



FACT SHEET

Connecticut Department of Public Health
Environmental Health Section
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What You Need To Know About: **1,1,1-Trichloroethane in Private Well Water**

Trichloroethane is found in some public and private groundwater drinking water wells in Connecticut. The US Environmental Protection Agency requires regular testing for this chemical in public water systems. Private wells can also have trichloroethane, but testing in these wells must usually be done by the well owner.

This fact sheet addresses health concerns and treatment questions about trichloroethane in private well water. For more information, please see the contact information at the end of this document.

What Is 1,1,1-Trichloroethane?

1,1,1-Trichloroethane, also known as trichloroethane, TCA or 1,1,1-TCA is a chemical that was widely used for metal degreasing and as a solvent for glues and paints. This chemical is used much less now than it used to be because research showed that it might be damaging the Earth's ozone layer. Trichloroethane can get into well water when groundwater comes in contact with a spill or other release to the environment. TCA is one of the more common non-natural chemicals found in Connecticut's groundwater.

What Is The Hazard Associated With Trichloroethane In Drinking Water?

Trichloroethane can cause liver or brain damage in animals exposed to high levels. While there are no studies in people, it is unlikely that exposure to TCA at levels typically found in drinking water could cause significant health effects. Trichloroethane has not been shown to cause cancer in laboratory animals or humans. Animal studies show that it is not likely to cause harm to growth and development or to the reproductive system.

How Might I Be Exposed To Trichloroethane From My Well Water?

Trichloroethane evaporates easily from water, so in addition to taking it into your body through drinking, you may also be exposed to a large amount from breathing the air inside your home. TCA gets into the indoor air from appliances that use water (such as dishwashers and washing machines), and from the shower. Your body may also absorb it through the skin during a bath or shower. A simple way to absorb less is to turn on a bathroom fan while bathing or showering. This can prevent the buildup of TCA in the bathroom air.

Is There A Safe Level Of Trichloroethane In Drinking Water?

The CT Department of Public Health (CT DPH) has set an Action Level for TCA of 200 micrograms per liter (ug/L). An Action Level is a state guideline for a chemical in private well water. The Action Level for TCA is the same as the US Environmental Protection Agency Maximum Contaminant Level (MCL) for TCA in public drinking water. An MCL is a federal, enforceable drinking water standard for public drinking water. If your well water has TCA at a concentration greater than the Action Level of 200 ug/L, you should stop drinking your water and using it for cooking until you can install a treatment system to remove the TCA. Action Levels are set well below the level that causes health effects in people or animals. So if you have TCA in your well water at a level above the Action Level, it is still probably at a level lower than what could cause harm to your health. Nevertheless, it is a good idea to avoid drinking and cooking with water that has tetrachloroethylene at levels above the Action Level to reduce any chance for harm to your health.

What About Bathing and Showering?

Since you can inhale tetrachloroethane and absorb it through the skin while bathing and showering, it is important to prevent these exposures as well. If the TCA level in your well water is greater than 2,000 ug/L (ten times greater than the Action Level), you should avoid bathing and showering until you can install a whole house treatment system to remove the TCA from all of the water you use in your home.

How Can I Find Out If There Is a Problem With My Drinking Water?

The best way is to have your well water tested by a [state-certified water testing lab](#). You can also call the CT Department of Energy and Environmental Protection (CT DEEP) or your local health department to ask if they are aware of a contamination problem in your neighborhood.

What Can Be Done If a Private Well Is Contaminated With Trichloroethane?

If tests show that your well has trichloroethane you should call CT DEEP and your local health department to report the problem. They may investigate to see where the contamination is coming from. If the levels are above the Action Level of 200 ug/L, you will need a treatment system to remove the TCA from the water. Contact the CT DPH Private Well Program to discuss water treatment options.

Whom Can I Contact For More Information?

Health & Treatment Questions

CT Dept. of Public Health
Environmental Health Section
860- 509-7740 - Health Questions
860-509-7296 - Treatment Questions
CT DPH [Private Well Program](#)

Report Contamination:

CT Dept. of Energy and
Environmental Protection
860-424-3705

Your [Local Health Department](#)

Water Testing Laboratories:

[List of State Certified Labs](#)