

# PHARMACOLOGICAL COMFORT MEASURES FOR BIRTH



## GAS & AIR

### What is it?

Gas and air is a mixture of 50% oxygen and 50% nitrous oxide (commonly known as laughing gas). It is usually breathed in through a mask or mouthpiece, either from a central supply in a birth room or from a cylinder. As well as its use in birth, gas and air is sometimes used by dentists as a numbing agent and by paramedics for quick pain relief for trauma patients.

It is inhaled and enters the lungs, where it is absorbed into the bloodstream and reaches the brain within about 6 seconds. How it works to reduce pain is not clearly understood but it is thought that gas and air reduces pain perception.

### PROS OF USING GAS & AIR

1. It acts quickly, usually providing pain relief within 30 seconds.
2. You can usually continue to stay mobile during labour, which we know is associated with faster labours and decreased risk of tearing, among other benefits (read more about the benefits of upright positions in labour here). Also, you don't require continuous monitoring for your baby which can reduce your ability to stay moving and change position in labour.
3. It is portable (as mentioned above, it is available in cylinders), so you can change position more freely, use it during a home birth or use it in the bath or birth pool.
4. It can be administered by a midwife so you don't have to wait while a doctor or anaesthetist is called. It works best if you take slow, deep breaths.
5. You control the dosage. It's self administered, so you can reduce or increase how much of the drug you breathe in as you require.



6. It is quickly cleared from your system, so if you find the side effects unpleasant, they will quickly wear off. It does cross the placental barrier but it's effects on the baby also seem to quickly wear off.
7. It doesn't affect with oxytocin production so doesn't interfere with the bonding process once your baby is born.

## CONS OF USING GAS & AIR

1. There are some side effects associated with gas and air. For some women, it can cause nausea and/or vomiting and lightheadness. Other women experience lightheadness, sleepiness, difficulty concentrating or an out of control 'out of it' feeling which can be unpleasant.
2. Because it is quickly cleared from the system, it may not provide consistent enough pain relief for some mums and it's effectiveness can vary for different women.
3. It can be a bit fiddly. It can take several surges (contractions) for you to 'get the hang of it'.
4. Because you'll usually be breathing the gas through a mouthpiece, it can cause dry mouth. Be sure to have some drinks with you that you can sip now and again and lip balm to help with this.
5. At high doses (probably much higher than you will probably be exposed to during labour), nitrous oxide can interfere with your levels of vitamin B12 and for this reason, it is not advised for women with B12 deficiency.