



Nitrous oxide (N₂O) vs Nitric oxide (NO) Nasal Spray (NONS)
SaNOtize 'Poster': No Laughing Matter

	Nitrous Oxide Gas (N₂O) Non-flammable Lung Inhalation		Nitric Oxide Gas (NO) Nasal Spray (NONS) NO produced when sprayed
Names	Anesthetic gas Laughing gas Whippet / Hippy Crack / Nangs	VS	enovid™ Virx™ FabiSpray™
Examples	 Supplied in small pressurized balloons (rave)	VS	 Non pressurized liquid in a pump spray bottles
Primary medical legitimate Use	N ₂ O Anesthesia (dental/surgical)	VS	NO Antiviral (nasal cavity spray) SARS-CoV-2 treatment; Mechanical and chemical barrier against viruses within the nasal cavity-lacks systemic absorption
Endogenous	Not found naturally in the body	VS	Produced naturally throughout the body
Normal physiologic actions within the body	N ₂ O Endogenous - None	VS	NO Endogenous - vasodilation, bronchodilation, regulation of neuronal function and signal transmission, inflammatory response, modulates intraocular pressure, direct/indirect antiviral activity
Abuse Potential	N ₂ O High	VS	NO None
Rave Use	N ₂ O Euphoria (hallucinations)	VS	NO None
Severe toxicity	Unconsciousness Death from asphyxiation (suffocation)	VS	None
Sub-toxic clinical reason for ER visit or hospitalization	Lower/upper limb numbness, weakness; difficulty walking, or performing fine tasks with the hands; resembles demyelinating neuropathy similar to Guillain-Barré syndrome	VS	None
Treatment	N ₂ O High-dose vitamin B 12 (intramuscular)	VS	NO Not applicable/not needed
Recovery	May not fully recover	VS	Not applicable
References	¹ Whippet toxicity (Pract Neurol) ² England's 2001-2020 Tox Rpt	VS	³ JOI (NONS UK Phase 2) ⁴ Lancet (NONS India Phase 3)

1. Nitrous oxide toxicity (Wippits) 2015
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4453489/>
2. England's 2001-2020 Deaths Related to Volatiles (including nitrous oxide)
<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/deathsrelatedtovolatilesubstancesheliumandnitrogeninenglandandwales/2001to2020registrations>
3. Nitric oxide nasal spray Phase 2 randomized clinical trial (COVID-19 Treatment) 2021
<https://pubmed.ncbi.nlm.nih.gov/33992687/>
4. Nitric oxide nasal spray Phase 3 randomized clinical trial (COVID-19 Treatment) 2022
[https://www.thelancet.com/journals/lansea/article/PIIS2772-3682\(22\)00046-4/fulltext](https://www.thelancet.com/journals/lansea/article/PIIS2772-3682(22)00046-4/fulltext)