
Acrylonitrile Patient Information Sheet

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

What is acrylonitrile?

Acrylonitrile is a clear, colorless, or slightly yellow liquid. At room temperature, it readily becomes a vapor. The vapor is flammable and can explode. Acrylonitrile is used to make a variety of fibers and plastics.

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

Breathing acrylonitrile can result in a variety of symptoms, including sneezing, tightness in the chest, cough, weakness of the arms and legs, nausea and vomiting, sleepiness, irregular heartbeat, seizures, and fainting. Generally, the more serious the exposure, the more severe the symptoms. In the body, acrylonitrile breaks down to release cyanide. Symptoms can occur from any type of exposure to acrylonitrile including through the skin or by ingestion.

Can acrylonitrile poisoning be treated?

The treatment for acrylonitrile poisoning includes breathing pure oxygen and, in the case of severe exposure, specific antidotes, including those used to treat cyanide poisoning. Persons with serious symptoms may need to be hospitalized.

Are any future health effects likely to occur?

A single small exposure from which a person recovers quickly is not likely to cause delayed or long-term effects. After a large exposure, a patient may have brain, heart, or liver damage. Acrylonitrile has caused cancer in laboratory animals, cancer in humans has not been completely established.

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

Specific tests for the presence of acrylonitrile (or cyanide) in blood and urine generally are not useful to the doctor. If a severe exposure has occurred, blood and urine analysis and other tests may show whether the liver, heart, or nervous system has been injured. Testing is not needed in every case.

Where can more information about acrylonitrile be found?

More information about acrylonitrile 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:

- weakness in the limbs, dyspnea, irritability
- headache, apprehension
- chest discomfort, nausea, vomiting, diarrhea
- burning sensation in the throat

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 _____