



Q & A on PCE

What is Tetrachloroethylene (PCE)?

Tetrachloroethylene (PCE) is a manufactured chemical that is widely used for dry cleaning of fabrics and for metal-degreasing. It is also used to make other chemicals and is used in some consumer products

How long has this been in our water?

PCE was first detected in the South Elgin water supply in 1997 at levels below the EPA regulations of .005 mg/L (or 5 parts per billion). All subsequent tests have produced results below the EPA regulations. However, it is possible that private wells in the area using the same groundwater could contain levels greater than those found in the community well because the volume of water in a community well could dilute any contaminants. The Kane County Health Department is encouraging private well owners to have their water tested for volatile organic compounds (VOCs) including PCE

What are the risks of getting liver disease? Cancer?

The health effects of breathing in air or drinking water with low levels of PCE are not definitely known. However, at levels found in the ambient air or drinking water, risk of adverse health effects is minimal.

Results of animal studies, conducted with amounts much higher than those that most people are exposed to, show that PCE can cause liver and kidney damage and liver and kidney cancers even though the relevance to people is unclear. Although it has not been shown to cause cancer in people, the U.S. Department of Health and Human Services has determined that PCE may reasonably be anticipated to be a human carcinogen. The effects of exposure to any chemical depend on—

- When you are exposed (during pregnancy, in infancy),
- How much you are exposed to,
- How long you are exposed,
- How you are exposed (breathing, drinking), and
- What your personal traits and habits are.

Therefore, not everyone who is exposed to PCE will develop a health problem.

How do those risks compare to something I know about?

Some people who drink water containing PCE well in excess of the maximum contaminant level for many years could have problems with their liver and may have an increased risk of getting cancer. Health officials estimate that consumption of two liters of water containing 5 ppb of PCE per day for 70 years increases the risk for cancer by .000005 % (five additional cancer cases in 1 million people who were exposed). For comparison purposes, one tablespoon added to an Olympic-sized swimming pool would equal one part per billion.

Should I or my child be tested?

We recommend that you consult with your family doctor.

Should we bring in bottled water? Should the water be treated? How?

Filtering the water supply with granular activated filters has proven to be effective for removing PCE below the EPA regulation.

More information about PCE is available by visiting www.atsdr.cdc.gov/tfacts18.html or www.epa.gov.