



# FACT SHEET

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## What You Need To Know About: **Trichloroethylene in Private Well Water**

*Trichloroethylene 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 trichloroethylene, but testing in these wells must usually be done by the well owner.*

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

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### **What Is Trichloroethylene?**

Trichloroethylene, also known as trichloroethene, or TCE, is a chemical that is widely used for metal-degreasing and as a solvent for glues or paints. This chemical can get into well water when groundwater comes in contact with a spill or other release to the environment. TCE is one of the most commonly found contaminants in Connecticut's groundwater. It can remain in groundwater for many years and so spills from the past can still be a health concern.

### **What Is The Hazard Associated With TCE In Drinking Water?**

TCE is a toxic chemical that can harm multiple organs and induce cancer. It is known to affect the liver, kidney and immune system. It can also harm fetal development and so is a risk during pregnancy. USEPA recently reevaluated TCE and found it to be more potent than previously believed with stronger evidence of cancer and birth defects in humans. The higher the concentration in drinking water and the longer the exposure the greater the health risk. However, even short term exposure may be a reproductive risk.

### **How Might I Be Exposed To TCE From My Well Water?**

TCE evaporates easily from water, so in addition to drinking the water, you may also be exposed from breathing the air inside your home. TCE gets into the indoor air from appliances that use water (such as dishwashers and washing machines), and from the shower. You 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 TCE in the bathroom air.

## **Is There A Safe Level Of Trichloroethylene In Drinking Water?**

The US EPA has established a drinking water standard called the maximum contaminant level (MCL) of 5 ug/L for TCE. Public water supplies must meet MCLs. The TCE MCL was set in the 1980s and is outdated. US EPA has indicated that it is looking to update this drinking water target. CT DPH has set an Action Level for TCE of 1 ug/L based upon the most recent evidence of TCE health effects. If your well water has TCE contamination at levels greater than 1 ug/L you should treat the water to remove TCE.

## **What About Bathing and Showering?**

Since you can inhale TCE and absorb it across the skin when bathing and showering, it is important to prevent these exposures as well. If the level is greater than the federal MCL (5 ug/L), a whole house filter will be needed to prevent exposures from bathing and showering as well as from drinking the water. If the level is between 1 and 5 ug/L a short-term solution can be a kitchen tap filter or switching to bottled water, until you can arrange for a whole house filter. This should be within 2 weeks if anyone in the home is pregnant to ensure that any developmental risks during pregnancy are avoided. Detections below 1 ug/L do not need to be acted on except to test the water again within the next year as TCE concentrations in groundwater can change over time.

## **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 lab. Instructions on how to find a lab in your area are at the end of this fact sheet. You can also call the Connecticut Department of Energy and Environmental Protection (CT DEEP) or your local health department and ask if they know of contamination in your neighborhood.

## **What Can Be Done If a Private Well Has Trichloroethylene?**

If tests show that your well has TCE 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 Connecticut Action Level of 1 ug/L, you need a treatment system to remove TCE from the water. Carbon filters are typically effective. You can contact CT DPH's Private Well Program to discuss water filtration options.

## **Whom Can I Contact For More Information?**

For answers to questions about TCE in drinking water, contact the Connecticut Department of Public Health or the Connecticut Department of Energy and Environmental Protection.

### **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 Department of Energy and  
Environmental Protection  
**860-424-3705** and  
Your [local health department](#)

### **State Certified Laboratories:**

Click on the following link:  
[List of State Certified Labs](#)