Toluene Diisocyanate Patient Information Sheet

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

What is Toluene diisocyanate?

Toluene diisocyanate is a pale-yellow liquid with a strong, sharp odor. It is used mainly to make polyurethane foams and coatings.

What immediate health effects can be caused by exposure to toluene diisocyanate?

Low levels of toluene diisocyanate 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 toluene diisocyanate 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 toluene diisocyanate poisoning be treated?

There is no antidote for toluene diisocyanate, 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?

After exposure to toluene diisocyanate, certain persons can develop allergies in which even small exposures to toluene diisocyanate or other irritants can trigger asthma attacks or shortness of breath. Therefore, it is important to tell your doctor that you have been exposed to toluene diisocyanate. After a serious exposure or repeated exposures, toluene diisocyanate can cause permanent lung damage. Toluene diisocyanate poisoning can cause permanent alterations of nervous system function, including problems with memory, learning, thinking, sleeping, personality changes, depression, headache, and sensory and perceptual changes.

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

Specific tests for the presence of toluene diisocyanate in blood are not available. If a severe exposure has occurred, respiratory function tests and a chest x-ray may show whether damage has been done to the lungs. Patients who have problems with memory, concentration, or personality changes or who experienced seizures or convulsions when exposed to toluene diisocyanate may need neurobehavioral toxicity testing. Testing is not needed in every case.

Where can more information about toluene diisocyanate be found?

More information about toluene diisocyanate 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 headache or lightheadedness 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 _____