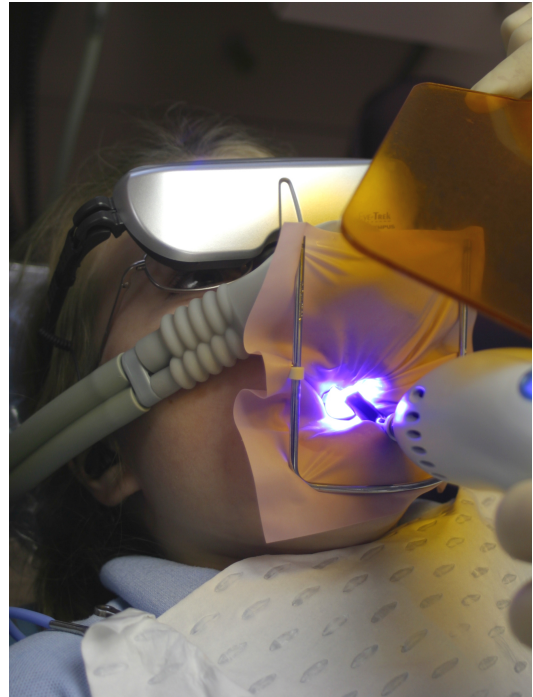


NITROUS OXIDE

An important aspect of specialist paediatric dentistry is providing high quality dental care safely and effectively, to a child in a non intimidating environment. Some children require assistance to provide the level of cooperation required to achieve this and may benefit from some form of sedation. For some children, for multiple reasons dental treatment in the office is not possible and it may be decided with the Child's Parents that general anaesthesia may be required. For others, nitrous oxide inhalation sedation may be adequate to assist in the relaxation of the patient during dental procedures. It has a mild sedative effect creating a care-free floating sensation helping to alleviate anxiety with a degree of analgesia.

Nitrous oxide is a gas that is inhaled. It is commonly known as laughing gas or happy air. It has no colour, no smell and is not irritating to hypersensitive people.



The nitrous oxide is administered through a nasal mask via a double tube system allowing the desired mixture of nitrous oxide and oxygen to flow through. The machine has a safety mechanism that allows a maximum of 70% nitrous oxide although normal dosage is between 30 - 50%. A scavenger is used to take away the waste and expired gases.

Nitrous oxide has a rapid effect. It is introduced incrementally over two to three minutes until the desired level is reached. This can be adjusted throughout the appointment if required. On completion of treatment, 100% oxygen is administered allowing the patient to return to a normal state.

There are four levels of sensation during the use of nitrous oxide:

- A tingling sensation, especially in the arms, legs, fingers and toes.
- A warm sensation.
- A feeling of euphoria, well being or 'floating on a cloud'.
- Sleepiness, difficulty in keeping eyes open. Rarely nausea.

Ideally we aim to keep the patient between the stages of warm comfort and euphoria. Young children generally during school term are often tired when they come in, they can fall asleep. This is not because of the level of nitrous oxide, it is simply they are relaxed, warm and tired.

As all children are different your child may not be comfortable with the effects of the nitrous oxide. Some don't like the feeling, others are afraid they may lose control and some simply cannot tolerate the nose piece. Each child is assessed and treated accordingly based on age maturity, degree of treatment required and their medical assessment.

If your child is unwell, has a cold or hay fever, or is a mouth breather and they are unable to breathe through their nose, nitrous oxide will have no effect, as it needs to

be inhaled through the nose. Where this is the situation, a different appointment may be planned when your child is well or an alternative sedation may be required.

For more information, please see our website at www.ikidsdentalcare.com.au/articles