

# Entonox Use in Endoscopic Procedures

**This leaflet aims to answer your questions about taking Entonox for pain control. If you have any questions or concerns, please speak to the Endoscopy department.**

## What is Entonox?

Entonox or Equanox is sometimes referred to as 'laughing gas' or 'gas and air'. It has been used in the NHS since 1965 for relieving pain and anxiety. Entonox is a 50/50% mixture of nitrous oxide and oxygen gas and is commonly used in childbirth and by the ambulance service for the relief of pain. Entonox works very quickly and its effects are felt almost immediately after inhalation, providing very good pain relief with a relaxing effect without losing consciousness or control.

Entonox can be used as an alternative to intravenous sedation and pain relief for endoscopic procedures examining the bowel such as colonoscopy and flexible sigmoidoscopy. It cannot be used in procedures examining the stomach as it requires inhalation of the gas and air through a mouthpiece.

## What are the benefits of using Entonox?

Entonox is self-administered via a patient controlled on-demand mouthpiece, therefore you are in full control of your own pain relief requirements. The effects of the Entonox gas will be reached/felt after approximately six to eight inhalations. After stopping inhalation, the gas and its effects wear off within eight minutes. Due to this you will not need anyone to look after you for twelve hours afterwards (a necessity after receiving injections of painkiller and sedative drugs for an endoscopic examination). Our policy is to monitor you for 30 minutes before being discharged. You can drive again at this time. (After receiving injections of painkiller/sedative drugs a patient cannot drive for twenty four hours).

## How do I use Entonox?

Following your admission by the nurse for your endoscopy procedure you will be shown the mouthpiece and instructed on how to breathe the Entonox gas in and out.

When the endoscopist is ready to start your procedure the nurse will tell you to start breathing in the Entonox gas and you will breathe the Entonox for about two to eight breaths before your procedure starts. This will give the Entonox time to take full effect and for you to feel comfortable using the gas. You will then breathe the Entonox throughout your procedure and the nurse will tell you to breathe in and out as normal.

If you find the Entonox gas is unsatisfactory then the endoscopist will assess you and offer an alternative, the decision on which will be made by the endoscopist performing the test.

**Warning: the alternative may be an injection of painkiller/sedative and you must be aware that after this you will require 24 hours aftercare by a responsible adult and you will not be able to drive or operate machinery or sign any legal documents for 24 hours after your procedure.**

## **What happens when I stop using Entonox?**

After the procedure has finished the nurse will tell you to stop breathing the Entonox gas and take away the mouthpiece. The Entonox gas will take about eight minutes to disappear completely from the body.

## **Are there any risks?**

There are no serious risks and very few side effects from inhaling Entonox gas. Occasionally you may feel some light headedness, some tingling in the fingers and face and a little sickness or dizziness. This usually happens if you are breathing the gas in and out too quickly. This is called 'hyperventilating'. If this does occur, the nurse will tell you to slow down your breathing to normal breaths and the side effects will stop. Entonox is not always suitable for everyone and there are conditions/illnesses where Entonox gas cannot be used.

These are:-

- any ear disorder or previous ear/eye surgery
- any facial injuries
- drunk or intoxicated patients
- patients with head injuries
- within 72 hours of diving using oxygen tanks
- patients who have previously suffered the bends from deep sea diving
- patients who are heavily sedated or unconscious
- severe/bad COPD/asthma (oxygen levels which are normally below 94%)
- previous chest injuries
- any kind of previous pneumothorax (air in-between the lung membranes)
- the first 16 weeks of pregnancy
- patients with laryngectomy (throat surgery).



A full assessment of your suitability for Entonox will be done upon admission.

## Benefits of choosing Entonox for endoscopic procedures

As there are no lasting effects from breathing Entonox gas, within 30 minutes you will be able to drive home and carry on with your normal day without having anyone to look after you.

## Useful sources of information

BOC Healthcare

<https://www.bochealthcare.co.uk/en/Products-and-services/Products-and-services-by-category/Medical-gases/ENTONOX/ENTONOX>

## Contact us

If you have any questions or concerns about using Entonox, you can call the Endoscopy department on **020 8725 1913 / 1491** Monday to Friday 9am to 5pm.

**For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.stgeorges.nhs.uk](http://www.stgeorges.nhs.uk)**

---

## Additional services

### Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

**Web:** [www.nhs.uk](http://www.nhs.uk)

### NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency.

NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

**Tel:** 111

### AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website ([www.accessable.co.uk](http://www.accessable.co.uk)).

The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

<b>Reference:</b> GAS_ENTO_01 <b>Published:</b> October 2019 <b>Review date:</b> October 2021
---