

BASIC FIRST AID

- •According to American Safety & Health Institute(ASHI) at work ,injury and illness kill more than 2 million people each year, i.e. 1 death every 15 seconds.
- •Effective first aid can make the difference between life and death; rapid vs. prolonged recovery or permanent vs. temporary disability.

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What is First aid?

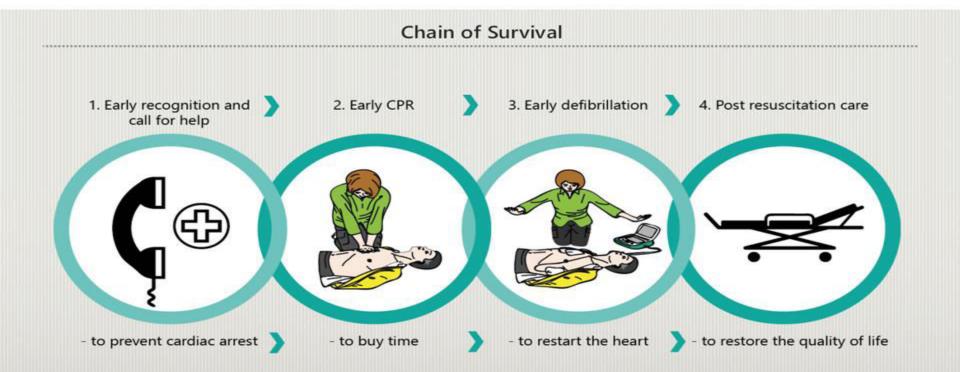
• Emergency first aid care is the care given to an injured or sick person prior to treatment by medically trained person.

• First aid is both simple and life saving.



Aims of First Aid

- Preserve life
- Prevent any further damage &
- Promote recovery.



First Aid kit

A **first aid kit** is a collection of supplies and equipment that is used to give medical treatment

Contents:

Antiseptic wipes

Band-Aids

Cotton Balls

Cotton Swabs

Iodine

Bandages

Hydrogen Peroxide

Gauze

Saline

Dressings

Eye wash



Commonly Acquired Injuries



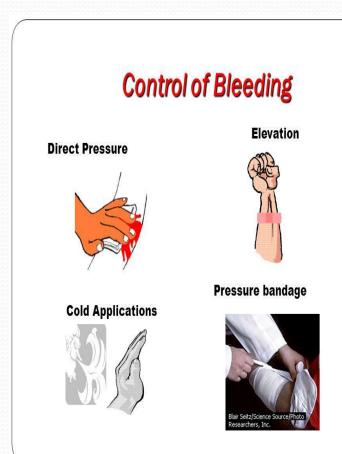
- Bleeding due to cuts ,abrasion etc
- Sports injuries
- Burn injuries
- Chemical injuries
- Electric burn injuries



Management in specific injuries

Bleeding due to cuts abrasions etc:

- Wash your hands before giving first aid and cleaning & dressing the wound.
- Apply direct pressure on the cut or wound with a clean cloth, tissue, or piece of gauze until bleeding stops.
- If blood soaks through the material, don't remove it. Put more cloth or gauze on top of it and continue to apply pressure.
- If the wound is on the arm or leg, raise limb above the heart, if possible, to help slow bleeding.



Sports injuries

• Commonly caused by overuse, direct impact, or the application of force that is greater than the body part can structurally withstand.

Common injuries include :

- Ankle sprain symptoms include pain, swelling and stiffness
- Bruises a blow can cause small bleeds into the skin
- <u>Cuts and abrasions</u> are usually caused by falls. The knees and hands are particularly prone.
- <u>Dehydration</u> losing too much fluid can lead to heat exhaustion and heat stroke.
- <u>Knee joint injuries</u> symptoms include pain, swelling and stiffness. The ligaments, tendons or cartilage can be affected.
- Nose injuries either blood nose or broken nose, are caused by a direct blow.
- <u>Stress fractures</u> particularly in the lower limbs. The impact of repeated jumping or running on hard surfaces can eventually stress and crack bone
- Hamstring strain symptoms include pain, swelling and bruising
- <u>Dental damage</u> a blow to the jaw can crack, break or dislodge teeth
- Concussion mild reversible brain injury from a blow to the head, which may be associated with loss of consciousness. Symptoms include headache, dizziness and short term memory loss



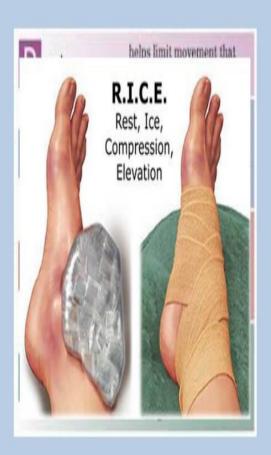
First aid in sports injury

Suggestions on immediate treatment for sprains, strains and joint injuries, to prevent further damage include:

Rest – keep the injured area supported and avoid using for 48-72 hours.

- Ice apply ice to the injured area for 20 minutes every two hours for the first 48-72 hours.
- Compression apply a firm elastic bandage over the area, extending above and below the painful site.
- Elevation raise the injured area above the level of the heart at all times.
- No **H**eat heat will increase bleeding.
- No Running running or exercise increases blood flow, delaying healing.
- No Massage massage increases swelling and bleeding, also delaying healing.

Traetment



First aid for nose bleeds

Suggestions include:

- Stop the activity.
- Sit with your head leaning forward.
- Pinch your nostrils together and breathe through your mouth.
- Hold your nose for at least 10 minutes.
- If bleeding continues past 30 minutes, seek medical advice.



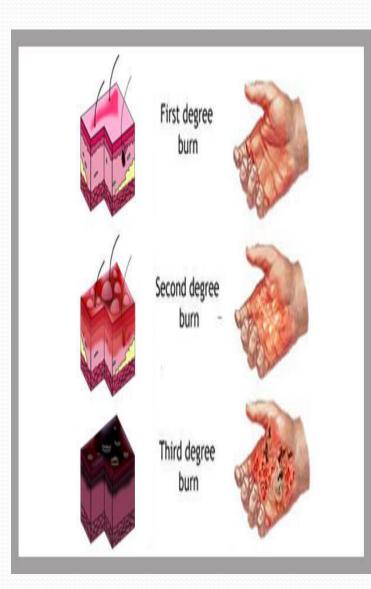
Burn Injuries For All Burns

1. Stop Burning Immediately

- Put out fire or stop the person's contact with hot liquid, steam, or other material.
- Remove hot or burned clothing. If clothing sticks to skin, cut or tear around it.

2. Remove Constrictive Clothing Immediately

 Take off jewelry, belts, and tight clothing. Burns can swell quickly.



For First-Degree Burns (Affecting Top Layer of Skin)

1. Cool Burn

Hold burned skin under cool (not cold) running water or immerse in cool water until pain subsides.

Use compresses if running water isn't available.

2. Protect Burn

Cover with sterile, non-adhesive bandage or clean cloth. Do not apply butter or ointments, which can cause infection

3. Seek medical help if

You see signs of infection, like increased pain, redness, swelling, fever, or oozing.

The person needs tetanus or booster shot, depending on date of last injection. Tetanus booster should be given every 10 years.

- *The burn blister is larger than two inches or oozes.
- *Redness and pain last more than a few hours.
- *Pain worsens.
- *The doctor will examine the burn and may prescribe antibiotics and pain medication



For Second-Degree Burns (Affecting Top 2 Layers of Skin)

1. Cool Burn

- Immerse in cool water for 10 or 15 minutes.
- Use compresses if running water isn't available.
- Don't apply ice. It can lower body temperature and cause further pain and damage.
- Don't break blisters or apply butter or ointments, which can cause infection.

2. Protect Burn

 Cover loosely with sterile, nonstick bandage and secure in place with gauze or tape.

3. Prevent Shock

- Unless the person has a head, neck, or leg injury, or it would cause discomfort:
- Lay the person flat.
- Elevate feet about 12 inches.
- Elevate burn area above heart level, if possible.
- Cover the person with coat or blanket.

4. See a Doctor

• The doctor can test burn severity, prescribe antibiotics and pain medications, and administer a tetanus shot, if needed.



For Third-Degree Burns

1. Call emergency care

2. Protect Burn Area

- Cover loosely with sterile, nonstick bandage or, for large areas, a sheet or other material that won't leave lint in wound.
- Do not soak burn in water or apply ointments or butter, which can cause infection.

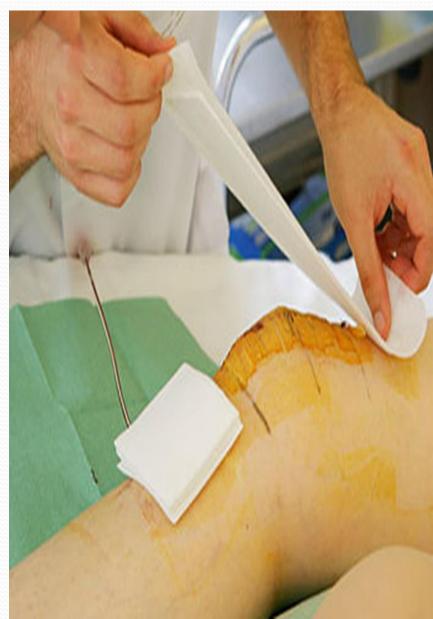
3. Prevent Shock

<u>Unless the person has a head, neck, or leg injury or it would cause discomfort:</u>

- Lay the person flat.
- Elevate feet about 12 inches.
- Elevate burn area above heart level, if possible.
- Cover the person with coat or blanket.
- For an airway burn, do not place pillow under the person's head when the person is lying down. This can close the airway.
- Have a person with a facial burn sit up.
- Check pulse and breathing to monitor for shock until emergency help arrives.

4. See a Doctor

 Doctors will give oxygen and fluid, if needed, and treat the burn.



Chemical injuries

- A chemical burn occurs when your skin or eyes come into contact with an irritant, such as an acid or a base. Chemical burns are also known as caustic burns. They may cause a reaction on your skin or within your body. These burns can affect your internal organs if chemicals are swallowed.
- You should immediately check your mouth for cuts or burns if you swallow a chemical & call a local poison control center.

common symptoms associated with chemical burns include:

- blackened or dead skin, which is mainly seen in chemical burns from acid
- irritation, redness, or burning in the affected area
- Numbness or pain in the affected area
- A loss of vision or changes in vision if chemicals have come into contact with your eyes



First aid in chemical burns

- Remove the chemical that caused the burn and rinse the skin under running water for 10 to 20 minutes.
- If a chemical came into contact with your eyes, rinse your eyes continuously for at least 20 minutes before seeking emergency care.
- Remove any clothing or jewelry contaminated by the chemical. Wrap the burned area loosely with a dry sterile dressing or a clean cloth if possible.





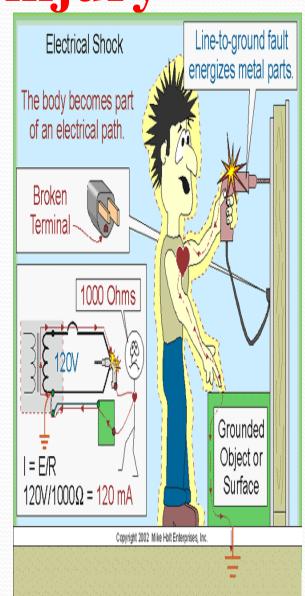
Electrical injury

• An electrical injury is damage to the skin or internal organs when a person comes into direct contact with an electrical current.

Electric current can cause injury in four ways:

- 1. Cardiac arrest due to the electrical effect on the heart
- 2. Muscle, nerve, and tissue destruction from a current passing through the body
- 3. Thermal burns from contact with the electrical source
- 4. Falling or injury after contact with electricity.

The danger from an electrical shock depends on how high the voltage is, how the current travelled through the body, the person's overall health, and how quickly the person is treated.



First Aid in Electric burns

- Don't touch the person with your bare hands, the person may still be in contact with the electrical source. Touching the person may pass the current through you.
- Don't get near high-voltage wires until the power is turned off. Stay at least 20 feet away much farther if wires are jumping and sparking.
- Don't move a person with an electrical injury unless the person is in immediate danger.
- Turn off the source of electricity if possible. If not, move the source away from you and the affected person, using a nonconducting object made of cardboard, plastic or wood.
- Check for signs of circulation (breathing, coughing or movement). If absent, begin <u>cardiopulmonary</u> <u>resuscitation(CPR)</u>immediately.



Emergency situations

Call an ambulance for:

- Difficulty breathing.
- Uxtreme pain.
- Unconsciousness
- Bone injuries (fractures)
- Neck or spine injuries
- Prolonged loss of consciousness
- Injuries to the head or face
- Eye injuries
- Abdominal injuries.
- Chest pain or chest tightness.
- Sudden numbness or paralysis of the face, arm or leg'
- Large burns
- Serious accidents or bleeding.



Thanks