

Inhalants/Aerosols

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Glue, gassing, sniffing, chemo, snappers.

Amyl and butyl nitrites (pearls, poppers, rush, locker room, bolt, kix).

Nitrous oxides (laughing gas, balloons, whippets).¹

Substances abused include;

Volatile gases: butane, propane, aerosol propellants

Solvents: Airplane glue, gasoline, toluene, printing fluid, cleaning solvents, benzene, acetone, spray paint

Aerosols: deodorants, hair spray, Freon

Anaesthetic gases: Nitrous oxide, chloroform, ether¹



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| <p>Characteristics</p> | <ul style="list-style-type: none"> Inhaled product enters the bloodstream quickly via the lungs and CNS penetration is rapid¹ Intoxication occurs within minutes and can last from a few minutes to an hour¹ Tolerance develops to desired effect psychological dependence is frequent¹ |
| <p>Presentation during intoxication¹</p> | <p>Common signs and symptoms of intoxication can include:</p> <ul style="list-style-type: none"> Drowsiness Dizziness Slurred speech Impaired motor function Muscle weakness Cramps Light sensitivity Headache Nausea or vomiting Salivation Sneezing Coughing Wheezing Decreased breathing and heart rate Hypotension Cramps Changing levels of awareness Impaired judgment and memory Loss of inhibitions Hallucinations Euphoria Excitation Vivid fantasies Feeling of invincibility Delirium <p>Extreme intoxication signs and symptoms may include¹:</p> <ul style="list-style-type: none"> Acute and chronic effects reported (e.g ataxia, peripheral neuropathy) MI may occur, primarily with use of halogenated solvents Acidosis and hypokalemia Hepatitis and hepatic necrosis Bone marrow suppression (primarily with benzene and nitrous oxide use) |
| <p>Monitoring and support during intoxication⁵</p> | <p>Monitor</p> <ul style="list-style-type: none"> Vital signs Mental status Electrolytes <p>Supportive Interventions</p> <ul style="list-style-type: none"> Use calming techniques and reassurance |
| <p>Withdrawal presentation</p> | <p>***After long periods of use, it has been found some inhalant users may experience a withdrawal syndrome comparable to delirium tremens (DTs) that occurs in individuals withdrawing from alcohol.⁴</p> <p>Other symptoms can include^{2,3,4}</p> <ul style="list-style-type: none"> Insomnia, Muscle tremors and cramps Tremors, Hallucinations Nausea Excessive sweating Extreme confusion, Anxiety Seizures Headache Depression Irritability Dizziness Craving for drug |

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| | <p>***There is much variability in the chemicals being used and the doses received; therefore, it is impossible to predict exact symptoms for each user undergoing withdrawal.⁴</p> |
| Monitoring and support during withdrawal | <p>Effects are usually short lasting¹</p> <ul style="list-style-type: none"> • Use calming techniques • Reassurance |
| Potential Complications | <p>High doses can lead to loss of consciousness, convulsions, cardiac arrhythmia, seizures, and death.¹</p> <p>Chronic use can lead to;</p> <ul style="list-style-type: none"> • Fatigue • Chronic headache • Encephalopathy • Hearing loss • Visual impairment • Sinusitis • Rhinitis • Laryngitis • Weight loss • Kidney and liver damage • Bone marrow damage • Cardiac arrhythmias • Chronic lung disease |
| Drug interactions | <p>With CNS Depressants</p> <ul style="list-style-type: none"> • Increased impairment of judgment, distortion of reality¹ • Can dangerously suppress the central nervous system.⁴ <p>With Alcohol, Benzodiazepines, Hypnotics and Narcotics¹</p> <ul style="list-style-type: none"> • Increased impairment of judgement • Distortion of reality |
| Psychiatric effects | <p>Chronic use can lead to inability to think clearly memory disturbances, depression, irritability, agitation, and paranoia¹</p> <p>Inhalant use has also been associated with sleep disorders, delirium, and mood disorders⁴</p> |

References

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4. Beyond the Basics. Inhalants. Addiction Foundation of Manitoba. Taken on March 30, 2015 from http://afm.mb.ca/wp-content/uploads/woocommerce_uploads/2013/03/InhalantsBTB.pdf
5. Townsend, M.C. (2015). *Psychiatric Nursing: Assessment, Care Plans, and Medications*. Oklahoma: F.A. Davis Company.