Here's the Latest on Inhalants

What substance is called "the silent killer"? What "drug" tried by one in seven eighth graders is not technically a drug? What "non-drug" does more damage to the brain than cocaine? What does gasoline have in common with an aerosol bottle of whipped cream? Answer: It's an inhalant. And because it is legal and easily accessible in the home, an inhalant is often the first dangerous substance a child tries, rarely with knowledge of the dangers of sniffing (or "huffing").

One sniff of glue, propane, paint thinner, or other similar household products can be fatal. Virtually no illicit drug acts so quickly to stop the heart as the substances known as inhalants. Between 1996 and 2001, over 700 deaths caused by inhalants were reported to the National Inhalant Prevention Coalition (NIPC). Many of these were teens or even pre-teens. In one national study of youth in high-risk areas, the average age of first inhalant use was 10.

Latest trends

On the one hand, there is good news. According to the *Monitoring the Future 2002* survey, inhalant use by youth has been in decline since 1996. In 2002, a persistent pattern of higher rates by younger children continued, as more 8th graders than 10th- or 12th-graders admitted using inhalants. However, the rate of those 8th graders who had ever tried inhalants had dipped significantly—from 17 percent in 2001 to 15 percent in 2002. Inhalant use peaked in 1995 at 21.6 percent of 8th graders. By the end of senior year in high school, 90 percent of teens have never even tried an inhalant.

On the other hand, the *National Household Survey on Drug Abuse 2001* showed that those over 12 who have tried inhalants at least once in their lifetimes rose by 1.5 million, to over 18 million. Youths who reported an average grade of "D" or below were more than 3 times as likely to have used inhalants as youths with an average grade of "A".

As for "regular" (past month) inhalant use, both surveys find only about 1 to 3.8 percent of 12- to 13-year-olds (or eighth graders) doing inhalants on that basis. By senior year, pastmonth huffers fall to less than 1 percent.

The dangers, and what to look for

Over 2 million youth 12 to 17 still use inhalants and risk their lives every time they inhale the toxic substances. In 2001, 77,000 of these youngsters entered treatment facilities for inhalant abuse. Two-thirds of adolescent admissions for inhalants were White, while 20 percent were Hispanic. Inhaling toluene (found in paint sprays, glues, and dewaxers) or cleaning and correction fluids can ruin a child's hearing.

Glue and gasoline huffing can cause uncontrolled spastic action of the limbs and damage the bone marrow; nitrous oxides, also called laughing gas, (whipping cream and compressed gas cylinders) can have the same effect. Paint sprays and glue can also damage the brain and lungs. Correction and dry cleaning fluids can ruin the liver and the kidneys. Many of these effects are irreversible. Chronic inhalant use can permanently impair everyday tasks like walking, talking and thinking. Prolonged use leads to involuntary passing of urine or feces.

Among the 1,000 other household products that are potential inhalants are nail polish remover, marking pens, paint thinner, butane lighter fluid, deodorants, and air conditioner coolants. Inhalants starve the body of oxygen and force the heart to beat irregularly and more rapidly. In fatal incidents, the child's heart fails or he suffocates to death.

To spot inhalant use, a parent or friend can look for a dazed appearance in a child; spots or sores around the mouth; wild or anxious behavior, heavy sweating; unusual breath odor; a chemical smell on clothing; the child sitting with a marker or pen near his nose; constant smelling of clothing sleeves; hiding rags, clothes or empty containers in closets; or a plastic bag near a gasoline can.

What is being done?

In March 2003, SAMHSA made \$4 million available for 14 awards to health and community organizations targeting inhalant and methamphetamine abuse. SAMHSA demographic statistical tables on inhalants and lifetime use rates for amyl nitrites ("poppers"), toluene, and other inhalants can be found under "inhalants" at www.samhsa.gov/oas/drugs.cfm.

The NIPC has tips for teachers warning children about the dangers of inhalants on their website, www.inhalants.org. For example, for ages 4 to 7, teach about oxygen's importance to life. For ages 10 to 14, discuss environmental and household toxins and reinforce peer resistance skills.

Sources: National Inhalant Prevention Coalition (www.inhalants. org); Monitoring the Future, National Institute on Drug Abuse, 2002; National Household Survey on Drug Abuse, SAMHSA, 2001; Tips for Teens (Inhalants), SAMHSA, 2000; NIDA InfoFacts, "Inhalants," www.drugabuse.gov; Robert Mathias, "Chronic Solvent Abusers Have More Brain Abnormalities and Cognitive Impairments Than Cocaine Abusers," and Dr. Glen Hanson, "Rising to the Challenges of Inhalant Abuse," NIDA Notes, Vol. 17, No. 4, Nov. 2002; Adolescent Admissions Involving Inhalants and Inhalant Use Among Youth, SAMHSA, Office of Applied Studies, 2003.

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