

Abuse of Nitrous Oxide for Recreational Inhalation

EIGA strongly disapproves of the personal use of gases without medical surveillance and, in particular, disapproves of the inhalation of any gases, except those when prescribed and used as medicines, or when specifically produced, sold and used for breathing applications such as diving.

The dangers of nitrous oxide

Nitrous oxide (unfortunately termed “laughing gas”) is used in the food industry as propellant in whipped cream canisters. It is also used in medicine for anaesthesia (anaesthetic) and as a painkiller (analgesic). As such it also falls under both pharmaceutical and food regulations.

Nitrous oxide use as an intoxicating substance and recreational drug, is on the rise particularly at festivals, events and night clubs. The growing popularity may lie in the fact that nitrous oxide is relatively cheap and easy to obtain. Nitrous oxide may appear harmless but can entail serious health risks.

Characteristics

Nitrous oxide is a compound of nitrogen and oxygen with the formula N_2O . In the atmosphere, nitrous oxide is a powerful greenhouse gas (300 times more than carbon dioxide). Nitrous oxide gas is colourless and has a slightly sweet taste and odour. The gas itself is not flammable, but it is a powerful oxidiser and can therefore enhance the combustion of flammable substances.

The dangers of using nitrous oxide

Nitrous oxide gives a temporary feeling of euphoria or intoxication (quick high) almost immediately after inhalation that can last for a few minutes. This drop in consciousness is somewhat like drunkenness. Nitrous oxide also causes an oxygen deficiency that causes dizziness, concentration problems and hallucinations (hypoxia). Physical effects include fainting, vomiting and headache (hangover feeling).

It is also possible that people feel restless or anxious, like in a nightmare. Other risks include infertility, spontaneous miscarriages, birth defects in pregnant women, loss of blood pressure, fainting or heart attack.

Inhaling a large amount of nitrous oxide will replace the oxygen in the lungs essential to life causing hypoxia. Reducing the oxygen concentration can cause brain damage or even death. In general, the more you take, the more you can suffer from unwanted effects.

Warning for the abusive inhalation of nitrous oxide

The name “laughing gas” should not be used as it trivialises its risks, but it is not safe to inhale and there have been many deaths from its abuse.

Inhalation of nitrous oxide via any means is dangerous because:

- too much gas leads to hypoxia (starvation of oxygen), possible brain damage and death;
- inhalation directly from a canister can freeze the mouth, airways and lungs due to very low temperatures, or damage to mouth or lungs (rupture) from the pressure;
- sudden loss of co-ordination or fainting can cause injuries from trips or falls;
- it can result in infertility due to disturbed production of sperm and red blood cells, or cause spontaneous miscarriages or birth defaults;
- chronic use of nitrous oxide may result in a deficiency of vitamin B12 and neurological disorders; or
- frequent use can result in dependency like any other drug.

Further Information:

EIGA PP24 Abuse of Gases www.eiga.eu.

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