



CASE DEFINITION

Phosgene

Clinical description

The majority of exposures to phosgene occur by inhalation. In high concentrations, exposure might lead to symptoms of ocular, nasal, and throat irritation. Lower respiratory irritation is the most consistent finding after phosgene exposure. If one of the following lower respiratory signs and symptoms is reported, the clinical description for phosgene poisoning has been met (1, 2): chest tightness or cough, dyspnea, or pulmonary edema, which might be delayed ≤ 48 hours after exposure.

Laboratory criteria for diagnosis

- *Biologic*: No biologic marker exists for phosgene exposure.
- *Environmental*: Confirmation of phosgene in environmental samples is not available.

Case classification

- *Suspected*: A case in which a potentially exposed person is being evaluated by health-care workers or public health officials for poisoning by a particular chemical agent, but no specific credible threat exists.
- *Probable*: A clinically compatible case in which a high index of suspicion (credible threat or patient history regarding location and time) exists for phosgene exposure, or an epidemiologic link exists between this case and a laboratory-confirmed case.
- *Confirmed*: A clinically compatible case in which laboratory tests have confirmed exposure.

The case can be confirmed if laboratory testing was not performed because either a predominant amount of clinical and nonspecific laboratory evidence of a particular chemical was present or a 100% certainty of the etiology of the agent is known.

Additional resources

1. Agency for Toxic Substances and Disease Registry. Medical management guidelines (MMGs) for phosgene (COCl₂). Atlanta, GA: Agency for Toxic Substances and Disease Registry, Division of Toxicology; 2004. Available at www.atsdr.cdc.gov/MHMI/mmg176.html.
2. US Army Medical Research Institute of Chemical Defense. Pulmonary agents. In: Medical management of chemical casualties [Handbook]. 3rd ed. Aberdeen Proving Ground, MD: US Army Medical Research Institute of Chemical Defense, Chemical Casualty Care Division; 2000:19-35.

This document is based on CDC's best current information. It may be updated as new information becomes available. For more information, visit www.bt.cdc.gov/chemical, or call CDC at 800-CDC-INFO (English and Spanish) or 888-232-6348 (TTY).