



CASE DEFINITION

Ammonia

Clinical description

The majority of exposures occur by inhalation and typically lead to symptoms of ocular, nasal, and respiratory irritation. Signs and symptoms of poisoning might include eye redness and lacrimation, nose and throat irritation, cough, suffocation or choking sensation, and dyspnea. (1-3)

Laboratory criteria for diagnosis

- *Biologic*: No biologic marker is available for ammonia exposure.
- *Environmental*: Detection of ammonia in environmental samples, as determined by NIOSH.

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 ammonia exposure, or an epidemiologic link exists between this case and a laboratory-confirmed case.
- *Confirmed*: A clinically compatible case in which laboratory tests of environmental samples 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. Nelson LS. Simple asphyxiants and pulmonary irritants. In: Goldfrank LR, Flomenbaum NE, Lewin NA, Howland MA, Hoffman RS, Nelson LS, eds. Goldfrank's toxicologic emergencies. 7th ed. New York, NY: McGraw-Hill; 2002:1453-69.
2. Ellenhorn MJ, Schonwald S, Ordog G, Wasserberger J, eds. Respiratory toxicology. In: Ellenhorn's medical toxicology: diagnosis and treatment of human poisoning. 2nd ed. Baltimore, MD: Williams & Wilkins; 1996:1448-531.
3. Agency for Toxic Substances and Disease Registry. Toxicological profile for ammonia. Atlanta, GA: Agency for Toxic Substances and Disease Registry, Division of Toxicology; 2002. Available at www.atsdr.cdc.gov/toxprofiles/tp126.html.

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).

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