





## FIRST AID for accidents in the LABORATORY



**Accident: Someone is injured and needs help!**

### Flowchart:

1.		If necessary, request assistance: <b>Tel 888</b>
2.		Move injured persons out of the danger zone.
3.		Perform first aid.
4.		Send report to ETH SHE Department <a href="mailto:safety@su.ethz.ch">safety@su.ethz.ch</a> and to HCI SHE Co <a href="mailto:lab-safety@chem.ethz.ch">lab-safety@chem.ethz.ch</a> .

First aid, links to websites:

[www.toppharm.ch](http://www.toppharm.ch)

[www.pharmacie.de](http://www.pharmacie.de)

[www.webhealthcentre.com](http://www.webhealthcentre.com)

# 1. burns

## A. Skin burns:

- Clothing the injured person immediately remove (avoid self-endangerment), and immediately or simultaneously --.
- -- rinse with sufficient running water (at least 10 minutes), do not neutralize.
- Cover open burns aseptically or with clean cloth.
- Always the Toxicology Center (Tel 0145) contact and notify the alarm center (Tel 888).

## B. Burns of the eyes:

- Always notify the alarm center (Tel 888).
- Rinse the injured eye with plenty of running water or eye wash bottle, taking care not to burn the uninjured eye. Whenever possible, rinse the entire eye, i.e. also under the eyelid. This is advantageously carried out by two people, whereby the injured person should help as much as possible, e.g. lift the eyelid.
- Bandaging of both eyes (immobilization).
- Visit the eye clinic of the university hospital.
- Eye showers: Before rinsing the eye, let enough water out of the shower until the water no longer contains impurities.

## 2. FIRE WOUNDS

### 1. Degree: redness

### 2. Degree: Bubbles

### 3. Degree: Open wound

#### A. 1st and 2nd degree:

- Cool immediately with cold running water (at least 15 minutes).
- Do not open burn blisters.
- Do not apply ointments, powders, oil or similar to the burns or scalds.
- In case of burns on the face, joints, genitals and if it is unclear, a doctor or hospital should be consulted immediately, regardless of the severity of the burn.

#### B. 2nd degree over larger skin areas and 3rd degree:

- Call the alarm center (Tel 888).
- Cool immediately with cold running water (at least 15 minutes).
- The water does not have to be ice-cold (note cooling); let the water jet reach the wounded part of the body in a damped manner if possible (through the palm of the hand, etc.).
- In case of scalds/burns, remove (cut open) clothes only if they are not stuck.
- Do not apply ointments, powders, oil or similar to the burns or scalds.
- For transport, cover open burn wounds germ-free or with clean cloth (ev. alu-coated wound dressings).
- Protect from heat loss.
- Danger of shock!

## 3. poisonings

### **A. Inhalation of gases/vapors/aerosols:**

- Rescue injured persons and bring them out into the fresh air; pay particular attention to self-protection (breathing mask)!
- Always contact the Toxicological Center (Tel 0145) and the Alarm Center (Tel 888)! If possible: Immediately ask for the safety data sheet of the chemical that caused the poisoning.
- In case of respiratory arrest, ventilate immediately; in case of cardiac arrest, perform cardiopulmonary resuscitation (CPR, if trained to do so).
- Upper body elevation while conscious, unconscious in lateral position for transport.
- In the case of gas poisoning ( $\text{NO}_2^*$ ,  $\text{Br}_2$ ,  $\text{HF!}$ ), secondary damage often occurs after a (short-term) improvement in the condition of the injured persons has occurred. It is essential to seek advice from the toxicology center!

Emergency kits for HF poisoning can be obtained from the central disposal HCl D276 or from the medical room HCl E3.3.

### **B. Absorption of toxins through the digestive tract:**

- Ensure poison, paying special attention to self-protection.
- Always contact the Toxicology Center (Tel 0145) and the Alarm Center (Tel 888). If possible: Immediately ask for the safety data sheet of the chemical that caused the poisoning.
- First aid measures according to the instructions of the Toxicology Center (e.g. water, tea, medical charcoal). If strong acid, base or organic solvent has been swallowed, do not induce vomiting.
- Store quietly and protect from heat loss.
- Treat any intake of unknown chemicals as if it were poisoning.

### **C. Poisoning through skin contact:**

- Immediately remove clothing of the injured person (avoid self-hazard), and immediately or simultaneously -.
- -- Rinse affected skin areas with plenty of water (soap if necessary), do not use hot water, do not rub strongly.
- Always contact the Toxicology Center (Tel 0145) and the Alarm Center (Tel 888). If possible: Immediately ask for the safety data sheet of the chemical that caused the poisoning.

## 4. open wounds or mechanical injuries - bleeding

### A. Bleeding in general:

- Wound not without gloves touch or wash out, do not remove foreign bodies from the wound.
- Cover wound aseptically or with clean cloth, apply protective dressing, disinfect only if no further treatment by the physician is necessary.

### B. Heavy bleeding:

- Call the alarm center (Tel 888).
- Put patient down or even better (have patient put down).
- Hold up bleeding body part.
- If hemostasis is insufficient, apply finger pressure (note the correct pressure point on the affected body part).
- Apply pressure dressing with thick, absorbent pad.
- If the first pressure dressing proves insufficient, apply a second pressure dressing directly over the first.
- Keep injured extremity elevated and immobilized.
- Watch for symptoms of shock! Keep warm and monitor.
- No ligation, if pressure dressing not possible, pressure directly into the wound.