



Exposure to Chlorinated Solvents in the Workplace

What are chlorinated solvents?

Chlorinated solvents, like **trichloroethylene (TCE)** and **tetrachloroethylene (PCE or Perc)**, are human-made chemicals historically used as metal degreasers, fabric cleaners in commercial dry cleaners or formal wear rental businesses, and in the production of refrigerant and other chemicals. TCE and Perc are still used in some industrial settings today. Chemicals from these industrial uses may have been spilled on the ground or improperly disposed of which has led to long-term contamination. These chemicals can evaporate quickly into the air and be breathed in.

Exposure to chlorinated solvents

Past chemical spills and improper disposal practices can affect the quality of air you breathe at your workplace, even if there is no odor. Chemicals like **TCE** and **Perc** can stay in the ground for a long period of time and create harmful vapors that move through the soil and along or through underground utility lines to buildings nearby or above.

These chemical vapors can enter buildings through cracks in the foundation, plumbing, or other openings and impact the air you breathe through a process called **vapor intrusion**.

Talk with your employer about steps they are taking to protect workers and reduce exposure to chlorinated solvent vapors in the workplace. Scan for more information on **vapor intrusion** or visit dhs.wisconsin.gov/air/vi.htm



Potential health effects

Health effects from breathing in harmful chemicals depend on the specific chemical, the concentration of vapors in the indoor air, and how long someone is exposed. Breathing in low concentrations of chlorinated solvents over a **long amount of time** (daily for more than one year) can increase the risk of cancer or impact organ function. Breathing in medium to high concentrations of chlorinated solvents over a **short amount of time** (usually less than two weeks) may cause:



Headache



Sleepiness



Dizziness



Nausea



Exposure to chlorinated solvents can harm the developing fetus. **Avoid exposure** to TCE and PCE if you are pregnant or plan to become pregnant.



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