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## Information and recommendations for patients

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- Patients exposed only to phosgene gas should not pose a significant risk of secondary contamination. Patients whose clothing or skin is contaminated with liquid or solvents containing phosgene can secondarily contaminate rescue and medical personnel by direct contact or through off-gassing phosgene.
  - Phosgene irritates lungs severely. Because of its slow hydrolysis in the alveoli, serious lung effects and, therefore, symptoms of toxicity may be delayed up to 24 hours. Signs of accumulation of fluid in the lungs (shortness of breath, cyanosis, expectoration, cough) do not usually appear for hours after even severely toxic exposures.
  - There is no antidote to be administered to counteract the effects of phosgene. Treatment consists of supportive measures.
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### Substance information

Phosgene (COCl<sub>2</sub>), CAS 75-44-5

Synonyms: carbonic acid dichloride, carbonic dichloride, carbon oxychloride, carbonyl chloride, chloroformyl chloride

Phosgene is a colorless, fuming liquid below 8°C (47°F) and a colorless, nonflammable gas above 8°C. Often it is used as a solution in organic solvents. At low concentrations, its odor is similar to that of green corn or newly mowed hay; at high concentrations, its odor can be sharp and suffocating. Phosgene is hydrolyzed slowly by moisture to form hydrochloric acid.

Phosgene is used as an intermediate in the manufacture of many chemicals including isocyanates, polyurethane, polycarbonates, dyes, crop protection products, and pharmaceuticals.

### What immediate health effects can result from exposure to phosgene?

Most exposures to phosgene occur from breathing the gas. Exposure to small amounts usually causes eye, nose, and throat irritation. However, the irritating effects can be so mild at first that the person does not leave the area of exposure. Extended exposure can cause severe breathing difficulty, which may lead to chemical pneumonia and death. Severe breathing problems may not develop for as long as 24 hours after exposure.

### 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. Some persons who have had serious exposures have developed permanent breathing difficulty and tend to develop lung infections easily.

## 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 or wheezing
  - difficulty breathing or shortness of breath
  - increased pain or a discharge from exposed skin or eyes
  - chest pain or tightness
- ( ) 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; alcohol may worsen your clinical conditions.
- ( ) Avoid taking the following medications: \_\_\_\_\_  
\_\_\_\_\_
- ( ) You may continue taking the following medication(s) that your doctor(s) prescribed for you: \_\_\_\_\_  
\_\_\_\_\_
- ( ) Other instructions: \_\_\_\_\_  
\_\_\_\_\_

Signature of patient \_\_\_\_\_ Date \_\_\_\_\_  
Signature of physician \_\_\_\_\_ Date \_\_\_\_\_

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