

Playing "Russian Roulette" with Inhalants, Part I Roland W. Grav, M.D.

There is good news and bad news about substance abuse. The good news: alcohol and drug abuse have fallen slightly over the past five years. The bad news: inhalant abuse has risen dramatically, mainly among our children.

Statistics show first-time inhalant use by 12-17 year olds has nearly doubled since 1994 and the mean age for first-time inhalers has declined fairly steadily (Table). There is even worse news about inhalant abuse: most inhalants are legal substances difficult to regulate, and are more likely to kill their first-time users. Sudden sniffing death, caused by cardiac arrhythmia, can kill you the first time, the 10th time, or the 100th time. It's like playing Russian Roulette.

Even if they don't kill, inhalants can cause irreversible damage to the organs, particularly the brain – another characteristic that makes them worse than illegal drugs, because damage caused by those drugs is usually reversible with time. Inhalants are absorbed by the fatty tissues of the body and in the brain, causing demyelinization. Butane and toluene (lighter fluid) are particularly bad about causing irreversible damage to the brain, heart, liver and bone marrow.

Unfortunately, parents who find out their child has been "huffing" don't realize the significance, or the harm. They may think it's a stage and the problem isn't serious; if they discover a butane lighter, they may think the child is smoking, when in fact the child is using a drug that is virtually destroying the lining of their nervous system.

The substances abused seem innocuous and are easily obtainable for most children: model airplane glue, rubber cement, spray paint, hairspray, air freshener, deodorant, nail polish remover, paint thinner, lighter fluid, nitrite room odorizers, vegetable cooking spray, even aerosol whipped cream. There are over 1,000 products currently being abused and these are common household items – as I said, tough to regulate.

Physicians, families and educators have got to step up to the plate. We must educate ourselves and then educate others, particularly young people, about the damage these terrible drugs can do.

In Tennessee, a bill to mandate inhalant abuse education in our schools, counseling and treatment in substance abuse programs and more accurate reporting of accidents and deaths caused by inhalant abuse nearly won passage in the General Assembly this session; it was dropped in the House as lawmakers rushed to deliver a budget. That means it is more incumbent on us, particularly as doctors, to address this problem with our patients and our own families.

There are free brochures and educational materials available through a variety of sources; I particularly recommend the National Institute on Drug Abuse (NIDA) at www.nida.nih.gov, and the National Inhalant Prevention Coalition (NPIC) at www.inhalants.org.

Next month, Part II of our article on inhalant abuse will discuss some of the statistics involved, as well as signs of abuse and tips for prevention and intervention.

To make a tax deductible contribution to the Physician's Health Program (PHP), contact TMF Administrator Michael Todd at (615) 467-6411, or write to the Tennessee Medical Foundation, 216 Centerview Drive, Suite 304, Brentwood, TN 37027. For more information on the TMF or the PHP, log on to www.e-tmf.org.

Table. Estimated Number of Persons Who First Used Inhalants: 1994-2002*

Year	All Ages	12-17	18 & Older	Mean Age of First Use
1994	694,000	405,000	189,000	16.5
1995	681,000	416,000	265,000	17.0
1996	694,000	414,000	280,000	17.1
1997	751,000	476,000	274,000	16.5
1998	846,000	513,000	333,000	17.5
1999	946,000	617,000	329,000	16.4
2000	1,122,000	781,000	341,000	16.3
2001	1,117,000	796,000	320,000	15.9
2002	1,033,000	802,000	231,000	15.6

(Note: First time inhalant use, ages 12-17, has steadily increased and, in fact, almost doubled since 1994, while mean age of first use has declined).

^{*}Source: 2003 National Survey on Drug Use and Health, SAMHSA, Office of Applied Studies