox?

Entonox is a medical gas used to relieve pain during certain orthopaedic procedures. It is a mixture of half nitrous oxide and half oxygen. The compressed gas is stored in cylinders and is fast acting providing pain relief during orthopaedic procedures such as:

- Fracture/dislocation reduction.
- Removal of K-Wires.
- Cast moulding.
- Suture/clip removal.
- Wound dressing.

## Things to consider before use

If you wish to use entonox during your procedure you must tell us about any medical conditions you have.

Entonox can cause a rise in intra-cranial pressure so should not be used if you have recent:

- Head injuries.
- Injuries to the face and jaw.
- Suspected or known increased pressure on the brain.
- Eye surgery, involving gas bubble insertion.

Other examples where air may be trapped in the body and where entonox should never be use are:

- Pneumothorax.
- Abdominal distension.
- Suspected intestinal obstruction.
- Bullous emphysema.
- Middle ear procedures.
- Following a recent dive (last 48 hours).

## Other medications

Please tell staff if you are taking any of the following:

- Methotrexate - taking entonox may have an effect on your blood cell count.
- Amiodarone, bleomycin or nitrofurantoin – there is a possibility of toxic effects to the lungs.

In cases of prolonged use (24 hours or more frequently than every four days), close clinical supervision and close monitoring of your blood levels are required as entonox may affect the way your body uses vitamin B12 which may affect your blood cell count.

## Driving and using machinery

You must wait at least 30 minutes after the use of entonox before driving or using machinery. Please speak to your healthcare professional if other forms of pain relief have been used.

## **How to use Entonox**

Entonox is self-administered. This means that you have to be able to hold the mouthpiece and inhale the gas. If this isn't possible please speak to the healthcare professional performing the procedure.

We will make sure you are able to use the entonox equipment. The supply will be properly set up and ready for you. The mouthpiece we give you has a demand valve. The demand valve ensures that gas is released for you only when you suck on the mouthpiece.

It may take up to two to three minutes of inhalation before the gas takes effect. The effect will quickly wear off when you are not breathing in the gas. It is more effective if you keep a regular rhythm when breathing in and out. It is common to experience a dry mouth and throat when using entonox. If you experience ear ache when using the gas please discontinue use and tell staff.

### **Common side effects:**

- Dizziness.
- Light-headedness.
- Nausea.
- Tingling.
- Disorientation.

### **Other side effects include:**

- Ear problems due to increased pressure inside the ear.
- Tiredness.
- Bowel enlargement due to trapped gas.

### **Rare side effects:**

- Effects on nerve function (numbness and weakening).
- Breathing difficulties.
- Addiction.

Notify your healthcare professional if you experience any of these side effects.

More information can be found on the BOC healthcare website  
[www.bochealthcare.co.uk](http://www.bochealthcare.co.uk) [Accessed May 2019]

## Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact Jo Bradley-Smith, Orthopaedic Technician, The York Hospital, Wigginton Road, York, YO31 8HE, Telephone: 01904 726523 or email [joanne.bradley-smith@york.nhs.uk](mailto:joanne.bradley-smith@york.nhs.uk).

## Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email [pals@york.nhs.uk](mailto:pals@york.nhs.uk).

An answer phone is available out of hours.

## Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## Leaflets in alternative languages or formats

Please telephone or email if you require this information in a different language or format, for example Braille, large print or audio.

如果你要求本資 不同的 或 式提供 , 電或發電

Jeżeli niniejsze informacje potrzebne są w innym języku lub formacie, należy zadzwonić lub wysłać wiadomość e-mail

Bu bilgileri değişik bir lisanda ya da formatta istiyorsanız lütfen telefon ediniz ya da e-posta gönderiniz

Telephone: 01904 725566

Email: [access@york.nhs.uk](mailto:access@york.nhs.uk)

Owner	Jo Bradley-Smith, Orthopaedic Technician
Date first issued	May 2019
Review Date	September 2025
Version	1 (reissued September 2022)
Approved by	James Stanley, Clinical Director of Orthopaedic Outpatients and Susan Kelly, Sister, Orthopaedics & Trauma
Document Reference	PIL1336 v1.2
© 2022 York and Scarborough Teaching Hospitals NHS Foundation Trust. All Rights reserved.	

[www.yorkhospitals.nhs.uk](http://www.yorkhospitals.nhs.uk)