

# Using Nitrous Oxide During Labor

## What is it?

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Nitrous oxide is a colorless, odorless gas usually mixed 50/50 with oxygen. The gas is widely used around the world for pain relief during labor. Most people know of it as “laughing gas.” However, the blend used during labor **is different** because a much lower dose is needed to assist with labor pain and anxiety.

## How does it work?

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Nitrous oxide is self-administered. You hold your own mask and begin to inhale the gas mixture about 30 seconds before a contraction begins. Inhaling before a contraction begins helps the gas reach its peak effect at about the same time as the contraction peaks, providing the greatest relief.

## Benefits of Nitrous Oxide During Labor

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- Eases pain. Often described as disassociation from pain.
- Lowers anxiety to feel less tense during contractions.
- Helps with relaxation and well-being.

## Does it have any side effects?

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Nausea and unsteadiness may occur. There should always be someone with you in case you need assistance. (Nausea medication is available, as needed.)

## Are there any effects on baby?

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**No**; there are no known effects on the baby or breastfeeding. Nitrous enters and leaves your body by breathing. As soon as you pull the mask away, the nitrous effect is gone within a few breaths. Additionally, no extra fetal monitoring is required for nitrous to be used.

## You cannot use it if:

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- You are unable to hold up the mask yourself.
- All nitrous machines are in use.
- You received a narcotic in the past 2 hours.
- You have pernicious anemia or a **B12 deficiency** and take supplements (see back page).

## Safety Measures

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If anyone else is observed or suspected of using the nitrous oxide mask, the nitrous oxide machine will be removed from the room, and the Security Department may be notified.

**Please ask your doctor, midwife or nurse if you have any questions or concerns.**

## Do I have to choose between either using nitrous oxide OR having an epidural?

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**No;** although, they would not be used together (the epidural and nitrous), it is perfectly fine to use nitrous first, and then transition to a different type of pain relief if you find you need to change to something else.

## Who is at risk of vitamin B12 deficiency?

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People who do not eat enough foods that contain vitamin B12 and those who have poor absorption of vitamin B12 are at risk of deficiency. If any of the following apply to you, inform your provider so you can be screened for vitamin B12 deficiency:

- Following a vegan, vegetarian, or plant-based diet with minimal or no consumption of animal products (meat, fish, eggs, dairy).
- History of the surgical removal of a portion of the stomach and/or intestine, including weight-loss surgery.
- Diagnosed with an inflammatory intestinal disorder, such as Crohn's disease or celiac disease.
- Taking metformin for more than four months or acid-suppressing medication for more than 12 months.

## Nitrous Oxide versus Epidural for Pain Relief

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- **It's quick to start:** You'll begin feeling the effects of the drug after taking just a few breaths.
- **You can move around:** You won't be hooked up to an IV and monitor, so if you want to walk or sit on a birthing ball, or change your position, you'll be able to.
- **You can stop at any time:** If you aren't enjoying the effects or don't feel like nitrous oxide is helping you anymore, simply breathing regular air will make the effects disappear.