



Shambots

Safety First!

Basic First Aid Procedures



SAFETY FIRST!

- Our team mission is to build a superb robot that will win at our tournaments, while at the same time maintain the safety of all of our students, mentors and fellow competitors.

In order to help our students know what to do in the event of a medical emergency that might occur in our workshop, we developed this powerpoint to educate our students and mentors.

- In the spirit of coopertition, we hope that other teams consider similar training for their students and mentors.

Fainting

- Recognizing signs: a feeling of weakness, giddiness and nausea. A very pale face, brief loss of consciousness, slow pulse
- If signs recognized:
 - have student sit down with their head between their knees or have student lay down and raise their legs above the level of their heart supporting them on a pile of cushions, pillows or folded blankets 8-12 inches high
 - Loosen tight clothing
 - Provide fresh air (open a window or fan their face)
 - Place in recovery position and call 911 if student does not regain consciousness

Bleeding

- Apply direct pressure with a clean pad or cloth.
- If there is profuse bleeding from a deep wound, raise the injured area above the level of the heart.
- Cover the wound with a sterile bandage. Make sure its not too tight.
- If bleeding persists, have student lay down and raise their legs above their heart. Call 911
- If there is an embedded object, do not attempt to remove it because you may cause further damage and bleeding
- If bleeding caused by a superficial cut or abrasion, wash area with soap and water and remove any small particles of dirt or gravel.
- Apply pressure as needed to control bleeding and cover with a clean bandage

Blisters

- Clean the blister thoroughly with soap and water
- Thoroughly dry the blister and the surrounding skin.
- Pat it gently with a clean pad or paper tissues
- Cover the blister with a bandage with a pad that is large enough to cover the whole blister
- Never deliberately break a blister, as this can cause it to become infected

Eye Wound

- Sit the student down and tell them to try not to move their eyes
- Cover the injury, avoiding any pressure on the eye.
- Find a paper or styrofoam cup and cut it 1 ½ inches from the bottom.
- Tape the cup, firmly but gently, over the injured eye. Then bandage in place.
- DO NOT touch the injured eye
- Then bandage over both eyes in order to keep blood fluid and dirt out of the uninjured eye.

Chemical Burn to Eye

- Splashes of chemicals in the eye can cause scarring or even blindness
- Recognizing chemical burns to the eye
 - Fierce Pain in the eye
 - Difficulty opening the eye
 - Redness and swelling in and around the eye
 - Very watery eye
- Do not let student rub their eye!
- The eye will most likely be shut in spasm and pain, so gently pull the eyelids open.
- Hold student over eyewash station with the good eye uppermost
- Gently run cool water over the contaminated eye for at least 10 minutes
- Make sure that the water drains away from the face and that both sides of the eyelid are thoroughly washed
- Avoid splashing the good eye with contaminated water.
- After the injured eye is washed, cover it, avoiding pressure on the eye, using a cup as described in prior slide
- Take student to the hospital for further evaluation and treatment.

Splinters

- Clean the area around the splinter with soap and warm water
- Do NOT poke at the area with a needle
- Sterilize a pair of tweezers by passing them through a flame. Allow the tweezers to cool. Don't touch the ends or wipe off of the soot.
- Grasp the splinter as close to the skin as possible, and draw it back out at the angle it went in.
- If the splinter does not come out easily, or if it breaks, consult a medical professional
- Squeeze the wound to encourage a little bleeding that will flush out dirt.
- Wash the area again, pat it dry and cover with an adhesive bandage.

Chemical Burn to the Skin

- Chemical burns can be caused by ??????? in our workshop
- These burns are serious but signs develop more slowly than for thermal burns.
- Recognizing chemical burns:
 - Fierce stinging pain
 - Redness and skin discoloration
 - Blistering and peeling
- First put gloves on your hands to protect yourself from the chemicals

Foreign Body in the Eye

- Sit student down, facing the light
- Separate the eyelids and ask student to look right, left, up and down
- Examine all of the eye
- If you can see a foreign body, wash it out using clean water. Tilt the head and aim for the inner corner so that water will wash over the eye, or use the corner of a damp cloth to lift it off.
- If an object is under the eyelid, you can ask an older child to clear it herself by lifting the upper eyelid over the lower.
- If a foreign body cannot be removed, cover the eye with a pad and bandage so that a gentle pressure is exerted.
- Then bandage both eyes, to keep blood fluid and dirt out of the uninjured eye and take the student to the hospital for further evaluation.

Burns and scalds

- DO NOT remove any clothing or material that may be sticking to the burned area because this may cause further damage to the skin.
- To stop the burning process and relieve pain, cool the burn with cool water for at least 10 minutes
- Once cooled, remove clothing from burned area and, if the pain persists, cool again. Cut around any material sticking to the skin.
- Remove restrictive clothing from the area of burn before the burn area begins to swell.
- DO NOT touch the burn or burst any blisters

Burns and Scalds (continued)

- Cover the burn with clean, smooth material to protect it from infection (You can use a clean sheet or pillowcase) The dressing does not need to be secured.
- DO NOT apply lotions, fat or ointment
- DO NOT give student anything to eat or drink (watch for signs of shock)
- An alternative dressing for a hand or foot is a plastic bag secured with adhesive bandage around the bag, not on the skin.

Electrical Burn

- An electrical shock from a low-voltage source can result in burns. These may occur at both the point of entry and the point of exit of an electrical current.
- DO NOT touch the student until you are sure the electrical current is turned off.
- Hold the injured area under cool, running water for at least ten minutes to cool the burn.
- Protect the burn by covering it with clean, smooth material or with a plastic bag.
- Take the student to the hospital.

Broken Tooth

- Rinse dirt from injured area with warm water.
- Place cold compress over the face in the area of the injury.
- Locate and save any broken tooth fragments.
- Immediate dental attention is necessary.

Knocked out permanent tooth

- Find the tooth
- Handle the tooth by the top(crown) not the root portion
- You may rinse the tooth, but DO NOT clean or handle the tooth unnecessarily
- Try to reinsert the tooth in its socket
- Have the student hold the tooth in place by biting on a clean gauze or cloth
- If you can't reinsert the tooth, transport the tooth in a cup containing milk or water
- See a dentist immediately. Time is a critical factor in saving the tooth



Stay Safe!

