

# Trichloroethylene (TCE) in Residential Indoor Air

***It is important that you know about the potential risk of TCE if you are a woman between the ages of 15 and 50 years who could be pregnant, or plans to get pregnant soon.***

## **Why am I receiving this notice?**

Trichloroethylene (also called trichloroethene or TCE) has been found in the air in your home at a level of 2.1 micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ) or more. This level is of concern for pregnant women in their first trimester because TCE above this level has the potential to damage the heart of the baby during the time the heart is forming.

## **What is TCE? How might I be exposed?**

TCE is a manmade, colorless liquid used mainly as a solvent to remove grease from metal parts. It is also used in glues and paint removers. When TCE gets in the soil or groundwater because of spills or leaks at a facility, it can evaporate and get into a building through seams and cracks in the building's foundation. This process is called "vapor intrusion."

## **What is the recommended level of TCE in a home?**

The United States Environmental Protection Agency recommends 2.1  $\mu\text{g}/\text{m}^3$  or less in the home.

## **What are the possible health effects from breathing indoor air with TCE?**

The possible health effects from breathing TCE depend on its level in the air, how long you breath the air with TCE, and if you are in contact with TCE during the first trimester of pregnancy. Contact with TCE during the first trimester may increase the risk of heart damage to the baby during the time the heart is forming. Contact with TCE above 2.1  $\mu\text{g}/\text{m}^3$  does not mean it will cause heart damage to the baby, only that there may be a higher risk.

Breathing air with TCE over a long period of time also may affect the immune system, which fights off infections, and therefore may increase your chances of getting infections. Contact with TCE for a long time may increase the risk of kidney cancer, liver cancer and non-Hodgkin's lymphoma.

## **What should I do if I think I might be pregnant?**

If you may have been exposed to TCE levels above the action level of **2.1  $\mu\text{g}/\text{m}^3$  of air in the home** and might be in your first trimester of pregnancy, the N.C. Department of Environmental Quality (DEQ) recommends the following:

- avoid areas of the home with TCE levels above the action level,
- consider moving to another location while TCE levels are brought below the action level,
- talk to your doctor or a doctor familiar with chemical exposures if you are pregnant, and

- wait three to four weeks after contact with TCE above the action level before getting pregnant to allow TCE to leave your body.

### **What measures might be taken to reduce my exposure to TCE?**

- The DEQ requires telling women between 15 and 50 years of age about levels at the action level or above immediately.
- The DEQ requires immediate actions to lower TCE levels below 2.1 µg/m<sup>3</sup> of air to lower the risk of heart damage to the baby during the first trimester.
- Parties responsible for the pollution are required to lower TCE indoor air levels below action levels.
- Pregnant women in their first trimester or women trying to get pregnant soon might need to find another place to stay until TCE levels are below the action levels.
- Quick steps to lower TCE levels include sealing foundation cracks and increasing air flow.
- Portable carbon filtration systems and changes to the heating and air system could be quick, temporary ways to lower TCE levels while permanent solutions are designed and put in place.
- Installing a sub-slab depressurization (SSD) system can lower TCE levels. An SSD system is a series of pipes under the foundation or basement with a fan that pushes vapors to the outdoors.

### **What should I do if I think my health has been affected?**

You should talk to your doctor or a doctor that knows about chemical exposures. Give your doctor a copy of your TCE results and the N.C. Division of Public Health's factsheet, Trichloroethylene (TCE) Information for Health Professionals, available at <http://epi.publichealth.nc.gov/oe/az.html#tce>. Your doctor may also contact the N.C. Division of Public Health's Occupational and Environmental Epidemiology Branch to speak with doctors familiar with chemical exposures (919-707-5900).

You and your doctor can find additional health information at the Agency for Toxic Substances and Disease Registry's website at: <https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=30>.

### **Where can I get more information about TCE contamination and cleanup?**

More information on the DEQ's guidance for sites with TCE contamination can be found at <https://deq.nc.gov/VaporIntrusionGuidance>. For more information about the contamination site that prompted this notice, please contact: \_\_\_\_\_.

Adapted from Massachusetts Department of Environmental Protection's 'Important Information on Trichloroethylene (TCE) in Residential Indoor Air'.

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