HYDROFLUORIC ACID EMERGENCIES

Hydrofluoric (HF) acid’s toxicity and its ability to move through the body make immediate first aid for HF exposure essential. Follow the guidelines below for hydrofluoric emergencies.

First Aid

- Labs that keep or use HF gas or solutions should have a first aid kit containing 2.5% calcium gluconate gel for use in emergencies (contact the Campus Health Center pharmacy at 827-3926)

Spills

- If a small quantity (100 ml or less) of dilute HF solution is spilled, clean it up by applying powdered calcium carbonate or calcium hydroxide, or a commercial HF spill kit (contact EH&S to dispose of residue)
- If a larger amount is spilled, or the acid is concentrated, contain the spill as best you can, evacuate the area, and call 9-1-1 (avoid exposure to vapors)

Skin Exposure

- Move victim immediately under an emergency shower or other water source and flush the affected area for 5 minutes with a lot of water (washing immediately is crucial)
- Remove all contaminated clothing while flushing the affected area with water
- While the victim is being rinsed with water, have someone call to arrange medical treatment (if the exposure is to the eyes or covers a large area, call 9-1-1)
- All HF burns should be evaluated by a physician experienced in medical toxicology and treatment of chemical burns
- Immediately after flushing with water, start massaging (wear gloves) 2.5% calcium gluconate gel into the burned site (apply every 15 minutes and massage until pain/redness stops or professional medical care is available)

Eye Exposure

- Immediately flush eyes for at least 15 minutes with flowing water
- Take victim to a physician as soon as possible, apply ice water during transport

Inhalation

- Immediately move the victim to fresh air, and Call 9-1-1
- May cause swelling in the respiratory tract up to 24 hours after exposure
- Persons may need prophylactic oxygen treatment and should be seen by a physician as soon as possible

Visit www.ehs.ucr.edu for additional information or call EH&S at 827-5528 if you have any questions.