



HYDROGEN CHLORIDE / HYDROCHLORIC ACID

I. Protocol Overview

Hydrogen chloride, classified as a choking/pulmonary agent, is a gas at room temperature but can be converted into a liquid for shipment and storage. Hydrogen chloride is irritating and corrosive to the eyes, skin, and respiratory tract. Exposure to hydrogen chloride may cause burning of the eyes, nose, and throat, cough, constriction, shortness of breath, nausea, vomiting, headache, and watery eyes. Severe exposure can result in systemic poisoning, kidney or brain damage.

Hydrogen chloride is used commercially for production of hydrochloric acid, vinyl and alkyl chlorides, treatment of cotton, in the semiconductor industry, a chemical intermediate and in toilet bowl cleaners. Clandestine laboratories commonly use HCl gas to convert a freebase drugs into the corresponding hydrochloride salts that are more conveniently distributed.

For all suspected chemical exposures, consult the Poison Control Center (800-222-1222) located at Children's Hospital of Philadelphia. Information and treatment advice is available to the public and healthcare professionals at no charge.

There are no common biomarkers for hydrogen chloride exposure; however, airborne hydrogen chloride exposure can be determined from treated silica gel tube collection. Rapid toxicological screening may rule out other potential exposures. Hydrogen chloride can be indirectly determined in environmental and food samples through ion chromatography (IC).

The Delaware Public Health Laboratory does not perform this testing. Contact the CDC or the Poison Control Center.

II. Contact Information

24/7 CDC Emergency Contact Number: 1-888-295-5156

Poison Control Center: 215-386-2100

III. CDC Website

<http://www.atsdr.cdc.gov/MMG/MMG.asp?id=758&tid=147>