

BENZENE FACT SHEET

What is benzene?

It is a colorless liquid with a sweet odor. It evaporates into the air very quickly and dissolves slightly in water. It is highly flammable. Benzene is made mostly from petroleum sources. It is also used for the manufacturing of some types of rubbers, lubricants, dyes, detergents, drugs and pesticides.

How you can be exposed to benzene?

- Breathing outdoor air that contains low levels of benzene from tobacco smoke, gas stations, exhaust from motor vehicles, and industrial emissions.
- You can be exposed through vapors from products that contain benzene, such as glues, paints, furniture wax, and detergents.
- You can be exposed to benzene from leaking underground storage tanks or from hazardous waste sites containing benzene can contaminate well water.
- If you drink benzene-contaminated tap water, eat foods prepared with the contaminated water or breathe in contaminated air, you are also exposed.
- If you live in a city or an industrial area you are generally exposed to higher levels than those who live in rural areas.

How benzene can affect your health?

Benzene can affect your health by causing cells not to work properly. For example, it can damage the immune system by causing the bone marrow to produce too many white blood cells—a condition known as leukemia. The impact of poisoning caused by benzene depends on the amount, route, and length of time, as well as the age and preexisting medical condition of the exposed person.

What are the immediate symptoms of exposure to benzene?

People who breathe in high levels of benzene may develop the following symptoms within minutes to several hours:

- Drowsiness
- Dizziness
- Fast or irregular heartbeat
- Headaches
- Tremors
- Confusion
- Unconsciousness
- Death (at very high levels)

Eating foods or drinking beverages containing high levels of benzene can cause the following symptoms within minutes to several hours:

- Vomiting
- Irritation of the stomach
- Dizziness
- Sleepiness
- Convulsions
- Fast or irregular heartbeat
- Death (at very high levels)

What are the long-term health effects of exposure to benzene?

- If you are exposed to benzene for a year or more, it can have harmful effects in the bone marrow and can cause a decrease in red blood cells, leading to anemia.
- Some women who breathed in high levels of benzene for many months had irregular menstrual periods and a decrease in the size of their ovaries.
- The Department of Health and Human Services (DHHS) has determined that long-term exposure to high levels of benzene in the air can cause leukemia

How can I protect myself and my loved ones?

- If the benzene release was released into the air, get to fresh air by leaving the area.
- If the benzene release was indoors, get out of the building and get fresh air.
- If you are near a release of benzene, emergency coordinators may tell you to either evacuate the area or to “shelter in place” inside a building to avoid being exposed to the chemical.

What should I do if I have been exposed to benzene?

If you think you may have been exposed to benzene, you should quickly remove your clothing that may have benzene on it. Any clothing that has to be pulled over the head should be cut off the body instead of pulled over the head. Quickly wash your entire body with large amounts of soap and water. If your eyes are burning or your vision is blurred, rinse them with plain water for 10 to 15 minutes or until the burning sensation stops. If you wear glasses, wash them with soap and water. You can put your eyeglasses back on after you wash them.

If you wear contacts do not handle contacts until you have, wash your hands especially after removing contaminated clothes. Clothing and contacts should then be placed in a plastic bag and sealed. Place the bag inside a second plastic bag and seal. When the local or state health department or emergency personnel arrive, tell them what you did with your clothes. You should no longer handle the plastic bags yourself.

How benzene poisoning is treated?

There is no specific antidote that exists for benzene poisoning. If you have swallowed benzene, do not induce vomiting or drink fluids. **Dial 911 for medical attention right away and the removal of contaminated clothing items. Do not drive yourself to the hospital as you may become very ill on your way.**

Where can I get more information on benzene?

www.bt.cdc.gov

www.dshs.state.tx.us

www.state.nj.us/health/eoh/rtkweb/rtkhsfs.htm

Source of Information

Centers for Disease Control and Prevention (CDC)