

# Inhalant Abuse II

Rimrock  
Foundation

## FACT SHEET

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### What are inhalants?

**Inhalants are volatile substances that produce chemical vapors that can be inhaled to induce a psychoactive, or mind-altering, effect.** Although other abused substances can be inhaled, the term “inhalants” is used to describe a variety of substances whose main common characteristic is that they are rarely, if ever, taken by any route other than inhalation.

**Inhaled chemicals travel rapidly from the lungs through the blood to the brain and other organs. In minutes, the user feels alcohol-like effects such as slurred speech, clumsy movements, dizziness, and euphoria.** Other effects might include lightheadedness, hallucinations, delusions, and, after heavy use of inhalants, drowsiness and a lingering headache. Inhalants dilate blood vessels, increase heart rate, and produce a sensation of heat and excitement.

### Classes of inhalants

**Inhalants encompasses a broad range of chemicals found in hundreds of different products that may have different pharmacological effects. As a result, precise categorization of inhalants is difficult. There are four general classes of inhalants: volatile solvents, aerosol, gases, and nitrites which are often found in household, industrial, and medical products.**

- Volatile solvents are liquids that vaporize at room temperatures.** They are found in a multitudes of inexpensive, easily available products used for common household and industrial purposes. Also included are thinners and removers, dry-cleaning fluids, degreasers, gasoline, glues, correction fluids, and felt-tip marker fluids.
- Aerosols are sprays that contain propellants and solvents.** They include spray paints, deodorant

and hair sprays, vegetable oil sprays for cooking, and fabric protector sprays.

- ❑ **Gases include medical anesthetics as well as gases** used in household or commercial products. Medical anesthetic gases include ether, chloroform, halothane, and nitrous oxide, commonly called laughing gas is the most abused of these gases. It can also be found in whipped cream products and additives to boost octane levels in racing cars. Household or commercial products containing gases include butane lighters, propane tanks, whipped cream dispensers, and refrigerants.
- ❑ **Nitrites often are considered a special class of inhalants used primarily as sexual enhancers.** Unlike most other inhalants, which act directly on the central nervous system (CNS), nitrites act on the body primarily to dilate blood vessels and relax the muscles.

### How are inhalants used?

Inhalant abusers can sniff or snort fumes from containers, spray aerosols directly into the nose or mouth, or “huffing” fumes from an inhalant-soaked rag stuffed into the mouth, sniffing fumes from substances sprayed into a paper or plastic bag, or inhale from balloons filled with nitrous oxide. The quick high from inhalants lasts only a few minutes, so abusers often inhale repeatedly over several hours - a practice that can cause unconsciousness and even death.

**Inhalants-particularly volatile solvents and aerosols are often among the first drugs children use. These are one of the few substances abused more by younger children than by older ones. Nevertheless, abuse can become chronic and extend into adulthood.**

Generally, people who use inhalants will abuse any available substance. However, effects produced by inhalants vary, with some individuals going out of their way to obtain their favorite inhalant. In certain parts of the country, “Texas shoe-shine,” a shoe-shining spray containing the chemical toluene is a local favorite. **Silver and gold spray paints, which contain more toluene than other spray colors are also popular.**

### How is abuse recognized?

**Early identification and intervention are the best ways to stop inhalant abuse before it causes serious health consequences. Parents, educators, family physicians, and other healthcare practitioners should be alert to the following signs of a serious inhalant abuse problem:**

- Chemical odors on breath or clothing
- Drunk or disoriented appearance
- Paint or other stains on face, hands or clothes
- Slurred speech
- Hidden empty spray paint or solvent containers and chemical-soaked rags or clothing
- Nausea or loss of appetite
- Inattentiveness, lack of coordination, irritability and depression

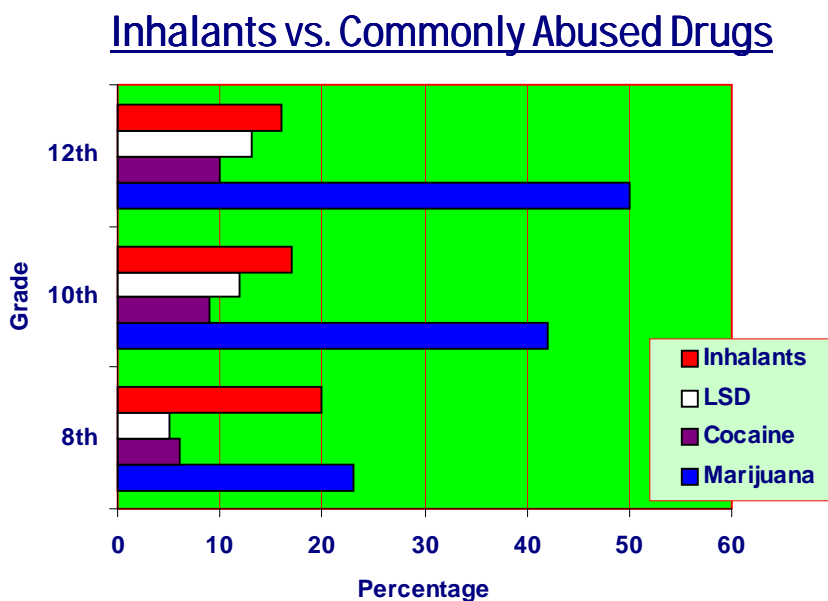
### Patterns of abuse

People who abuse inhalants are found in both urban and rural settings. Research on factors contributing to inhalant abuse suggests that adverse socioeconomic conditions, rather than racial or cultural factors, may account for most reported racial and ethnic differences in rates of inhalant abuse. **Poverty, a history of childhood abuse, poor grades, and dropping out of school all are problems associated with this addiction.**

According to the National Institute on Drug Abuse (NIDA), Native American youths who live on reservations, where socioeconomic distress and school dropout rates are typically high, have higher rates of inhalant abuse than both the general population of young people and those Native American youths who are not living on reservations.

**Despite the declines in abuse among schoolchildren in recent years, inhalants are still being abused at higher rates than they were a decade ago, according to NIDA.** About 6 percent of children in the United States have tried inhalants by the time they reach fourth grade. In 1999, NIDA's "Monitoring the Future" survey showed that 19.7 percent of 8th-graders, 17 percent of 10th-graders, and 15.4 percent of 12th-graders said they had abused inhalants at least once.

**Data from national and State surveys suggest inhalant abuse reaches its peak at some point usually in the seventh through the ninth grades.**



## Medical consequences

**Inhalant abusers risk an array of devastating medical consequences.** Prolonged sniffing of the highly concentrated chemicals in solvents or aerosol sprays can induce irregular and rapid heart rhythms and lead to heart failure and death within minutes of a session of prolonged sniffing. This syndrome is known as "**sudden sniffing death**". It is particularly associated with the abuse of butane, propane, and chemicals in aerosols. **Inhalant abuse also can cause death by:**

- Asphyxiation** from repeated inhalations, which lead to high concentrations of inhaled fumes displacing the available oxygen in the lungs.
- Suffocation** from blocking air entering the lungs when inhaling fumes from a plastic bag placed over

the head.

- ❑ **Choking** from inhalation of vomit after inhalant use.
- ❑ **Fatal injury** from accidents, including vehicle fatalities, suffered while intoxicated.

**Research shows that most inhalants are extremely toxic. The neurotoxic effects of prolonged inhalant abuse include neurological syndromes that reflect parts of the brain involved in controlling cognition, movement, vision, and hearing. Cognitive abnormalities range from mild impairment to severe dementia.**

## The path to healing

Inhalants are clearly dangerous drugs, which pose a particular threat to the health and well-being of children and adolescents at a critical point in their lives - when they are growing, learning, maturing, and laying the foundation for their adult years. Children look to parents for help and guidance in working out problems and in making decisions, including the decision not to use drugs.



**There is no magic bullet for preventing teenage drug use. But parents can be influential by talking to their children about the dangers of using inhalants and other drugs and by remaining actively engaged in their children's lives.**

Studies shows that appropriate parental monitoring can reduce future drug use, even among those adolescents who may be prone to addictions, such as those who are rebellious or ones who cannot control their emotions.

Rimrock Foundation has pioneered an advanced Addictions Treatment Model. This model focuses education and therapy on the always-present psychological core of the addiction experience that hides the reality of the illness from both patient and family.

We give our patients and family members an unparalleled understanding about themselves, their illness, their thinking patterns, and alternative behaviors necessary for abstinence from mood-altering chemicals or experiences.

**For further information on Rimrock Foundation's treatment of inhalant abuse, call Barbara Hansen, Admissions Supervisor, at 1-800-227-3953 or 1-406-248-3175, or visit our website at [www.rimrock.org](http://www.rimrock.org). For more educational information on inhalant abuse, contact the Rimrock Foundation Library at the above numbers.**

**Disclaimer: This Fact Sheet is designed for educational purposes only. The information contained herein is not intended to substitute for informed medical advice or training. This information should not be used to diagnose or treat a health problem without consulting a qualified healthcare provider.**