



Poison HOTLINE

Partnership between Iowa Health System and
University of Iowa Hospitals and Clinics

March 2011



Did you know

On February 19, the U.S. House of Representatives passed H.R.1, proposed to cut \$27.3 million of the \$29.3 million of the federal funding for all the poison centers in the U.S. This cut would lead to the closure of many of the nation's poison centers.

Please help us maintain poison center funding!

Contact your U.S. legislators and tell him why the Iowa Poison Center is important to your family and community. Feel free to share your own story if you've ever called the ISPCC. Click [here](#) to find your local senator and congressman, and let them know how much you value the poison center.

www.iowapoisson.org

Anhydrous Ammonia Exposures

Spring planting time is approaching, the time of year when anhydrous ammonia is applied to farmers' fields as a fertilizer. Anhydrous ammonia is a gas at room temperature, but is compressed into a liquid for transportation and application. The compressed liquid is very cold, and exposure to liquid anhydrous ammonia has the potential to cause serious frost bite.

Anhydrous means "without water" and anhydrous ammonia dissolves in the water of the mucous membranes in the eyes, nose, throat and airways to become ammonium hydroxide. Ammonium hydroxide is a strong alkaline corrosive which causes burns to any tissues with which it has contact.

Initially, after an exposure to anhydrous ammonia, the need for decontamination needs to be balanced against the need for immediate, life-saving interventions. Upper airway obstruction and respiratory failure are the two potentially life threatening injuries which can occur soon after exposure to anhydrous ammonia.

Personnel treating the patient or performing decontamination, whether at the scene or at the hospital, need to wear the appropriate personal protective equipment until the patient has been decontaminated. Decontamination is best accomplished by irrigation with copious amounts of warm water until the pH of the affected tissue is at or near 7.0.

Inhalation causes coughing and bronchospasm, and severe exposures can cause upper airway injury leading to upper airway obstruction. Intubation or emergency tracheotomy may be needed to maintain the airway, and intubation should only be done with direct visualization of the vocal cords. Anhydrous ammonia reaching the alveoli can cause pulmonary edema. The standard treatments for pulmonary edema (oxygen, diuretics, etc.) and bronchospasm (bronchodilators, etc) are appropriate treatment for inhalation injuries.

Eye exposures may cause burns and the full extent of injury may be delayed. Clouding of cornea is not uncommon. Ophthalmology consult may be needed.

Dermal exposures, including frostbite injury, can be extensive and should be treated like a thermal burn. Any burns to the face, hands, feet and genitalia need the appropriate specialty consultation.

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POISON
Help
1-800-222-1222

Post and share this edition of **Poison Hotline** with your colleagues. Send comments or questions to Poison Hotline, 712-234-8775 (fax) or noblef@ihs.org. To subscribe or unsubscribe from this distribution list, contact the Iowa Poison Center education office at 712-279-3717. Read past issues of **Poison Hotline** at www.iowapoisson.org.