

WHAT YOU NEED TO KNOW ABOUT XYLENE

What is Xylene?

Xylene is a colorless liquid that had a sweet odor. Xylene is flammable and practically insoluble. Xylene is primarily a synthetic chemical; however, it can occur naturally in petroleum, coal tar, and during forest fires.

There are three forms of xylene: meta-xylene, ortho-xylene and para-xylene. These different forms are known as isomers. Collectively, these three isomers of xylene are known as total xylenes.

What is Xylene Used For?

In terms of volume, xylene is one of the top 30 chemicals produced in the United States.

Xylene is primarily used as a solvent (a liquid that can dissolve other substances), particularly in the printing, rubber and leather industries. Xylene is also used as:

- Cleaning Agent
- Paint Thinner and Remover
- Varnish
- Airplane Fuel
- Gasoline
- Shellac
- Rust Preventatives
- Pesticides
- Lacquers

What Happens to Xylene In The Environment?

Because xylene is a liquid, it can easily leak into soil, surface water or groundwater. Xylene can enter soil, water or air in large amounts after spills or as a result of a leak during storage or burial at a waste site.

Xylene evaporates quickly, meaning that most xylene that gets into soil or water is released into the air and broken down by sunlight and less harmful chemicals within a couple of days. However, if xylene make its way down into underground water, it may remain for several months before being broken down.

How Might I Be Exposed to Xylene?

Xylene is most frequently released from industrial sources, automobile exhaust, and during its use as a solvent. As such, paint industry workers, automobile garage workers, and metal workers are particularly likely to be exposed to xylene. People who live near these industries may also be at risk for heightened exposure to xylene.

You may also be exposed to xylene by using a variety of consumer products including gasoline, paint varnish and rust preventatives. Small amount of xylene can even be found in cigarette smoke.

Xylene exposure can also occur thorough contact with contaminated soil and by drinking contaminated water.

What Are The Health Effects of Xylene?

Both the International Agency for Research on Cancer (IARC), a division of the World Health Organization (WHO) and the U.S. Environmental Protection Agency (EPA) have determined that there is insufficient information to determine the possible carcinogenic effects of xylene.

The nervous system, respiratory system, cardiovascular system, and kidneys are primarily affected by exposure to xylene. Effects can include:

- Labored Breathing
- Impaired Pulmonary Function
- Increased Heart Palpitation
- Severe Chest Pain
- Accumulation of Fluid in Lungs
- Respiratory Depression or Arrest
- Ventricular Arrhythmias

Symptoms of Xylene exposure include:

- Eye Irritation
- Headaches
- Dizziness
- Fatigue
- Tremors
- Incoordination
- Nausea
- Vomiting
- Stomach Discomfort

- Impaired Short-term Memory
- Impaired Reaction Time
- Alterations in Equilibrium
- Anxiety
- Inability to Concentrate
- Lack of Muscle Coordination
- Death
- Coma
- Impaired Vision
- Paralysis
- Skin Irritation

Is There a Medical Test That Shows Whether I Have Been Exposed to Xylene?

Tests of blood and urine are available to determine if you have been exposed to xylene. However, because xylene quickly leaves the body, these tests must be taken within hours after exposure.

While these tests can indicate exposure to xylene, they cannot be used to predict which health effects may, if at all, develop as a result of the exposure.

How Can I Reduce My Family's Risk of Exposure to Xylene?

1. Exposure to xylene as a solvent (paint and gasoline) can be reduced by only using the products in an area that is adequately ventilated. These products should also be stored in tightly closed containers, out of the reach of children.
2. Older children sometimes sniff household chemicals as a way to get high. Parents should talk to their children about the dangers of sniffing xylene.
3. Get your private well and the air inside your home tested.
4. Avoid drinking water from contaminated sources. Drink bottled water until a solution can be reached. Limit showers and baths or use bottled water.
5. Demand the polluter connect your family to a clean water source.
6. Prevent children from playing in dirt if you live near a site contaminated with xylene.
7. Seal sump pumps and foundation cracks and increase ventilation in your home.
8. Demand the polluter clean up the contaminated site and the groundwater.
9. If necessary, demand the polluter install a vapor mitigation system to get rid of toxic vapors.
10. Contact an experienced environmental lawyer to help you with each of these steps.

What Should I Do if I'm Concerned My Health May be Affected?

If you believe you may have been exposed to xylene and your health has been effected, see a doctor familiar with chemical exposure. Let them know if you have been exposed to xylene and bring any xylene test results.

Xylene Can Also be Labeled As:

Benzene; p-Dimethylbenzene; p-Xylol; 1,4-Dimethylbenzene; 1,4-Xylene; p-Methyltoluene; para-Xylene; Chromar; Scintillar; 4-Methyltoluene; NSC 72419; 1,4-dimethyl-benzene (p-xylene); o-Dimethylbenzene; o-Methyltoluene; o-Xylol; 1,2-Dimethylbenzene; 1,2-Xylene; 3,4-Xylene; ortho-Xylene; NSC 60920; 2-Methyltoluene; 1,2-dimethyl-benzene (o-xylene); m-Xylene; m-Dimethylbenzene; m-Xylol; 1,3-Dimethylbenzene; 1,3-Xylene; 2,4-Xylene; m-Methyltoluene; meta-Xylene; NSC 61769; 1,3-dimethylbenzene (m-xylene).

Links:

<https://www.epa.gov/sites/production/files/2016-09/documents/xylenes.pdf>

<https://www.atsdr.cdc.gov/PHS/PHS.asp?id=293&tid=53>

<https://www.atsdr.cdc.gov/toxguides/toxguide-71.pdf>

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C95476&Mask=4>

<https://www.atsdr.cdc.gov/mmg/mmg.asp?id=291&tid=53>