

Chlordane - ToxFAQs™

What is chlordane?

Chlordane is a man-made chemical. It is a thick liquid whose color ranges from colorless to amber. Chlordane has a mild, irritating smell.

From 1948 to 1988 chlordane was used in the United States as a pesticide on agricultural crops, lawns, gardens, and homes. Because of concerns about damage to the environment and harm to human health, the EPA banned all uses of chlordane in 1983 except to control termites. In 1988, EPA banned all uses.



What happens to chlordane in the environment?

Chlordane entered the environment when it was used as a pesticide on crops, on lawns and gardens, and to control termites.

Chlordane sticks strongly to soil particles at the surface so it is not likely to move into groundwater. It can stay in the soil for over 20 years. Most of this chemical will leave the soil by evaporating into the air. Chlordane does not dissolve easily in the water and will stick to the sediment at the bottom of water bodies. Chlordane in the environment breaks down slowly. It can build up in fish, birds and land animals.

How can I be exposed to chlordane?

Because chlordane has not been used in the United States to treat termites since 1988 and not used on crops since 1983, most people will not come in contact with this chemical.

You may be exposed to chlordane by breathing air or touching soil near a home that was treated with chlordane to control termites. Eating crops grown in soil that contains chlordane or eating fish and shellfish caught in water contaminated with chlordane may also expose you to this chemical.

How can chlordane affect my health?

Chlordane affects mainly the nervous system and liver in people and animals. Headaches, irritability, confusion, dizziness, and tremors have occurred in people who breathed air containing high concentrations of chlordane or accidentally swallowed small amounts of chlordane. Large amounts of chlordane taken by mouth can cause convulsions and death in people.

Animals given high levels of chlordane by mouth for short periods had convulsions or died. In addition, liver damage and changes in blood cells were observed.

Animals exposed before birth or while nursing developed behavioral effects later. We do not know whether chlordane affects the ability of people to have children or whether it causes birth defects.

Chlordane can effect your nervous system and cause headaches, dizziness and tremors. It may also damage your liver.

Chlordane

Can chlordane cause cancer?

Some studies on workers who made or used chlordane show that exposure is not related to cancer, while others show that there may be a link. There is not enough information to know for sure.

Studies in animals show mice that eat low levels of chlordane can develop liver cancer.

The [U.S. Department of Health and Human Services \(DHHS\)](#) has not determine whether chlordane causes cancer in people.

The [U.S. Environmental Protection Agency \(EPA\)](#) has classified chlordane as a probable human carcinogen (causing cancer in people).

The [International Agency for Research on Cancer \(IARC\)](#) has classified chlordane as possibly carcinogenic to humans.

Can I get a medical test to check for chlordane?

Laboratory tests can measure chlordane and its breakdown products in blood, fat, urine, feces, and breast milk. The amount of breakdown products measured in body fat or breast milk does not tell you how much or how long ago you were exposed to chlordane or if harmful effects will occur.

How can I protect myself and my family from chlordane?

Most people do not need to take any special steps to avoid coming in contact with chlordane. Keep children from playing in areas where pesticides were used in the past and near hazardous waste sites to avoid coming in contact with chlordane.

Follow your state's health advisories that tell you about whether it is okay to eat fish or wildlife caught in contaminated areas.

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 Chlordane: <https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=355&tid=62>

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

