

Information about nitrous oxide

The use of nitrous oxide as an intoxicant has become more common among teenagers and young adults. Many people think that nitrous oxide is harmless, but that is not true. Anyone who uses nitrous oxide for the purpose of intoxication risks serious damage to the nervous system and brain.



What is nitrous oxide?

Nitrous oxide is a drug used as pain relief, for example during childbirth. Non-medical nitrous oxide is used as propellant, mainly in whipped cream siphons.

What do I need to know?

In recent years, nitrous oxide has become increasingly common as an intoxicant. Today, it is readily available to individuals, primarily through online stores. There is no age limit and the sale of nitrous oxide is not regulated. The government has appointed an inquiry into what the legislation should be regarding the non-medical use of nitrous oxide.

Nitrous oxide can be purchased in small silver-coloured cartridges and large cylinders. The gas is often inhaled directly from the cartridge/cylinder or by filling a balloon with nitrous oxide and then inhaling from the balloon. Nitrous oxide provides a 1–2-minute high that creates relaxation and giggling. It can also provide pain relief and hallucinations.

When nitrous oxide is inhaled directly from a gas cylinder or balloon, the person inhales concentrated gas. This is different from the nitrous oxide used in healthcare – it is mixed with oxygen and given by trained healthcare professionals who control the amount and strength. In addition, its use in healthcare is limited as nitrous oxide is used on a single occasion and the body and nervous system are given time to recover.

WHAT CAN I DO AS AN ADULT?

Talk to teenagers and young adults in your area about the risks of using nitrous oxide. Also be observant if you find gas canisters or balloons.

What are the risks?

- Every time you use nitrous oxide, the vital vitamin B12, which is needed to e.g. create blood cells and protect nerve fibres, is destroyed. The greatest risk of nitrous oxide is seen with repeated use because the body does not have time to recover, which can lead to serious damage to the nervous system. Symptoms of this include loss of sensation, numbness and reduced strength in the fingers, hands, arms and legs, as well as problems with bladder control. You may find it difficult to stand and walk.
- Other symptoms include anxiety, psychosis, and severe memory problems similar to dementia. It also increases the risk of blood clots.
- Concentrated nitrous oxide is very cold directly from the cylinder – it can be close to minus 100 degrees Celsius and cause frostbites in the mouth, oesophagus and airways. You may have difficulties breathing and swallowing for a long time afterwards.
- When you breathe in pure nitrous oxide, you do not get any oxygen. That may cause you to feel dizzy or briefly faint. Afterwards, when you breathe in air again, you get enough oxygen and recovery is usually fast.
- Deaths from nitrous oxide use are very rare but they do occur.

Other important things I should know?

- It is not possible to state how much nitrous oxide you can ingest without it being dangerous – it varies from person to person. The more nitrous oxide you use, the greater the risk of serious injury.
- A common misconception is that taking extra vitamin B12 is enough to avoid the side effects of nitrous oxide as an intoxicant. That is not true – nitrous oxide destroys all vitamin B12, including that supplied through supplements and food.
- There is nothing you can do preventively to make nitrous oxide less dangerous to inhale.
- If injury occurs as a result of repeated nitrous oxide use, the most important measure is to stop using nitrous oxide, in combination with a healthcare evaluation.

Do you have questions about nitrous oxide?

You can get advice and answers to questions about nitrous oxide and other drugs here.

Giftinformationscentralen (Swedish Poison Information Centre) on 010-456 6700 or on giftinformation.se/aktuellt/lustgas/ (website in Swedish)

Full koll – fullkoll.nu (website in Swedish)

1177 – call 1177 for medical advice or visit the website [1177 in other languages – 1177](#)

112 – If it is an emergency, call 112 and ask for giftinformation (poison information). [Important information in different languages – SOS Alarm](#)