

Instructor's Guide

Drugs: Uses and Abuses

INHALANTS

The History of Inhalants

Inhaling vapors to alter one's state of mind dates back to the times of the ancient Greeks. In ancient Delphi, a priestess known as "The Pythoness" inhaled vapors from a rock crevice as a part of her priestly activities.

In the 1840s, the effects of diethyl ether and nitrous oxide were demonstrated to the general public in "ether frolics" and "laughing gas demonstrations." Experience with these early agents led to their use as anesthetics, and the new branch of medicine known as "anesthesiology."

Evidence of inhalant abuse in the medical literature of the 1800s consisted mainly of case reports. In 1849, Dr. Horace Wells died of chloroform abuse. He had introduced nitrous oxide and chloroform as dental and surgical anesthetics only five years before. A case of chloroform abuse in an adolescent was described in 1885.

In the United States, gasoline sniffing became popular among teenagers in the 1950s, primarily in rural areas where alcohol and other commonly used drugs were more difficult to obtain. Glue sniffing became widespread in California in the early 1960s and by 1965 had been reported in every state and in many foreign countries.

Inhalant abuse steadily increased in the U.S., Mexico, and Canada throughout the 1980s and early 1990s. Inhalant abusers typically begin using in early to middle adolescence; a significant minority continue into adulthood. There are many types of inhalant substances, and they are inexpensive, plentiful, and easily available to minors.

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- Cox, Frank and Trent Tschirgi. "What is the History of Inhalants?" 1993. *METNET Drug Information Base*. Online. University of Maryland. 20 April 2000.

Nitrous Oxide Timeline

- 1772** Nitrous oxide was discovered by English scientist Joseph Priestley.
- 1799** Humphrey Davy, superintendent of the Pneumatic Institute in Bristol, England, experimented with the physiological properties of nitrous oxide, such as its effects upon respiration. He administered the gas to visitors at the institute, and coined the term "laughing gas."
- 1800** Humphrey Davy published the book *Researches, Chemical and Philosophical: Chiefly Concerning Nitrous Oxide*, in which he described the analgesic benefits he obtained by inhaling nitrous oxide. The information about the anesthetic effect of nitrous oxide was not tested and utilized for another 45 years.
- 1800-1840** Nitrous oxide is used primarily for recreational enjoyment and public shows. So-called nitrous oxide capers took place in traveling medicine shows and carnivals, where the public paid a small price to inhale a minute's worth of gas.
- 1844** The anesthetic properties of nitrous oxide are first demonstrated by Dr. Horace Wells, a British dentist. While watching a nitrous oxide exhibition by Garner Quincy Colton, Wells witnessed a participant injure his leg while on nitrous oxide. Noting that the man did not feel any pain until after the effects of the drug wore off, Wells realized that the gas was acting as an anesthetic and could possibly be used in dentistry. The next day he invited Colton to visit his office, where Colton administered nitrous oxide to Wells while an associate extracted one of Wells' molars.
- 1845** Dr. Wells demonstrated the effects of nitrous oxide at Harvard Medical School. When the patient having his tooth removed expressed that he felt discomfort, the audience booed Wells and the experiment was deemed a failure. It wasn't until 150 years later that Wells was recognized as the "Discoverer of Anesthesia."
- 1863** Nitrous oxide resurges as an anesthetic used in dentistry, primarily through the efforts of Colton, who opened a series of dental institutes across the U.S. that utilized the drug. At the time, 100% nitrous oxide was administered without supplemental oxygen, unlike today.

• The Vaults of Erowid. *Nitrous Timeline*. www.erowid.org/chemicals/nitrous/nitrous_timeline.php3. © 2000.

Questions

- Which of the following items is considered an inhalant?
 - Correction fluid
 - Gas from whipped cream cans
 - Hair spray
 - Gasoline
 - All of the above

- The feeling of euphoria associated with inhaling chemicals lasts _____.
 - 1 minute
 - 5 minutes
 - 30 minutes
 - 60 minutes

- What is one of the reasons inhalants are so commonly used?
 - They are cheap.
 - They are easy to get.
 - The high lasts a long time.
 - (a) and (b) only
 - All of the above

- When someone inhales drugs directly from the container, it is called _____.
 - bagging
 - sniffing
 - huffing
 - puffing

- When someone inhales chemical vapors from a paper or plastic bag, this is called _____.
 - bagging
 - sniffing
 - snuffing
 - puffing
 - all of the above

- What are some of the side effects of using inhalants in low concentrations?

7. Which of the following is NOT a consequence of inhaling vapors in high concentrations?
 - (a) brain damage
 - (b) osteoporosis
 - (c) liver damage
 - (d) death

8. It is possible to die from using inhalants only one time. *(True or False)*

9. Which of the following is a popular street name for inhalants?
 - (a) Poor Man's Pot
 - (b) Supermarket High
 - (c) Common People's Cocaine
 - (d) The Everyday Drug

10. A lack of oxygen to the brain is known as _____.
 - (a) anorexia
 - (b) anoxia
 - (c) antioxia
 - (d) antioxy

Answer Key

- 1. Which of the following items is considered an inhalant?**
(a) Correction fluid **(b) Gas from whipped cream cans**
(c) Hair spray **(d) Gasoline**
(e) All of the above

(e) All of the above. Inhalable drugs are found in every home, school, store, and workplace. Examples of inhalants include glue, paint, gasoline, nail polish remover, correction fluid, gas from whipped cream cans, hair spray, and nitrites.
- 2. The feeling of euphoria associated with inhaling chemicals lasts _____.**
(a) 1 minute **(b) 5 minutes**
(c) 30 minutes **(d) 60 minutes**

(a) One minute. Inhalants produce immediate effects because they are inhaled directly into the lungs, but the feeling of euphoria only lasts about one minute.
- 3. What is one of the reasons inhalants are so commonly used?**
(a) They are cheap. **(b) They are easy to get.**
(c) The high lasts a long time. **(d) (a) and (b) only**
(e) All of the above

(d) (a) and (b) only. Inhalants are a popular drug choice for many young adults because they are common products that are easily found in any home or supermarket, and they are relatively inexpensive.
- 4. When someone inhales drugs directly from the container, it is called _____.**
(a) bagging **(b) sniffing**
(c) huffing **(d) puffing**

(b) Sniffing or snorting is the term given to inhaling drugs directly from the container.
- 5. When someone inhales chemical vapors from a paper or plastic bag, it is called _____.**
(a) bagging **(b) sniffing**
(c) snuffing **(d) puffing**
(e) all of the above

(a) Bagging is the term used to describe the procedure of inhaling chemical vapors through a paper or plastic bag.

- 6. What are some of the side effects of using inhalants in low concentrations?**
Using inhalants in low concentrations makes a person feel sleepy, dizzy, confused, euphoric, and/or nauseous, and may cause a headache.
- 7. Which of the following is NOT a consequence of inhaling vapors in high concentrations?**
(a) brain damage (b) osteoporosis
(c) liver damage (d) death
 (b) Osteoporosis is a calcium deficient bone disease that is not related to using inhalants. However, brain damage, heart damage, kidney damage, liver damage, hearing loss, and death are all irreversible consequences of using inhalants in high concentrations.
- 8. It is possible to die from using inhalants only one time. (True or False)**
True. Sudden sniffing death syndrome is immediate death by heart attack. It can occur at any time, even for first-time inhalant users.
- 9. Which of the following is a popular street name for inhalants?**
(a) Poor Man's Pot (b) Supermarket High
(c) Common People's Cocaine (d) The Everyday Drug
 (a) The street name for inhalants is "Poor Man's Pot," which stems from the fact that inhalants are very inexpensive and easy to buy.
- 10. A lack of oxygen to the brain is known as _____.**
(a) anorexia (b) anoxia
(c) antioxia (d) antioxy
 (b) A lack of oxygen to the brain is called anoxia.

Discussion Starters

1. Why would anyone consider doing inhalants?
2. Should there be legal restrictions on inhalants to make them less accessible?
3. Who could you go to if you or a friend had any questions about or problems with inhalants?

Additional Resources

Inhalant.Org: Inhalant Abuse, Inhalant Education

www.inhalant.org

National Inhalant Prevention Coalition

www.inhalants.org

inhalants.drugabuse.gov

www.inhalants.drugabuse.gov

The Official D.A.R.E. Web Site

www.dare.com

National Institute on Drug Abuse (NIDA)

www.drugabuse.gov

The Partnership for a Drug-Free America®

www.drugfree.org

Teen Drug Abuse

www.teendrugabuse.us

Additional Resources at www.films.com

Available from Films Media Group • www.films.com • 1-800-257-5126

Inhalants

- 17" x 22" poster (available laminated or framed)
- Part of the poster series *Drugs: A Destructive Force*
- Order # 37042



This is poster 7 of the 8-part poster series *Drugs: A Destructive Force*. How can substance abuse educators combat the allure of cocaine, LSD, tobacco, and other killers? By communicating the downside of drugs in no uncertain terms. This eight-poster series speaks directly to young people about the alarming risks and all-too-frequent tragedies linked with drug abuse. In addition to several types of dangerous substances—including prescription and over-the-counter medication—the deadly pitfalls of drunk driving are also examined. Posters include Cocaine, Alcohol, Marijuana, Smoking, Prescription/OTC Drugs, Hallucinogens, Inhalants, and Drunk Driving. A Cambridge Educational Product. © 2007.

Drug Posters



- Eight 17" x 22" posters (available laminated or unlined)
- Order # 10901

This series of brightly illustrated posters explains, in detail, the harsh realities of substance abuse and the life-threatening decisions kids make today. With compelling up-to-date factual information, these posters cover the most popular drugs in teenage society. Use them to inform, explore myths, and promote valuable discussions. Posters include Hallucinogens, Inhalants, Narcotics, Phencyclidine (PCP), Sedatives, Steroids, Stimulants, Marijuana. A Cambridge Educational Product. © 2000.

Teen Danger Zone: Teens at Risk

- VHS/DVD
- Close captioned
- Preview clip online at www.films.com (Search on 36248)
- Correlates to educational standards
- Order # 36248

Combining hard-hitting personal stories with cold facts, the first six segments of this chaptered program report on some of the most common drugs currently being abused by teens: OxyContin, PMA, Special K (ketamine), the methamphetamine Ice, inhalants, and, in the form of binge drinking, alcohol. The final segment focuses on hazing, a frequently outlawed form of initiation that, like substance abuse, speaks directly to the teenage desire to fit in with peers—sometimes at any cost. Recommended for high school. (46 minutes) © 2006.

Deadly Highs

- VHS/DVD
- Part of the series *Reality Matters*
- Preview clip online at www.films.com (Search on 33243)
- Order #33243

In the real world, saying no to drugs is a decision that has to be made every time the opportunity to get high comes up. But the stakes are also high. This program addresses the stark downside of drug abuse through the sobering experiences of three teens. Sarah's resolve slowly crumbled, and in 7th grade she began a nightmare trip that left her, years later, still recovering from heroin addiction and facing eventual liver failure from hepatitis C. Jackson's background predisposed him to instant addiction—first to Ritalin and, before entering rehab, just about anything he could snort. And Jennifer, who never tried drugs in her life, died when her boyfriend, high on huffing, crashed the car they were in. A Discovery Channel Production. (26 minutes) © 2000.

Facts on ... Drugs

- CD-ROM (Windows/Macintosh)
- Preview clip online at www.films.com (Search on 31862)
- Correlates to the American School Health Association standards and the Joint Committee for National School Health Education and the American Cancer Society standards.
- "Honest in [its] assessment, offering valuable information on substances that are commonly referred to only as 'illegal' and 'harmful'—vague castigations that sometimes entice youth rather than deter them." —*Youth Today*
- Order # 31862

Conversational in tone yet authoritative in content, this interactive electronic reference guide gives the scoop on dozens of commonly abused drugs, including marijuana, cocaine and crack, heroin, ecstasy, methamphetamine, PCP, inhalants, and steroids, as well as prescription and over-the-counter medicines. Includes information on the different categories and types of drugs, the abuse of street drugs and medicinal drugs, the effects of specific drugs on the body, warning signs and potential consequences of drug abuse, and treatment for drug addiction. Also contains quizzes, a list of frequently asked questions, a glossary, and more. All material is printable, for handy offline reference. A Cambridge Educational Production. © 2003.

Inhalants: A Deadly High

- VHS/DVD
- Preview clip online at www.films.com (Search on 10384)
- Correlates to educational standards
- Bronze Apple, National Educational Media Network
- Order #10384

"Cheap, accessible, powerful, and tragically misunderstood" is a description that neatly sums up the class of drugs known as inhalants. This program offers the straight dope on how the vapors of easily

obtained substances such as hair spray, paint thinner, and gasoline are abused, including the mechanics of metabolization and the debilitating short- and long-term side effects. The program is an excellent tool for informing viewers of the dangers associated with potentially deadly chemicals too often thought of as harmless. A Meridian Production. (16 minutes) © 1998.

The series *Drugs: Uses and Abuses* includes

- Sedatives
- Narcotics
- Stimulants
- Psychedelics and Hallucinogens
 - Inhalants
 - THC
 - PCP and Ketamine
 - Steroids