

Working Safely with Corrosives

Stats and Facts

FACTS

1. Corrosive chemicals are hazardous wastes.
2. Corrosive gases and vapors are extremely hazardous. Examples include:
 - Ammonia
 - Hydrogen chloride
 - Nitrogen dioxide
 - Sulfur dioxide
3. Corrosives typically consist of an acid or a base. Acids include hydrochloric acid, sulfuric acid, nitric acid, and chromic acid. Bases include ammonium hydroxide, potassium hydroxide, and sodium hydroxide.
4. Corrosive exposure occurs when:

Inhalation. Breathing in even small amounts of corrosive material can cause nose, throat, and mouth irritation. Larger amounts can potentially cause severe lung damage.

Ingestion. Initial symptoms include drooling and dysphagia. Pain, vomiting, and sometimes bleeding will develop immediately in the mouth, throat, chest, or abdomen.

Eye Contact. Symptoms can include eye redness, irritation, pain, swelling, blurred vision, or inability to keep eyes open.

Skin Contact. Symptoms can include pain, redness, burns, and blistering.

STATS

- 25,263 autopsy cases were reviewed in which the cause of death was determined to be corrosive injury in 23 cases.
- Of the cases, one was a child, and the corrosive substance ingestion was accidental.
- All other cases were adults, and the ingestion was for suicidal intent.
- 16 (69.90) of the corrosive cases were female.
- Nitric acid was the most frequent agent with 13 cases (56.5%).
- Necrosis of esophagus was determined in 19 cases (82.6%) and perforation of stomach in 11 cases (47.8%)