Inhalant Abuse
(Bagging, Huffing, Sniffing, Snorting)

Inhalant abuse is the intentional breathing in (*inhalation*) of substances to obtain a feeling of well being (*euphoria*). Inhalants produce vapors. When these vapors are inhaled, they produce a mind-altering effect. Although other abused substances can be inhaled, the term "inhalants" is used to describe substances that are most often inhaled, rather than taken in a different way. Inhalants are a broad range of chemicals that have different effects and are found in different products. These chemicals are put into four general categories. They are:

- Solvents.
- Aerosols.
- Gases.
- Nitrites.

Many of these substances are found in common household products like gasoline, carpet cleaner, spray paints, air fresheners, glues, lighter fluids, hair spray, nail polish remover and other solvents. These substances are abused by all ages.

HOW INHALANTS ARE USED

Inhalants can be breathed in through the nose or the mouth. This can be done in different ways, such as:

- Sniffing or snorting fumes from containers.
- Spraying aerosols directly into the nose or mouth.
- Bagging. This is sniffing or inhaling fumes from substances sprayed or put inside a plastic or paper bag.
- Huffing. This is when an inhalant-soaked rag is stuffed in the mouth.
- Inhaling from balloons filled with nitrous oxide.

HOW INHALANTS WORK

Most inhalants produce a rapid high that resembles alcohol intoxication. Inhaled chemicals are absorbed rapidly into the bloodstream through the lungs and quickly reach the brain and other organs. Within seconds of inhalation, the user experiences intoxication along with other effects. These effects may include:

- Slurred speech.
- Inability to coordinate movements.
- Euphoria.
- Dizziness.
- Lightheadedness.
- Hallucinations.
- Delusions.

Intoxication only lasts a few minutes so abusers often try to prolong the high. They do this by inhaling repeatedly over several hours. This is a very dangerous practice. Abusers can suffer loss of consciousness and possibly even death. At the least, they will feel less inhibited and less in control. After heavy use of inhalants, abusers may feel drowsy for several hours and experience a lingering headache.

COMMONLY ABUSED INHALANTS AND THEIR EFFECTS:

- **Amyl nitrite** (common street names are poppers and pearls). Inhalation of these nitrites causes dizziness, lightheadedness, irregular heartbeat, blurred vision, headaches, *nausea* (feeling sick to your stomach), and burning in the nose. Because these medications enlarge small blood vessels, they can cause low blood pressure, fainting, and a rapid heart rate. This inhalant may also cause chest pain, shortness of breath, and confusion. Death can be an end result of using this inhalant.
- **Nitrous oxide** (also called laughing gas, buzz bomb, whippets, and shoot the breeze). Nitrous oxide is a gas used commonly in dentistry. The gas causes harm when people using it do not get enough oxygen. This can

result in headaches, dizziness, excitation, depression of the central nervous system, seizures (*convulsions*) and death. Long-term use of this inhalant can cause nerve damage leading to weakness, uncoordinated or unsteady movements, and numbness and tingling in the arms and legs. This inhalant, when used over long periods of time, also leads to low red blood cells (*anemia*) and problems with blood clotting. When taken into the body, nitrous oxide actually is changed into nitric acid.

- **Glues, sealants or glue-like chemicals.** Inhaled into the lungs, these substances interfere with the transfer of oxygen to the bloodstream. The body can suffocate from lack of oxygen.
- **Toluene.** This material is a solvent found in correction fluids, paint thinners and some nail-polish removers. It causes a brain tissue loss. It can also cause kidney problems, hearing and vision loss and damage to chromosomes.
- **Benzene.** This is a gasoline additive. It causes serious injury to bone marrow and damage to the immune system. It is poisonous to sex organs.
- **Trichloroethylene.** This solvent found in glues, sealants and paints. It causes liver damage, injury to heart muscles and sex organs.

SUDDEN SNIFFING DEATH

The highly concentrated chemicals in solvents or aerosol sprays can induce an irregular and rapid heartbeat. It can also lead to a fatal heart failure within minutes of a session of prolonged sniffing. This syndrome, known as "sudden sniffing death," can result from a single session of inhalant use by an otherwise healthy young person. Sudden sniffing death is associated most often with the abuse of butane, propane and chemicals in aerosols. Inhalant abuse also can cause death by:

- **Asphyxiation** from repeated inhalations, which leads to high concentrations of inhaled fumes displacing the available oxygen in the lungs.
- **Suffocation** from blocking air from entering the lungs when inhaling fumes from a plastic bag placed over the head.
- **Convulsions or seizures** from abnormal electrical discharges in the brain.
- **Coma** from the brain shutting down all but the most vital functions.
- **Choking** from inhalation of vomit after inhalant use.
- **Fatal injury** from accidents, including motor vehicle fatalities, suffered while intoxicated.

SIGNS OF INHALANT USE

- Breath and clothing that smell like chemicals.
- Spots or sores around the mouth.
- Paint or stains on body or clothing.
- Dazed or glassy-eyed look.
- Hidden empty spray paint or solvent containers and chemical- soaked rags or clothing.
- Nausea or loss of appetite.
- Anxiety, excitability or irritability.
- Slurred speech.
- Red or runny nose.
- Inattentiveness, lack of coordination, irritability, and depression.

TREATMENT

The initial treatment of inhalant use is usually supportive in the emergency department. Most often, if serious complications do not occur, **the patient may be allowed to go home with a responsible adult after a period of monitoring** for a short time to several hours. IV (*intravenous*) therapy may be required for low blood pressures. Oxygen therapy is also necessary, along with removal of any inhalants of exposure (clothing, vials, cans, etc.). Cough is a common complication because the lungs get irritated.

X-ray studies may be performed to check the how the lungs are doing. **Re-check with your caregiver** after the *radiologist* (a specialist in reading x-rays) has read your x-rays. Do this to make sure your caregivers agree with the initial x-ray readings by the Emergency Department doctor. Do this also to determine when or if further studies or exams are needed. Ask your caregiver how they will inform you about your *radiology* (x-ray) follow up results.

After initial treatment has been administered and the immediate health concerns have been addressed, it is so

important that substance abuse evaluation and treatment be started without delay. It is usually not possible to determine during an emergency hospital visit how serious the inhalant abuse situation may be, but anyone who receives hospital care for inhalant abuse is in danger of recurrence. It is not infrequent for inhalant abusers to suffer more serious complications (including death) before substance abuse treatment can occur.

HOME CARE INSTRUCTIONS

- Cough suppressants may be used if you are losing rest. However, coughing is a protective mechanism for clearing our lungs. It is one reason to avoid cough suppressants. Sleeping in a semi-upright position in a recliner or using a couple of pillows will help with this.
- Only take over-the-counter or prescription medicines for pain, discomfort or fever as directed by your caregiver.
- Smoking is a common aggravating factor. Stop smoking.
- Get rest as you feel it is needed.

SEEK MEDICAL CARE IF:

- You have increasing shortness of breath.
- You cannot control your cough with suppressants and are losing sleep.
- You begin coughing up blood.
- You develop pain that is getting worse or is uncontrolled with medications.
- You develop an oral temperature above 102° F (38.9° C) after not having a temperature for one or more days, or as your caregiver suggests.
- You cough up sputum (thick phlegm), or become sicker.
- If any of the symptoms that initially brought you in for care are getting worse rather than better, or are not controlled with medications.
- Continued abuse of inhalants occurs.

MAKE SURE YOU:

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.

For more information call the National Inhalant Prevention Coalition's HOTLINE (800) 269-4237, or look on the web at www.inhalants.org.

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