# FIRST AID PRINCIPLES

Every accident, even minor ones, must always be reported to the laboratory manager, the technician in charge or the teacher and **ALWAYS** recorded in the accident book, which is in the secretariat. Each laboratory has a first aid kit, safety shower/night shower/ drinking water supply and pre-medical first aid instructions.

The safety of both the rescuer and the rescued must be ensured when providing first aid.

## Bleeding and open wounds

- Stop the bleeding.
- Wash minor injuries with a stream of water, disinfect (Betadine) and treat sterile.
- Extensive, deep, heavily bleeding, or contaminated injuries must be treated medically. Do not remove foreign bodies from the wound during first aid, cover the wound with a sterile cover and transport the victim to a doctor or call ERS (155).

### Fire burns

- Cool minor burns with cold water.
- In the case of a larger or open burn, do not wash the affected area, only cover it carefully with a sterile dressing.
- **Do not remove** parts of clothing or material adhering to the wound but cover the affected area with a sterile dressing and transport the victim to a doctor or call **ERS (155)**.
- Under no circumstances apply any ointments or dressings to the affected areas!

### Acid burns

### Skin contact:

- First remove the stained clothing and wash the affected area with a strong stream of water for a long time.
- Remove rings, watches, and bracelets if they are in the affected area.
- After thorough washing, neutralization can be carried out:
  - for acid etching: 5% NaHCO<sub>3</sub> solution (5-15 tablespoons of NaHCO<sub>3</sub> in 1L of water) or soapy water
  - for alkali etching: 5% H<sub>3</sub>BO<sub>3</sub> (or 5 tablespoons of citric or acetic acid in 1L of water)
  - for hydrofluoric acid etching: calcium gluconate gel
- The skin should be covered sterilely and, depending on the situation, **ERS (155)** should be called.

### Eye contact:

- Open the eyelids of the affected person; if the affected person has contact lenses, remove them immediately.

- Immediately **rinse the eye with a stream of running water or an eye shower** for at least 10-15 min from the inner corner to the outer corner.
- Do not use any neutralizing solutions or drops. After first aid is administered, the casualty is transported to a doctor or **ERS (155)** should be called.

#### **Chemical ingestion**

- Never induce vomiting when acids and alkalis are ingested!
- Rinse the mouth with water or preferably milk and give the affected person as much lukewarm water as possible to drink (at least 0.5L).
- If highly toxic and toxic substances are ingested, induce vomiting.
- It is always imperative to get the victim professional medical help, call ERS (155).
  - bromides: drink lukewarm water, induce vomiting
  - silver nitrate: drink salt water, induce vomiting, drink water with charcoal
  - hydroxides (sodium, potassium, calcium): drink 3% acetic acid solution
  - zinc chloride: drink water, milk, or magnesium oxide suspension (3 tablespoons per 0.5L of water)
  - acids (hydrochloric, sulfuric, acetic): drink milk with whipped egg whites, magnesium oxide suspension, rest, warmth
  - potassium permanganate: drink milk or sugar solution, give charcoal, then give olive oil, rest, warmth
  - hydrogen peroxide: drink 0.5L of water or milk
  - potassium sulfate: drink milk with beaten egg whites, magnesium oxide suspension

### Inhalation of harmful substances (chemical fumes, gases)

- Carry the affected person to fresh air, remove contaminated clothing, place him in a resting position.
- Do not administer any medication or food to the casualty.
- Depending on the situation, call ERS (155).
- If the casualty is not breathing, resuscitation must be initiated.

#### Damage by electric current

- If someone is in direct contact with electric current and the person is still touching electrical equipment, it is imperative to switch off the power immediately with the main switch. If the power cannot be switched off, only a **person who is completely isolated** (by rubber, wood, etc.) may touch the person affected.
- If the victim is unconscious, call **ERS (155)**, then check basic vital signs and start indirect cardiac massage or use the AED machine (located at the MCVE I porter's lodge).
- We must not stop resuscitating!