

1,3-Butadiene

Patient Information Sheet

This handout provides information and follow-up instructions for persons who have been exposed to 1,3-butadiene.

What is 1,3-butadiene?

1,3-Butadiene is shipped and handled as a liquefied compressed gas in a special container. At room temperatures, it is a gas with a mild, gasoline-like odor. It is used to make synthetic rubber, tires, and plastics.

What immediate health effects can be caused by exposure to 1,3-butadiene?

Inhaling 1,3-butadiene can cause irritation of the nose, eyes, mouth, and throat. Typical symptoms include sore throat, runny nose, burning eyes, and cough. Exposure to very high concentrations can cause headache, nausea, blurred vision, drowsiness, fatigue, vertigo, coma, and death. If the skin or eyes come in contact with liquid 1,3-butadiene, frostbite can occur.

Can 1,3-butadiene poisoning be treated?

There is no specific antidote for 1,3-butadiene, but its effects can be treated and most exposed persons recover well. Persons who have inhaled large amounts of 1,3-butadiene might need to be hospitalized.

Are any future health effects likely to occur?

A small single exposure from which a person quickly recovers is not likely to cause any delayed or long-term effects. There are no reported human reproductive health effects, but some animal studies have shown developmental defects after long-term exposure. Medical evaluation is recommended for such patients. Chronic, long-term exposure might also cause cancer; 1,3-butadiene is considered a probable human carcinogen.

What tests can be done if a person has been exposed to 1,3-butadiene?

Specific tests for the presence of 1,3-butadiene and its breakdown products in the breath and urine are not widely available and must be performed shortly after exposure. These tests are not generally useful to your doctor.

Where can more information about 1,3-butadiene be found?

More information about 1,3-butadiene can be obtained from your regional poison control center; your state, county, or local health department; the Agency for Toxic Substances and Disease Registry (ATSDR); your doctor; or a clinic in your area that specializes in occupational and environmental health. If the exposure happened at work, you may wish to discuss it with your employer, the Occupational Safety and Health Administration (OSHA), or the National Institute for Occupational Safety and Health (NIOSH). Ask the person who gave you this form for help locating these telephone numbers.

Follow-up Instructions

Keep this page and take it with you to your next appointment. Follow *only* the instructions checked below.

Call your doctor or the Emergency Department if you develop any unusual signs or symptoms within the next 24 hours, especially:

- shortness of breath
- coughing, wheezing, or chest tightness
- increased pain or discharge from injured eyes
- signs of skin infection, increased redness, pain, or pus-like discharge from injured skin

No follow-up appointment is necessary unless you develop any of the symptoms listed above.

Call for an appointment with Dr. _____ in the practice of _____.

When you call for your appointment, please say that you were treated in the Emergency Department at _____ Hospital by _____ and were advised to be seen again in _____ days.

Return to the Emergency Department/ _____ Clinic on (date) _____ at _____ AM/PM for a follow-up examination.

Do not perform vigorous physical activities for 1 to 2 days.

You may resume everyday activities including driving and operating machinery.

Do not return to work for _____ days.

You may return to work on a limited basis. See instructions below.

Avoid exposure to cigarette smoke for 72 hours; smoke may worsen the condition of your lungs.

Avoid drinking alcoholic beverages for at least 24 hours; alcohol may worsen injury to your stomach or have other effects.

Avoid taking the following medications: _____

You may continue taking the following medication(s) that your doctor(s) prescribed for you: _____

Other instructions: _____

• Provide the Emergency Department with the name and the number of your primary care physician so that the ED can send him or her a record of your emergency department visit.

• You or your physician can get more information on the chemical by contacting: _____ or _____, or by checking out the following Internet Web sites: _____; _____.

Signature of patient _____ Date _____

Signature of physician _____ Date _____