

Using Entonox[®] during your child's procedure



What is Entonox[®]?

Entonox[®] is a mixture of 50% oxygen and 50% nitrous oxide, also known as 'gas and air'. It is often used to treat pain during childbirth. It is also used widely by the ambulance service and in hospitals for a variety of procedures and conditions.

The exact way in which Entonox[®] works to provide pain relief is not fully understood. However it is thought to work in the brain and the spinal cord, stopping the pain from being felt.

Why should my child have it?

Entonox[®] is quick to act, and will usually begin to work within two minutes, although your child may feel some effect after the first few breaths. Its effect wears off quickly once stopped breathing it in, so your child will not feel any after-effects. One of the most popular advantages of this method of pain relief is that your child is in control of how much they have.

What are the risks?

There is minimal risk involved with the administration of Entonox[®]. The main concern is that the gas may become trapped in the body but this is only a problem if you have specific medical conditions. The nurses will carefully assess your child before they have Entonox[®] and will not give it if there is any risk that this may happen.

What are the possible side effects?

Dizziness and drowsiness: Entonox[®] can cause dizziness, however this usually improves once breathing the gas is stopped. If continuing to breathe in Entonox[®] at this point, your child may become sleepy and would automatically drop the mouth piece and breathe in normal air, which would wake them up again. It is therefore important that you do not allow anyone to hold the mouth piece for your child.

Nausea: Entonox[®] can occasionally cause nausea (sickness), but this settles once it is stopped being used.

Tingling: Entonox[®] can cause a mild tingling sensation in different areas of the body, for example, in the fingers and around the mouth. However this usually quickly improves once stopping breathing the gas.

These side effects can be reduced by ensuring your child breathes in and out at a controlled rate when using Entonox[®]. The doctor or nurse will guide your child to control their breathing.

Anaemia: Continuous use of Entonox[®] for longer than six to eight hours may cause anaemia, vitamin deficiencies and reduced bone marrow function. This is rare and is only a risk to patients in extreme circumstances. Procedures where Entonox[®] is used usually only last for about 30 minutes, so it is very unlikely that your child would experience any of these problems.

What happens if my child cannot tolerate the side effects?

Most patients find that if they concentrate on breathing slowly, they quickly become used to any sensations of dizziness, nausea or tingling. However, if Entonox[®] does not work for your child, or the side effects cannot be tolerated, an alternative pain relieving and/or sedating medication will be given instead. The doctors and nurses caring for your child can provide you with more information on alternatives.

How can I prepare my child?

Before your child can use Entonox[®], we will ask some questions to make sure that it is suitable for them. Please tell the nurse if your child:

- has recently used Entonox[®] for a procedure
- currently has, or has recently had an ear infection, or an operation on their ears
- has, or has recently had eye surgery
- has recently had a head injury which required them to be in hospital
- has recently been scuba diving
- is pregnant, or think they may be pregnant
- has recently suffered from a condition causing acute breathing problems (a chest injury, for example, or a collapsed lung)
- has emphysema, or chronic breathing problems, such as chronic bronchitis or asthma
- has been told that they have a low vitamin B12, in which case Entonox[®] should not be used
- has treatment with bleomycin or methylene tetrahydrofolate reductase.

How is it given?

Entonox[®] is designed to be self-administered – a specially trained nurse or doctor will show your child what to do. Your child will use a mouth piece (see picture), which is placed into your child's mouth. It is important that your child holds the mouthpiece firmly between their teeth to form a good seal. They will be asked to breathe deeply, for one to two minutes before the procedure begins to ensure that the painkiller is working. Entonox[®] will only flow when it is breathed in, therefore the deeper your child breathes the better their pain relief will be.



What do we need to do after we go home?

You do not have to take any special precautions if your child has used Entonox[®] for their procedure as its effects will have worn off by the time you leave the hospital.

For further information, please speak to the member of staff assisting your child to use Entonox[®].

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline.

t: 020 7188 3003 10am to 5pm, Monday to Friday

e: letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS).

To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints)

e: complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format,

please get in touch: **t:** 020 7188 8815

e: languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111

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