

Ethylene Glycol (C₂H₆O₂) Patient Information Sheet

This handout provides information and follow-up instructions for persons who have been exposed to ethylene glycol.

What is ethylene glycol?

Ethylene glycol is a colorless, syrupy liquid used in antifreeze solutions and as a solvent in making certain chemicals. When used in antifreeze solutions, it is usually mixed with a fluorescent yellow dye to create a bright yellow color. Ethylene glycol is odorless and can have a sweet taste.

What immediate health effects can be caused by exposure to ethylene glycol?

Drinking even small amounts (from 1 to 3 ounces) of ethylene glycol can result in damage to the kidneys if the poisoning is not treated. Consumption of larger quantities can be fatal. Skin contact with liquid ethylene glycol or breathing low levels of vapors in the air is generally not harmful or causes only minor irritation. Very few individuals develop an allergic rash when the liquid is on their skin.

Can ethylene glycol poisoning be treated?

Persons who have swallowed large amounts of ethylene glycol should be hospitalized. In severe exposures, special antidotes and hemodialysis might be needed. Treatment is generally successful if begun within 3 hours of swallowing, and most people recover completely after treatment.

Are any future health effects likely to occur?

Kidney damage is the most common effect if severe exposure by ingestion is not treated.

What tests can be done if a person has been exposed to ethylene glycol?

Ethylene glycol and its breakdown products can be measured in blood and urine. After significant exposure, diagnostic tests are needed to measure kidney function and the levels of the toxicant in the blood.

Where can more information about ethylene glycol be found?

More information about ethylene glycol 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 in 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:

- headache, dizziness, or a feeling of intoxication
- nausea, vomiting, or abdominal cramps.

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 _____