
Acrolein

Patient Information Sheet

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

What is acrolein?

Acrolein is a colorless to pale-yellow liquid with a strong, pungent odor. Acrolein is principally used as a biocide to control plants, algae, molluscs, fungi, rodents, and microorganisms. Acrolein has also been used in the manufacture of other chemicals, as a warning agent in gases, as a test gas for gas masks, in military poison gases, in the manufacture of colloidal metals, in leather tanning, and as a fixative in histology.

What immediate health effects can be caused by exposure to acrolein?

Low levels of acrolein in the air can irritate the eyes, nose, throat, and lungs and cause cough, chest tightness, and shortness of breath. Higher levels can cause a build-up of fluid in the lungs, which may cause death. If liquid acrolein comes in contact with the skin or eyes, it can cause severe burns. Generally, the more serious the exposure, the more severe the symptoms.

Can acrolein poisoning be treated?

There is no antidote for acrolein, but its effects can be treated and most exposed persons get well. Seriously exposed persons may need to be hospitalized.

Are any future health effects likely to occur?

Respiratory dysfunction may persist for over a year. In rare cases, after exposure to acrolein, certain persons can be sensitized so that even small exposures to acrolein or other irritants can trigger allergic reaction. Therefore, it is important to tell your doctor that you have been exposed to acrolein. The Department of Health and Human Services has determined that acrolein may possibly be a human carcinogen, based in part on limited evidence of cancer in rats that were exposed to acrolein in the drinking water for a lifetime.

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

Specific tests for the presence of acrolein in blood are not available. If a severe exposure has occurred, respiratory function tests and a chest x-ray may show whether lung damage has occurred. In some cases, lung damage may not be noticed immediately following exposure. Specialized tests exist for reacted hemoglobin in blood and for modified DNA in white blood cells.

Where can more information about acrolein be found?

More information about acrolein 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:

- coughing, wheezing, difficulty breathing, shortness of breath, or chest pain
- increased pain or a discharge from your eyes
- increased redness or pain or a pus-like discharge in the area of a skin burn

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 _____