

# NITROUS OXIDE : THE FACTS

## WHAT IS NITROUS OXIDE?

Commonly known as 'laughing gas' nitrous oxide is a colourless non-flammable gas that is generally used for sedation and pain relief.

It is also sometimes referred to as an inhalant or a volatile substance.

Inhalants are central nervous system (CNS) depressants. This means they slow down the workings of the brain, particularly breathing and heart.

## HOW IS NITROUS OXIDE USED?

The gas is typically inhaled through balloons filled with canisters of the gas. Serious damage can be done to the lungs if the gas is inhaled directly from capsules or cylinders.

When inhaled, the fumes enter the bloodstream very quickly and the effects are felt after just a few seconds.

Nitrous oxide is also known as laughing gas, nitro, N2O, NOS, nangs, whippet, hippy crack, buzz bomb, balloons.

## EFFECTS OF NITROUS OXIDE

The effects of nitrous oxide depend on:

- how much you take
- your height, weight
- your general health (risks increase in people with a B12 deficiency)
- your experience with taking nitrous oxide
- whether it is taken with other drugs.

### IMMEDIATE EFFECTS

The effects may start to be felt immediately and can last from 2 – 3 minutes; some effects may last up to 30 – 40 minutes.

### Physical Effects may include:

- initial "rush" or "high"
- euphoria
- giggling and laughing
- numbness of the body

- sedation
- giddiness
- uncontrolled laughter
- sound distortions
- blurred vision
- confusion
- dizziness and/or light-headedness
- sweating
- feeling unusually tired or weak
- sudden death

### If a large amount of nitrous oxide is inhaled it can produce:

- loss of blood pressure
- fainting
- unsteady gait, stumbling
- heart attack
- inhaling nitrous oxide can be fatal if you don't get enough oxygen, which is known as hypoxia.

### Effects of prolonged use\* may include:

- memory loss
- vitamin B12 inactivation (the body is unable to use B12 which may cause brain and spinal cord damage. Taking a B12 supplement will not prevent this.)
- anaemia
- incontinence
- numbness in the hands or feet
- limb spasms
- potential birth defects (if consumed during pregnancy)
- weakened immune system
- disruption to reproductive systems

### Psychological effects may include:

- depression
- psychological dependence
- psychosis

\*used more than once a week

## OVERDOSE

Whilst the risk of overdose from nitrous oxide is low people with heart conditions or abnormal blood pressure may be at higher risk as the drop in oxygen levels caused by inhaling the gas raises the heart rate, which could cause problems.

When inhaling directly from bulbs, the gas is intensely cold (-40C degrees) and can cause frostbite to the nose, lips and throat (including vocal cords). As the gas is also under constant pressure, it can cause ruptures in lung tissue when inhaled directly from these containers. Releasing the nitrous oxide into a balloon helps to warm the gas and normalise the pressure before inhaling.

People can also harm themselves if they use faulty gas dispensers, which may explode. Dispensing multiple gas canisters with one cracker (a handheld device used to 'crack' a nitrous oxide bulb/whippet) can also cause cold burns to the hands.<sup>9</sup>

To reduce the risks associated with misusing nitrous oxide **DON'T**:

- use it alone or in dangerous or isolated places
- put plastic bags over your head or restrict breathing
- spray near flammable substances, such as naked flames or cigarettes
- drink alcohol or take other drugs
- stand or dance while inhaling, as you may pass out

## MIXING WITH OTHER DRUGS

Mixing nitrous oxide with alcohol can also increase the risks associated with both substances and can lead to an increased risk of accidents or death.

Mixing nitrous oxide and alcohol can cause:

- confusion
- feeling heavy or sluggish
- reduced concentration
- loss of body control<sup>9</sup>.

The chances of an overdose are increased if taken with other depressant drugs such as benzodiazepines or opiates. Using nitrous oxide with other depressants can affect breathing rate and the heart and blood vessels. Mixing drugs can also increase the risk of passing out and suffocating or choking on vomit.