Laboratory accidents and first aid for injuries

Eye burn

If an acidic or alkaline solution is splashed in the eye, serious injury may only be prevented by immediate and thorough rinsing with water. Position the victim on the affected side and place a bowl or wad of gauze under the affected eye. Use your thumb and forefinger to lift the eyelids and rinse with running water so it flows from the conjunctiva outwards. Immediately seek medical attention. Never use a neutralizing solution.

Hazardous material on the body

If an acidic or alkaline solution is spilled on the skin, only immediate removal of the agent may prevent burns. Proceed as follows: remove the affected clothing but do so in a way to prevent further exposure for the victim or yourself. Flush the skin thoroughly with a strong stream of water. Apply sterile gauze to the burn. Seek immediate medical attention.

Thermal burns

Put out the fire using all available means (use a blanket to cover the burning person all around), remove the source of heat (hot water, steam etc.), and remove all flammable or otherwise hazardous materials. When dealing with burns caused by adhesive agents (asphalt, tar, plastics etc.), flood the affected place with cold water or submerse the affected person in a cold water bath to cool. Do not try to remove the clothing or the agent (asphalt). Only remove smoldering items, items that are not attached and chemical agents. Do not treat the affected skin area with any liquids, powders or ointments (apart from the cooling mentioned above). After the affected area has been cooled, apply a clean sterile bandage (or a clean handkerchief, towel or bed sheet). Burnt eyes must be repeatedly rinsed with a boric acid solution or clean water. A drink of water may be offered to the affected person only under exceptional circumstances, if the burns are not extensive. Do not try to rehydrate a person with extensive burns. If hot steam was inhaled, allow the affected to rinse the mouth or even have a small drink of water. In view of a possibility of shock, cover the affected person with a light blanket and try to calm him or her down. Seek immediate medical attention.

Open wounds

In case of open wounds, immediately stop the bleeding and prevent infection. Treat the injury with regard to its extent and the character of bleeding. Treat small wounds with a stream of water and apply sterile gauze. Stop bleeding from extensive wounds with a pressure bandage or (exceptionally) with a tourniquet. Do not rinse the wound if no chemical agents are involved.

Hazardous vapors or gases inhaled

Transport the affected person to prevent further exposure, unbutton or unzip the clothing to help the person breath more easily and seek medical attention. Initiate rescue breathing if the person is not breathing.

Hazardous substances ingested

Rinse the victim's mouth with water or give the person water (tepid) to drink. Do not use a neutralizing solution. Induce vomiting by throat irritation only if corrosive substances (pH under 2 or above 12) or foams are not involved. Seek immediate medical attention.

Electrical shock

First aid for electrical shock injuries is subject to recommendations in ČES 00.02.94:1994 První pomoc při úrazu elektrickou energií.

General approach

Calm the affected person, prevent hypothermia (e.g. cover with a blanket) and seek medical attention.