

## Inhalant Abuse

Almost all abused inhalants produce short-term effects similar to anesthetics, which slow down the body's functions. When inhaling high concentrations they can cause intoxication which usually lasts only a few minutes. Some users breathe in inhalants repeatedly to prolong the effects for several hours. According to NIDA Notes, Number 16, Volume 6, short-term effects of inhalant abuse include slurred speech, clumsy movements, dizziness, and euphoria, as well as lightheadedness, hallucinations, delusions, and, after heavy use of inhalants, drowsiness and lingering headaches. Sniffing highly concentrated amounts of the chemicals in solvents or aerosol sprays can directly induce heart failure and death within minutes of a session of repeated inhalations (NIDA InfoFacts). This is known as "sudden sniffing death," and can result from a single session of inhalant use. Sudden sniffing death is associated with the abuse of butane, propane, and chemicals in aerosols. NIDA states that inhalant abuse can also cause choking and asphyxiation, as well as suffocation by displacing oxygen in the lungs and central nervous system, causing breathing to stop. Chronic abuse can cause severe, long-term damage to the brain, liver and kidneys.

Inhalants are often the first drugs that young children use. Research shows that adolescents who first begin using inhalants at a younger age are more likely to become dependent on them. According to NIDA, adolescents who have been treated for mental health problems, have a history of foster care, or who already abuse other drugs have an increased risk of abusing or being dependent on inhalants. Most young people who experiment with inhalants stop usage, but a minority go on to develop serious problems with inhalants, thus increasing the chance of permanently damaging their health. In a

recent NIDA-funded study of survey data, investigators found that adolescents who progress to regular inhalant abuse and dependence tend to also exhibit a set of problematic behavioral characteristics (see NIDA chart below). According to NIDA, research has also shown that adolescents who had inhalant abuse diagnoses were likelier than others to have already abused these drugs by age 13 or 14 and to have abused two or more drugs in addition to inhalants in the year prior to being surveyed. These youths were also more likely to have other problems, such as a history of delinquent acts.

<b>Adolescent Inhalant Abuse More Likely in the Presence of Specific Behaviors</b>		
<b>Characteristic</b>	<b>Probability of Abuse Disorder*, times more likely</b>	<b>Probability of Dependence Disorder*, times more likely</b>
Age of first inhalant abuse 13-14 v. 15-17	Not more likely	5
Abuse of three inhalants v. one	4	3
Weekly inhalant abuse v. less-frequent use	2	4
Past-year delinquent behaviors three v. none	6	3
Past-year abuse/dependence of illegal drugs		
two other drugs v. no abuse	5	12
three other drugs v. no abuse	18	24
Past-year use of mental health services for nondrug problems v. no service use	2	4
*As defined by the DSM-IV. Abuse disorder is defined as having one or more drug-related problems in the past year, but not meeting the criteria for dependence; dependence disorder is defined as having three or more drug-related problems in the past year.		

*\*Chart from NIDA NOTES, Volume 19, Number 6 Inhalant Abuse Disorders Tied to Cluster of Adolescent Behavior Problems*

For further information regarding this article please contact Jaclyn M. Hitchcock at the Maternal Substance Abuse and Child Development Project, Emory University School of

Medicine, Department of Psychiatry and Behavioral Sciences, 1256 Briarcliff Road NE, Suite 324W Atlanta, GA 30306. You can also phone us at 404 712-9800 or visit our website at [www.emory.edu/MSACD](http://www.emory.edu/MSACD)

Information found at NIDA at [www.drugabuse.gov](http://www.drugabuse.gov)

NIDA NOTES Volume 19, Number 6

NIDA NOTES Volume 15, Number 6

NIDA InfoFacts: Inhalants

The Maternal Substance Abuse and Child Development Project is funded in part by the Georgia Department of Human Resources Division of Mental Health, Developmental Disabilities and Addictive Diseases.