

## **Methyl Isocyanate (C<sub>2</sub>H<sub>3</sub>NO )**

### **Patient Information Sheet**

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

#### **What is methyl isocyanate?**

Methyl isocyanate is a very flammable liquid that readily evaporates when exposed to air. Methyl isocyanate liquid is colorless with a pungent odor. The primary use of methyl isocyanate is as a chemical intermediate in the production of pesticides. It is also used to produce polyurethane foams and plastics. It is shipped and handled as a flammable and explosive liquid in a special container.

#### **What immediate health effects can be caused by exposure to methyl isocyanate?**

Methyl isocyanate vapors are severely irritating and corrosive to the respiratory tract and eyes. Symptoms may include cough, chest pain, shortness of breath, watery eyes, eye pain (particularly when exposed to light), profuse lid edema, and corneal ulcerations. Respiratory symptoms such as pulmonary edema and bronchial spasms may occur in immediate response to exposure or develop and progress in severity over a period of hours to days post-exposure. Acute exposure to very high concentrations may be quickly fatal due to respiratory failure. Methyl isocyanate is a skin irritant and may cause chemical burns upon dermal contact.

#### **Can methyl isocyanate poisoning be treated?**

There is no antidote for methyl isocyanate, but its effects can be treated. Persons who have inhaled large amounts of methyl isocyanate would most likely need to be hospitalized. Persons who have come into direct skin or eye contact with methyl isocyanate liquid or vapors may need to be treated for chemical burns or serious eye injury.

#### **Are any future health effects likely to occur?**

A single exposure from which a person recovers quickly may not result in long-term health effects. However, some respiratory and eye damage may persist for a long time after exposure to methyl isocyanate. The chemical may also be a dermal and respiratory sensitizer, causing reactive responses upon subsequent exposures.

#### **What tests can be done if a person has been exposed to methyl isocyanate?**

Specific tests for the presence of methyl isocyanate in blood or urine are not generally useful. If a severe exposure has occurred, blood analyses, x-rays, and breathing tests might show whether the lungs have been injured.

#### **Where can more information about methyl isocyanate be found?**

More information about methyl isocyanate 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 might be required to contact your employer and 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:
  - ▼ eye, nose, throat irritation
  - ▼ coughing or wheezing
  - ▼ difficulty breathing or shortness of breath
  - ▼ chest pain or tightness
  - ▼ nausea, vomiting, diarrhea, or stomach pain

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 \_\_\_\_\_