



About Nitrous Oxide

Most people think of nitrous oxide as “laughing gas,” which is used in many dental offices to help with pain during dental procedures. When used for labor pain, it is a mixture of 50% nitrous gas and 50% oxygen.

Nitrous oxide is a colorless, odorless and tasteless gas made for inhalation. The gas's rapid onset of action and quick clearance prevents accumulation in maternal or fetal tissues. When it is administered without opioids or other central nervous system depressants, it is defined as minimal analgesia.

Studies have shown that its use in labor can provide effective pain relief while being safe for the mothers, babies, and health care providers. Nitrous oxide by inhalation is an analgesia alternative for women in labor, as well as in the immediate post-partum period.

To learn more ask a Kern Medical OB/GYN Provider.



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Nitrous Oxide for Pain Relief During Labor

INFORMATION YOU NEED TO KNOW



Use of Nitrous Oxide During Labor

Nitrous oxide has been used by women to help cope with labor pain in Europe, Canada, and Australia for many years. Nitrous oxide helps in lowering anxiety and tension during contractions. Some women do not find nitrous oxide helpful or dislike the way it makes them feel. If this is the case, the gas can be stopped at any time, and alternative pain relief methods can be used.

Frequently Asked Questions

Who administers the nitrous oxide?

Nitrous oxide is self-administered. You will breathe it in as you feel necessary. The mask is hand held and never strapped onto the face.

How does nitrous oxide work to relieve pain during labor?

You will hold a mask provided by our facility with a firm seal against your face and breathe in to release the flow of nitrous oxide. You will be in control of the amount of nitrous that you receive by the depth and frequency of the breaths you take. Most women say that the gas helps "take the edge off" contractions and allows them to cope with labor better when they initiate the breath about 30 seconds before each contraction starts. This allows the gas to take effect at the peak of your contraction. You are then able to use it as needed throughout labor.

Can I be out of bed when using nitrous oxide?

Yes, as long as you are steady on your feet.

How will I feel when using nitrous oxide?

Some women report feeling drowsy, lightheaded, nauseous, or a little silly while using nitrous oxide. Please report any of these possible side effects to your nurse immediately. Side effects should go away quickly when you stop breathing the nitrous oxide.

Does the nitrous oxide affect my baby?

There are no known effects on the baby. Nitrous oxide is the only pain relief method used for labor that is cleared from the body through the lungs. As soon as you pull the mask away, the nitrous effect is gone within a few breaths. Using nitrous oxide does not mean you need additional fetal monitoring.

Can I use nitrous oxide and have intravenous (IV) opioid medications at the same time?

No, this would require a different level of monitoring for both you and your baby.

When can I start using nitrous oxide and how long can I use it?

You can use nitrous oxide at any time during labor or after delivery while undergoing a painful procedure such as a perineal repair, removal of placenta, D&C, etc. You can use the nitrous oxide for as long as you would like during labor.

Must I choose between either using nitrous oxide OR having an epidural?

No, you may choose to use nitrous oxide prior to an epidural or other IV pain medication. It is perfectly fine to use the nitrous oxide first, and then move on to a different type of pain management. In special circumstances, and with the approval of your Anesthesiologist, nitrous oxide might be used in conjunction with an epidural.

Are there any severe side effects of nitrous oxide use?

You could pass out for a short time if you were to breathe too much gas. This is why we strictly enforce you are the only person holding the mask or mouthpiece. The gas is only released when you take a deep breath. If you were to take in too much gas your hand would slip away from the mask, and you will no longer breathe in the gas. There is no known effect on the progress of labor.

Are there any reasons that I could not use nitrous oxide?

Nitrous oxide cannot be used if you:

- Cannot hold your own face mask
- Have a known vitamin B12 deficiency
- Have received an opioid IV pain medication within the past hour
- Have other medical conditions identified by your doctor that place you at risk