Hydrofluoric Acid Guideline

Inclusion

Known or suspected exposure to hydrofluoric acid (HF)

Exclusion

Exposure to other acids or bases

BLS

Pre-Decon

- Do not enter a confined space to rescue an unresponsive person without wearing an SCBA or testing to confirm SCBA is unnecessary. Remove from source, if safe to do so.
- Assist ventilation with BVM, if needed; use an OPA if possible, rather than an NPA to avoid epistaxis of chemically burned nares.
- Avoid supraglottic airways for upper airway chemical burns.

Decon

- The specific decon required should be determined by the Incident Commander (IC) or their designee.
- Break hydrofluoric acid chemical burn skin blisters & follow these guidelines:

General Decon Guideline | Eye Decon Guideline

ALS

Post-Decon

- Vital signs, primary & secondary surveys, give supplemental O_2 if indicated, insert IV/IO, apply cardiac monitor
- If in severe respiratory distress or apneic, then support ventilation with BVM or airway management protocol.
- Dysrhythmias: Treat per ACLS guidelines
- If in pain, use pain management orders
- If needed, contact medical direction or poison control for assistance.

Administer calcium gluconate topical gel to the affected skin.

- If calcium gluconate gel is not available, mix 10 mL of calcium gluconate solution with a 1 oz. package of water-soluble lubricant. Apply to affected skin.
- If lubricant is not available, apply calcium gluconate solution directly to affected skin.
- Do not apply calcium gluconate or calcium chloride to the eyes.

In the event of cardiac arrest, calcium chloride may be given IV/IO. Calcium chloride can cause severe peripheral venous irritation & tissue damage; therefore, administration via a peripheral IV or IO line should be limited to managing cardiac arrest.

Tox-Medic™

Age ≥ 10 Years
Initial Care • If unstable (cardiac dysrhythmia or arrest), insert IV/IO & give 10% calcium gluconate, 30 mL (3 g), IV/IO

Tox-Medic™

Age < 10 Years
Initial Care • If unstable (cardiac dysrhythmia or arrest), insert IV/IO & give 10% calcium gluconate, 0.6 mL/kg, IV/IO.

©2025