

WAYS HAZARDOUS CHEMICALS CAN ENTER YOUR BODY

There are over 19 million chemicals known to man. Many of these substances have beneficial uses and improve our quality of life. However, many of these chemicals also have harmful properties from which we must protect ourselves. Each day, at work and at home, we come in contact with hazardous chemicals. If we don't take steps to limit our exposure, these substances can cause immediate or long-term health effects. Without precautions, you could be overexposed and not even know it is happening. Hazardous chemicals enter your body in three primary ways: inhalation, absorption, and ingestion. All three should be avoided.

Inhalation: The most common and significant way that harmful chemicals enter your body is through breathing. Once inhaled, your lungs can absorb hazardous chemicals. Some chemicals do damage to the lungs directly, others cross the lung and enter into your bloodstream. Once in your blood, these chemicals can travel to, and accumulate in, vital organs and tissues. At that point, the damage may already be done. Carbon monoxide is a good example of a colorless, odorless gas that when inhaled at high levels, can kill a person in minutes.

Absorption: The second most important way that chemicals can enter the body and be absorbed is through the skin. This may be more likely to happen if your skin has been cut. The bloodstream can then carry the absorbed chemical throughout your body to your internal organs, and possibly cause serious damage. Harmful substances that are easily absorbed through the skin include common solvents, fuels and thinners.

Ingestion: At work, people often unknowingly eat or drink hazardous chemicals. Chemical dusts, fumes or mists can settle on food, drinks, or cigarettes. You can also pick up chemical residues from surfaces on your hands and unknowingly transfer them to your mouth. Once swallowed these chemicals can be absorbed in the stomach or intestines and enter the bloodstream to ultimately come to rest in the vital organs. Heavy metals are commonly absorbed by ingestion and can accumulate in the body over time.

Unchecked and unprotected, hazardous chemicals can easily enter your body. As a result, long-term exposures and chemical buildup in the body often result in serious health consequences. Don't take

chances! Protect yourself by taking appropriate safety measures at home and on the job.

- Be aware of the chemicals you use at home and in your workplace. Take a minute to become familiar with chemical product warning labels and Material Safety Data Sheets.
- Avoid breathing chemicals. Use chemicals only with proper ventilation and use a respirator if appropriate.
- Avoid skin contact with chemicals. Wear gloves and other protective clothing.
- Don't eat hazardous chemicals. Use and store hazardous chemicals away from food and always wash your hands before eating.

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