

Nitrous Oxide Sedation In Children

Fact Sheet

What is Nitrous Oxide?

Nitrous oxide is an inhaled medication which most people know as laughing gas or may have experienced themselves during childbirth. It is a very safe and effective way of relieving pain and anxiety in children during procedures.

How does it work?

It works very quickly- usually within a few minutes of breathing the gas. It provides pain relief, a sense of relaxation and loss of memory without making your child go fully to sleep.

Your child will become drowsy and may have slurred speech or seem like they are in a dream-like state. They may describe a sense of floating or feeling warm or tingly. Occasionally some children may become a little upset, but they will not remember this.

The gas wears off within minutes of the gas stopping, and they will be given oxygen at the end of the procedure to flush out the nitrous oxide from their body. The gas ensures they have no recollection of the procedure, but they remember the dream-like state.

How is it given?

Nitrous oxide is given gently via a mask or mouthpiece attached to a gas supply.

Older children may hold the mask and they are given nitrous every time they breathe.

Younger children are often unable to do this. In these cases, a senior doctor will hold a face mask over the child's face and nitrous oxide will be given continuously.

Side effects?

Nitrous oxide is extremely safe when used appropriately.

Temporary minor side effects may occur in 5-10% may include:

- Nausea and vomiting
- Euphoria
- Parasthesia
- Dizziness
- Bad dream

More significant effects are rare (around 1/300 cases).

These may include:

Airway obstruction, slowed breathing, slowed heart rate, decreased oxygen levels in the blood or over sedation.

These effects all cease within minutes of stopping the sedation, and we are prepared to manage all of them.

What happens after the procedure?

Children will wake up around 5-10 minutes after the procedure. They will be kept in the department until they can eat or drink and have fully recovered – usually around 20 minutes.

For more information

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This document has been reviewed and endorsed by consumers.

If you require this information in an alternative language or format please contact SA Health on the details provided and they will make every effort to assist you.