

1,2-Dichloropropane-ToxFAQs™

What is 1,2-dichloropropane?

1,2-Dichloropropane is a colorless, flammable liquid with a sweet odor. It is a man-made chemical that quickly evaporates into the air. It is used in the United States to make other chemicals such as chlorinated and industrial solvents. A few consumer products contain 1,2-dichloropropane, including household stain removers and waxes/sealants for natural stone and other surfaces. Before the early 1980s, 1,2-dichloropropane was used in farming as a soil fumigant.



What happens to 1,2-dichloropropane in the environment?

There are no known natural sources of 1,2-dichloropropane. 1,2-Dichloropropane enters the environment mostly from manufacturing facilities. In the air, it does not quickly break down so it may spread far from where it was released. When 1,2-dichloropropane is in water or soil, it will largely evaporate into the air. However, it can filter down through the soil into the groundwater. 1,2-Dichloropropane does not significantly build up in plants or animals.

How can I be exposed to 1,2-dichloropropane?

Most people are not likely to come in contact with this chemical. You may be exposed if you produce or use 1,2-dichloropropane at work or use consumer products containing 1,2-dichloropropane. The most likely way that you could be exposed to 1,2-dichloropropane is by breathing contaminated air or drinking contaminated water. If your water has 1,2-dichloropropane in it, activities such as showering, bathing, or other household water uses (e.g., dishwasher, clothes washer, toilets, sinks) can expose you to this chemical.

How can 1,2-dichloropropane affect my health?

1,2-Dichloropropane quickly enters your body after breathing or eating it and goes to the liver, kidneys, blood, and lungs. It can be broken down and leaves your body through the urine or by breathing it out. People who accidentally or intentionally breathed or drank chemicals containing high levels of 1,2-dichloropropane had trouble breathing and began coughing, experienced headaches, dizziness, and vomiting. They also had damage to their blood cells and liver. Some people with high exposure experienced coma and death.

Animals that breathed or ingested 1,2-dichloropropane for short periods of time suffered damage in the respiratory tract, blood cells, and liver. Animals also experienced drowsiness and loss of coordination. Delayed development of bones was observed in offspring of animals that ingested 1,2-dichloropropane during pregnancy.

Due to low levels in the environment, most people are not likely to be exposed to 1,2-dichloropropane.

1,2-Dichloropropane

Can 1,2-dichloropropane cause cancer?

Some studies have found that people who worked for printing companies were exposed to 1,2-dichloropropane and had a higher risk of developing a rare bile duct cancer. However, these workers were exposed to other chemicals as well, so it is unclear if 1,2-dichloropropane alone led to their cancer.

Mice and rats that breathed 1,2-dichloropropane developed respiratory tract cancer and tumors in the Harderian gland and spleen. Eating high levels of 1,2-dichloropropane for a long period of time causes mammary and liver tumors in rats and mice.

The U.S. Environmental Protection Agency (EPA) has classified 1,2-dichloropropane as likely to be a human carcinogen (cause cancer). The International Agency for Research on Cancer (IARC) has classified 1,2-dichloropropane as carcinogenic to humans. The Department of Health and Human Services (HHS) has not evaluated the potential of 1,2-dichloropropane to cause cancer in people.

Can I get a medical test to check for 1,2-dichloropropane?

1,2-Dichloropropane and its breakdown products can be measured in your blood and urine. These tests cannot predict whether you will have health problems from exposure to 1,2-dichloropropane. Doctor's offices do not routinely offer these tests. If you think that you have been exposed to this or any other chemical, talk to your doctor or nurse or call poison control.

How can I protect myself and my family from 1,2-dichloropropane?

Most people don't need to take any special steps to avoid 1,2-dichloropropane in their daily lives.

If your drinking water is supplied by a public water system, you can contact them for information on 1,2-dichloropropane levels in the water. If you have a private well for water, your local health department may be able to tell you if this chemical has been found in water in your area. You may also want to get your water tested by a certified laboratory.

Children should avoid playing near industrial or hazardous waste sites to prevent 1,2-dichloropropane exposure.

For more information:

Call **CDC-INFO** at 1-800-232-4636, or submit your question online at <https://wwwn.cdc.gov/dcs/ContactUs/Form>

Go to ATSDR's Toxicological Profile for 1,2-dichloropropane: <https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=831&tid=162>

Go to ATSDR's Toxic Substances Portal: <https://wwwn.cdc.gov/TSP/index.aspx>

Find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html

