



Salem/Cumberland County Health Department  
**PHOSGENE**  
(PUBLIC HANDOUT)

**What is phosgene?**

- Phosgene is an industrial chemical used to make plastics and pesticides.
- At room temperature (70 degrees F), phosgene is a poisonous gas.
- With cooling and pressure, phosgene can be converted into a liquid so that it can be shipped and stored. When liquid phosgene is released, it quickly turns into a gas that stays close to the ground and spreads quickly.
- Phosgene gas may appear colorless or as a white or pale yellow cloud. At low concentrations, it has a pleasant odor of newly mown hay or green corn, but its odor may not be noticed by all people exposed. At high concentrations, the odor may be strong and unpleasant.
- Phosgene is not easily ignited and burned (nonflammable), but it can cause flammable substances around it to burn.

**What are the symptoms of exposure of phosgene?**

During and immediately following exposure to heavy concentrations of phosgene, the following symptoms may develop:



Salem/Cumberland County Health Department  
**PHOSGENE**  
(PUBLIC HANDOUT)

- Coughing
- Burning sensation in the throat and eyes
- Watery eyes
- Blurred vision
- Difficulty breathing or shortness of breath
- Nausea and vomiting
- Skin contact can result in sores similar to those from frostbite or burns.

\*Following exposure to high concentrations of phosgene, a person may develop fluid in the lungs within 2-6 hours.

Exposure to phosgene may cause delayed effects that may not show up for up to 48 hours after exposure, even if the person feels better or appears well following removal from exposure.

Therefore, people who have been exposed to phosgene should be monitored for 48 hours afterward. Delayed effects that can appear up to 48 hours include the following:

- Difficulty breathing
- Coughing up white to pink-tinged (a sign of fluid in the lungs)
- Low blood pressure
- Heart failure



Salem/Cumberland County Health Department  
**PHOSGENE**  
(PUBLIC HANDOUT)

Showing these symptoms does not necessarily mean that a person has been exposed to phosgene.

**What is phosgene found and how is it used?**

Phosgene is not found naturally in the environment. It is used in industry to produce many other chemicals such as pesticides. It can be formed when certain compounds are exposed to heat, such as some types of plastics. Phosgene gas is heavier than air, so it will be more likely found in low-lying areas.

**How are people exposed to phosgene?**

People's risk for exposure depends on how close they are to the place where the phosgene was released.

**If it is released in the air:**

People may be exposed through skin contact or eye contact if phosgene is released into the air. They may also be exposed by breathing air that contains phosgene.

**If liquid phosgene is released into water:**

People may be exposed by touching or drinking contaminated water.



Salem/Cumberland County Health Department  
**PHOSGENE**  
(PUBLIC HANDOUT)

**If liquid phosgene comes in contact with food:**

People may be exposed by eating the contaminated food.

**What are the long-term health effects of exposure to phosgene?**

Most people who recover after an exposure to phosgene make a complete recovery. However, chronic bronchitis and emphysema have been reported as a result of phosgene exposure.

**How can people protect themselves and what should they do if they have been exposed to phosgene?**

- Leave the area where the phosgene was released and get to fresh air. Quickly moving to an area where fresh air is available is highly effective in reducing the possibility of death from exposure to lewisite.
  - If the phosgene release was outdoors, move away from the area where the phosgene was released. Go to the highest ground possible, because phosgene is heavier than air and will sink to low-lying areas.
  - If the phosgene release was indoors, get out of the building.



Salem/Cumberland County Health Department  
**PHOSGENE**  
(PUBLIC HANDOUT)

- If you think you may have been exposed, remove your clothing, quickly wash your entire body with soap and water, and get medical care as quickly as possible.
- Removing and disposing of clothing:
  - Quickly take off clothing that has liquid phosgene on it. Any clothing that has to be pulled over the head should be cut off the body instead of pulled over the head. If possible, seal the clothing in a plastic bag. Then seal the first plastic bag in a second plastic bag. Removing and sealing the clothing in this way will help protect you and other people from any chemicals that might be on your clothes.
  - If you placed your clothes in plastic bags, inform either the local or state health department or emergency personnel upon their arrival. Do not handle the plastic bags.
  - If you are helping other people remove their clothing, try to avoid touching any contaminated areas, and remove the clothing as quickly as possible.
- Washing the body:
  - As quickly as possible, wash any liquid phosgene from your skin with large amounts of soap and water. Washing with soap and water will help protect people from any chemicals on their bodies.
  - If your eyes are burning or your vision is blurred, rinse your eyes with plain water for 10 to 15 minutes. If you



Salem/Cumberland County Health Department  
**PHOSGENE**  
(PUBLIC HANDOUT)

wear contacts, remove them and place them in the bags with the contaminated clothing. Do not put the contacts back in your eyes. If you wear eyeglasses, wash them with soap and water. You can put the eyeglasses back on after you wash them.

- If you have ingested (swallowed) phosgene, do not induce vomiting or drink fluids.
- **Seek medical attention right away. Dial 911 and explain what has happened.**

**How is exposure to phosgene treated?**

Treatment for phosgene exposure consists of removing phosgene from the body as soon as possible and providing supportive medical care in a hospital setting. No remedy exists for phosgene. Exposed people should be observed for up 48 hours, because it may take that long for symptoms to develop or reoccur.

**Where can people get more information about phosgene?**

- Poison Control Center: 1-800-222-1222
- Centers for Disease Control and Prevention
  - English: 1-888-246-2675
  - Spanish: 1-888-246-2857