



Poison HOTLINE

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

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Did you know

Snow melt, spring rain and river flooding has prompted many calls to the ISPCC from those experiencing effects of flooding. Common questions include the use of gasoline or kerosene powered electrical generators, exposure to mold and questions on mold clean-up, tetanus immunizations, exposure to the flood waters including sewage water, and food concerns.

The ISPCC's homepage provides a link to the Iowa Department of Public Health's flood information. Check it out today at www.iowapoison.org. Additional information from the CDC available at www.bt.cdc.gov/disasters/floods/

Mixing Bleach + Other Household Products = Trouble Waiting to Happen

Household bleaches and other chlorine-based cleaning solutions are usually 3-5% sodium hypochlorite. These products rarely cause serious burns, but can be irritating to the skin. Inhalation of these products can also irritate the upper airways. Swimming pool chlorine treatments and industrial cleaners may contain up to 20% hypochlorite, which can be much more toxic and cause worse corrosive effects.

Many calls to the ISPCC are related to either the over use of bleach products or the mixing of bleach cleaners with other household cleaners. Mixing bleach with a strong acid produces chlorine gas while mixing bleach with ammonia produces chloramine gas. Both of these gases are irritating to upper airways, eyes and skin.

Due to the high water solubility of chlorine and chloramine gases, symptoms are rapid in onset with irritation of the eyes and throat, wheezing, coughing and burning of chest with deep breath. The effects of these fumes are worse in those who have preexisting respiratory disease, such as asthma or COPD.

Most short term exposures to chlorine or chloramine gas in the home setting produce minor symptoms and can usually be treated with fresh air, humidified oxygen, cold fluids, and bronchodilator treatments if wheezing ensues. Concentrated or long-term exposures can lead to upper airway obstruction (hoarseness, stridor, croupy cough) or significant lower airway damage (pulmonary edema, desaturation, etc). Significant exposures may require more intense respiratory support, including intubation and mechanical ventilation. There is no specific antidote for chlorine or chloramine inhalation injury; therapy is focused on respiratory support and hygiene. No data exists that proves nebulization of sodium bicarbonate is beneficial in chlorine gas exposures, or that the use of corticosteroids improves the outcome.

For questions regarding these type exposures and any questions about management, please call Iowa Statewide Poison Control Center at 1-800-222-1-222.

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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 nobletf@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.iowapoison.org.