

# Using Entonox<sup>®</sup> during your child's procedure



## What is Entonox?

Entonox is a mixture of half oxygen and half 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 different procedures and conditions.

The exact Entonox works to provide pain relief is not fully understood. It is thought to work in the brain and the spinal cord, stopping the pain from being felt.

## Benefits of using Entonox

Entonox is quick to act, and will usually begin to work within 2 minutes, although your child may feel some effect after the first few breaths. Its effects wear 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.

## Risks of using Entonox

There is minimal risk involved with taking Entonox. The main concern is that the gas might become trapped in the body, but this is only a problem if you have certain medical conditions. The nurses will carefully assess your child before they are given Entonox, and if there is any risk they will not be given it

## Possible side effects

**Dizziness and drowsiness.** Entonox can cause dizziness, but this usually improves once breathing in the gas is stopped.

If continuing to breathe in Entonox at this point, your child might become sleepy and would automatically drop the mouth piece and breathe in normal air, which would wake them up again. It is important that you do not allow anyone to hold the mouth piece for your child.

**Nausea.** Entonox can sometimes make people feel sick (nausea, but this settles once it is stopped).

**Tingling.** Entonox can cause a mild tingling sensation in different areas of the body, for example, in the fingers and around the mouth. This usually quickly improves once stopping breathing the gas.

These side effects can be reduced by making sure that 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 6 to 8 hours can 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 have any of these problems.

## **If your 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 relief or sedating medicine will be given instead.

The doctors and nurses caring for your child can give you more information on alternatives.

## Preparing your 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 surgery 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 might be pregnant
- has recently had a condition causing acute breathing problems (for example, a chest injury 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 their 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 1 to 2 minutes before the procedure begins, to make sure that the painkiller is working. Entonox will only flow when it is breathed in, so the deeper your child breathes, the better their pain relief will be.

## After leaving hospital

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 more information, please speak to the member of staff looking after your child.

## Further information

### **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, **phone** 020 7188 3003, Monday to Friday, 10am to 5pm

**email** [letstalkmedicines@gstt.nhs.uk](mailto:letstalkmedicines@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,

**phone** 020 7188 8815

**email** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

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