When you think of young people using drugs, alcohol and marijuana probably come to mind first. Some young people do use those drugs, but each year more are abusing another group of substances that you may know little about. These are called inhalants. The abuse of inhalants is also called solvent abuse, huffing, sniffing, glue sniffing, or volatile substance abuse.

There are over 1,000 inhalants—common products most often found in the home, office, and classroom. These products are legal because they have a useful purpose. They are also safe when used for that purpose. But when young people misuse them by breathing them into their lungs, inhalants are poison. Over time, the abuse of inhalants can cause severe permanent damage to the body, especially the brain. The scariest thing about inhalants is that your child could die from using them only once.

Read this brochure to learn more about inhalants so that you can talk with your child about them. Educating young people about their dangers is an important step in preventing inhalant abuse. This brochure also describes the signs and symptoms of inhalant abuse. If you suspect your child is abusing inhalants, it is important to get help and, if necessary, treatment right away.

Common inhalants and how they are used

Hair spray. Gasoline. Spray paint. Glue. Typewriter correction fluid. You probably have at least one of these products in your home. These are just a few of the inhalants that are poisonous when children:

- Sniff or inhale them directly from the cans, bottles, or other containers they are in.
- Spray them into a bag, empty soft drink can, or other container and breathe them in. (Gases like nitrous oxide are often inhaled from balloons.)
- Spray or pour them onto a cloth or piece of clothing and inhale deeply from the fabric.

There are three general types of inhalants: solvents, gases, and nitrites.

- **Solvents** are usually liquid. They are found in household and industrial products, such as glues, paints, and polishes.
- **Gases** are found in many household and commercial products. Aerosol sprays like hair spray and spray paint, as well as medical gases like nitrous oxide, fall into this category. Almost all pressurized aerosol sprays can be abused.
- **Nitrites** are found in room deodorizers.

Inhalant abuse is on the rise

Inhalant abuse is a growing problem—one that deserves parents’ attention. While the use of some drugs is declining, inhalant abuse is on the rise among children and teens. In the past decade it has nearly doubled. Adolescents 12 to 14 years of age are most likely to abuse inhalants, and almost 20% of eighth-graders have tried some form of them. Most young people who ever try inhalants do so before their second year of high school.

A household guide to inhalants

Here is a list of only a few of the common household products that are dangerous when inhaled:

**Kitchen**
- Cooking spray
- Typewriter correction fluid
- Disinfectants
- Fabric protectors
- Felt-tip markers
- Furniture polish and wax
- Oven cleaners

**Bathroom**
- Air fresheners
- Spray deodorants
- Hair sprays
- Nail polish removers

**Garage/Workshop**
- Pressurized aerosol sprays
- Butane
- Gasoline
- Glues and adhesives
- Paints and paint thinners
- Refrigerants (freon)
- Rust removers
- Spray paints

**Why do children abuse inhalants?**

There are many reasons why inhalants appeal to children. They are cheap, easy to get, and easy to hide. For a few dollars, a can of butane offers a quick high. Or a child can sit in class and secretly sniff correction fluid. Because inhalants are legal, kids can easily make excuses if they are caught with them.

Another appeal of inhalants is the social part of using them. Kids enjoy abusing inhalants with other kids, and most inhalant abuse is thought to be done with friends.

**Reasons why children use inhalants**

- Low cost
- Way to rebel against parents
- Easy to get and hide
• Peer pressure or influence
• Not illegal to possess, so kids can make excuses if they are caught with inhalants
• Public is not aware of the dangers

Signs and symptoms of inhalant abuse
• Breath and clothing that smells like chemicals
• Spots or sores around the mouth
• Paint or stains on body or clothing
• Drunk, dazed, or glassy-eyed look
• Nausea, loss of appetite
• Anxiety, excitability, irritability

Prevention of inhalant abuse
Although some states have laws to try and deal with inhalant abuse, such laws are not always easy to enforce. Since inhalants are legal and kids can get them from so many different ways, it is not possible to make inhalants entirely off-limits. The best way to fight inhalant abuse is to educate your child about how harmful these products are. Explain how they can cause both short- and long-term health problems, further drug abuse, and death. It is important to start talking with children at a young age, because inhalant abuse often starts as young as 8 or 9 years old. Parents and teachers should also be able to recognize the warning signs of inhalant abuse.

Help prevent your child from turning to inhalants and other drugs by taking these steps:

Set a good example at home. As a parent, you are the best role model for your child. Parents who use drugs also place their children at higher risk for drug use.

Build self-esteem and confidence. Praise your child often. Encourage your son or daughter to set goals and make decisions to achieve them. With each success and your constant support, your child will become more confident in what he or she can do. Children with self-confidence feel good about themselves without needing drugs.

Help your child develop different interests. Encourage your child to read, have hobbies, play sports, or join clubs. These activities can keep your son or daughter from using drugs out of boredom or from having too much free time. Young people will find that they can have a lot of fun and feel good without drugs. Take an active interest in your child’s interests and in his or her friends.

Help your child resist peer pressure. Being independent and self-confident can help your child resist pressure from friends to abuse inhalants. To foster independence, show confidence in your child’s ability to make his or her own decisions. Encourage your child to make his or her own judgments, no matter what friends or others say or do.

Talk openly and often. Talk about things that are important to and relevant in your child’s life. This includes discussing drugs and how some kids might use them to be accepted by their peers. Educating your pre-teen or teen about the dangers of drugs, including inhalant abuse, works best through talking rather than lecturing.

Treatment of inhalant abuse
When children are abusing inhalants, many times their parents do not find out until the abuse has already become a habit. Chronic inhalant abusers are hardest to treat because they often have many serious personal and social problems. They also have difficulty staying off inhalants and have very high rates of relapse. All of these reasons can keep chronic inhalant abusers from benefiting from many drug abuse treatment programs.

Toxic chemicals from inhalants stay in the body for weeks. Because of this, when chronic abusers stop using inhalants they may feel the effects of withdrawal for weeks. Withdrawal is the body’s way of getting over its physical addiction to inhalants. During withdrawal from inhalants, a person may have:
• Hand tremors
• Excess sweating
• Constant headaches
• Nervousness

Treatment for inhalant abusers is usually long-term, sometimes as long as 2 years. It must address the many social problems most inhalant abusers have and involves:
• Support of the child’s family
• Moving the child away from unhealthy friendships with other abusers
• Teaching and fostering better coping skills
• Building self-esteem and self-confidence
• Helping the child adjust to school or another learning setting

Inhalant abuse is a difficult form of substance abuse to treat. It is best to recognize and start treatment before the problem becomes a habit. Parents and educators need to be able to recognize the signs of inhalant abuse, especially because most abusers do not seek treatment on their own.

Parents also play the most important role in helping their children to resist abusing inhalants in the first place. The most effective prevention of inhalant abuse is through the education of parents, teachers, and school-aged children.
Information for you and your child

What are the effects of inhalants?

One thing that all inhalants have in common is that they contain chemicals that were never meant for people to consume. So why would anyone breathe toxic chemicals on purpose? Just like the users of other drugs, inhalant abusers try to get “high” from the chemicals.

The effects of inhalants usually last only a few minutes, unless users inhale repeatedly. At first, inhalants have a stimulating effect. Then if the users keep inhaling, they may feel dazed, dizzy, and have trouble walking. Sometimes users get aggressive or think they see things that are not there. Stronger chemicals or repeated inhaling can cause people to pass out. A user can also die suddenly from using inhalants.

When someone uses an inhalant, large amounts of toxic chemicals enter the lungs and pass into the bloodstream into the brain. There they damage and kill brain cells. The amount of fumes a young person inhales greatly exceeds what is considered safe even in a workplace setting. It takes at least 2 weeks for the body to get rid of some of the chemicals in inhalants.

Inhalants exit the body mainly through exhaling, which is why an inhalant abuser’s breath often smells like chemicals. Inhalants also pass out of the body through urine.

Short-term effects of inhalants are:

- Headaches, nausea, vomiting
- Loss of balance
- Dizziness

Over time, inhalants can cause more serious damage, such as:

- Loss of concentration
- Short-term memory loss
- Hearing loss

- Sturred and slow speech
- Mood changes
- Hallucinations

- Muscle spasms
- Permanent brain damage
- Death

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How do inhalants kill?

No one can predict how much of an inhalant will kill. A young person can use a certain amount one time and seem fine, but his or her next use could be fatal.

The Texas Commission on Drugs and Alcohol Abuse reports the following ways that inhalants can kill:

- Asphyxia—Solvent gases can cause a person to stop breathing from a lack of oxygen.
- Choking—Users can choke on their own vomit.
- Suffocation—This is more common among users who inhale from plastic bags.
- Injuries—Inhalants can cause people to become careless or aggressive. This often leads to behaviors that can injure or kill, such as operating a motor vehicle dangerously or jumping from great heights. Teens also can get burned or even be killed if someone lights a cigarette while they are huffing butane, gasoline, or some other flammable substance.
- Suicides—Coming down from an inhalant high causes some people to feel depressed, which may lead them to take their own lives.
- Cardiac arrest—Chemicals from inhalants can make the heart beat very fast and irregularly, then suddenly stop beating. This is called cardiac arrest. One reason why this might happen is that inhalants somehow make the heart extra-sensitive to adrenaline. (Adrenaline is a hormone that the body produces, usually in response to fear, excitement, or surprise.) A sudden rush of adrenaline combined with inhalants can make the heart stop instantly. This “Sudden Sniffing Death,” as it is called, is responsible for more than half of all deaths due to inhalant abuse.

Another very real danger of inhalants is that they often lead young people to try other drugs whose effects are even more intense and last longer.

From your doctor

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.