



**To: Physicians, Nurses, and Other Health Care Providers in the FSM**  
**From: Ron Kirschner, MD: Medical Director, Nebraska Regional Poison Center**  
**Subject: Bleach Update**  
**Date: August 25<sup>th</sup>, 2022**

- Household bleach (sodium hypochlorite) exposure is a common reason for calls to the Nebraska Regional Poison Center.
- Household bleach typically contains 4% to 6% sodium hypochlorite and up to 0.5% sodium hydroxide with a pH between 11 and 12.
- At these concentrations, bleach acts primarily as a mucosal irritant with ingestion resulting in a burning sensation of the mouth/throat, nausea and vomiting.
- Ingestion of large amounts (usually >5 mL/kg) or more concentrated industrial strength bleach may result in caustic injuries to the GI tract or upper airway.
- Initial treatment is dilution with water (up to 120 mL for children or 240 mL for adults).
- Monitor respiratory status and vital signs. Electrolytes should be checked for large ingestions.
- Symptoms such as drooling, dysphagia, or severe pain suggest more severe caustic injury and endoscopy should be considered.
- Ocular exposures warrant copious saline irrigation, followed by a check of conjunctival pH.
- Following dermal exposure, contaminated clothing should be removed and the skin washed.
- Mixing bleach with acid or ammonia can produce chlorine or chloramine gases.
- Both gases are mucosal and pulmonary irritants that can result in bronchospasm as well as delayed pneumonitis (24 hours or longer after exposure).
- Following exposure to these gases, respiratory status, including pulse oximetry, should be monitored.
- Patients should be given bronchodilators and supplemental oxygen as needed.