



# Penthrox<sup>®</sup> (methoxyflurane)

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**Your child may be recommended a pain relieving medication called Penthrox<sup>®</sup> while they are in the Children's Emergency Department. This leaflet outlines the benefits and risks of using this drug.**

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## What is Penthrox<sup>®</sup>?

Penthrox<sup>®</sup> (methoxyflurane) is a pain-relieving medicine that is inhaled (breathed in) as a vapour through a small, handheld device.

It is a low-dose anaesthetic that provides effective pain relief without putting your child to sleep. Your child stays awake and in control while using it.

In the UK, Penthrox<sup>®</sup> is currently licensed for use in adults. Use in children is described as 'off-label'. However, it has been safely used in treating children for many years in other parts of the world and is now used in many hospitals across the UK.

## What are the benefits of using Penthrox<sup>®</sup>?

- Simple and easy to use
- Low risk of serious side effects and a proven ability to be tolerated by patients
- Provides strong pain relief quickly
- Short-acting, so effects wear off quickly
- Your child controls how much they use to relieve their pain
- Avoids the need for needles or injections for strong pain relief

## Who can use Penthrox?

Penthrox<sup>®</sup> can be used by children aged 5 years and over who are able to understand and use the inhaler correctly.

## When should Penthrox be avoided?

Penthrox<sup>®</sup> should **not** be used if your child:

- Has had a bad reaction to inhaled anaesthetic medicines in the past
- Has a family history of malignant hyperthermia (a rare condition causing a high fever after anaesthetic medicines)
- Has severe kidney, liver, or heart disease
- Is taking certain medicines, including some:
  - Antibiotics
  - Antiviral medicines
  - Anti-epileptic medicines
  - Strong painkillers

**Please tell the medical team about all medications your child is taking.**

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## **What are the possible side effects of Pentrox®?**

Common side effects include:

- Headache
- Dizziness
- Dry mouth
- Drowsiness
- Feeling sick
- Tingling of the skin
- Double vision
- Flushing or mild skin irritation

These side effects usually wear off within a few minutes after stopping use.

If your child becomes drowsy, they may be unable to keep the mouthpiece in place. This will stop them inhaling the vapour, allowing the drowsiness to wear off naturally.

**If your child becomes very drowsy or unresponsive, please inform a member of staff immediately.**

## **Rare but serious side effects of Pentrox®**

Serious side effects are very rare but may include:

- Allergic reactions
- Problems affecting the liver or kidneys

If your child feels unwell after leaving hospital, please return immediately for assessment and tell staff that your child has used Pentrox®.

## **Further information**

If you have any questions or concerns, please speak to a member of staff.

Royal Berkshire Paediatric Emergency Department Tel: 0118 322 6876.

## **Friends and Family Test**

Whatever your experience, you can give feedback by completing the Friends & Family test by going online [www.royalberkshire.nhs.uk/patients-and-visitors/friends-and-family-test/](http://www.royalberkshire.nhs.uk/patients-and-visitors/friends-and-family-test/) or using the link sent to you in an SMS text message.

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

RBFT Paediatric Emergency Department, May 2026

Next review due: May 2028