

Nitrous Oxide: Information & Safety

Medical providers in Nevada County have seen an increase in patients seen at the emergency department and other medical offices as a result of nitrous oxide use. The negative effects from using nitrous oxide are often neurological (having to do with the nervous system) and range from tingling in the limbs, loss of sensation and significant weakness to long-term nervous system damage. This fact sheet provides information about nitrous oxide use and treatment options.

WHAT IS NITROUS OXIDE?

Nitrous oxide (also known as **laughing gas**, **noz**, or **whippets/whip-its**) is a colorless gas that is used for sedation and pain relief in medical settings, but is also used recreationally. In medical settings, nitrous oxide is highly regulated and often given along with oxygen to ensure safety. When used outside of a medical setting, it is often taken at higher concentrations and without oxygen.

HOW IS NITROUS OXIDE USED?

Nitrous oxide most often comes in highly-pressurized, metal canisters. People who are using nitrous oxide often inhale the gas through balloons. Inhaling nitrous oxide directly from the canister is dangerous because the gas is under high pressure and comes out extremely cold, which can damage the throat and lungs, stop breathing, or slow the heart to a dangerous level.

CAN YOU OVERDOSE?

Inhaling nitrous oxide can be deadly in rare instances if you don't get enough oxygen (known as hypoxia) or if you experience a loss in blood pressure that leads to a heart attack.

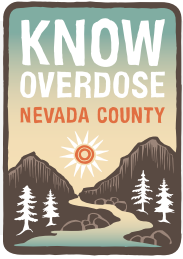
WHAT ARE THE SHORT-TERM EFFECTS OF NITROUS OXIDE?

The short-term effects of nitrous oxide vary for each person. It often produces a sense of dissociation of the mind from the body (a sense of floating) and distorted perceptions. Nitrous oxide affects everyone differently, based on:

- Amount taken
- Person's size, weight and health
- Whether the person is used to taking it
- Whether other drugs are taken around the same time

The following effects may be felt almost immediately and can last for a few minutes:

- Euphoria
- Sedation
- Giddiness
- Sweating
- Blurred vision
- Confusion
- Numbness of the body
- Uncontrolled laughter
- Uncoordinated movements
- Dizziness and/or light-headedness
- Feeling unusually tired or weak



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Nitrous oxide cannisters

IS TREATMENT AVAILABLE?

While nitrous oxide is not physically addictive, psychological (mental) dependence does happen. People interested in treatment for nitrous oxide or other drug use, can visit [Know Overdose Nevada County's Local Resources page](#) under **Treatment** to find treatment resources, or contact [Nevada County Behavioral Health](#) at 530-265-1437.

Anyone experiencing the effects of long-term nitrous oxide use, including nerve damage, should consult a medical practitioner as soon as possible, since research shows early treatment improves the chances of recovery. Common medical tests include lab tests for Vitamin b12 levels and homocysteine levels. The primary treatment for the neurological impacts of prolonged nitrous oxide use is typically repeated injections of Vitamin B12, although the success of this treatment and recovery varies for each person.

Much of this fact sheet was adapted from the [Alcohol & Drug Foundation's nitrous oxide webpage](#).

WHAT ARE THE LONG-TERM EFFECTS OF NITROUS OXIDE?

Long-term effect also vary from person-to-person and depend on the frequency, amount and length of use. Heavy use of nitrous oxide may result in:

- Memory loss
- Vitamin B12 depletion
- Brain and nerve damage, significant paralysis, foot drop, inability to walk
- Ringing or buzzing in the ears
- Incontinence (inability to control bladder and/or bowels)
- Numbness in the hands or feet
- Limb spasms and incoordination
- Potential birth defects (if consumed during pregnancy)
- Weakened immune system
- Disruption to reproductive systems
- Depression
- Psychological (mental) dependence
- Psychosis
- Low blood pressure
- Lack of judgement and safety awareness

LEARN MORE

Web: KnowOverdoseNC.com/nitrous-oxide

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