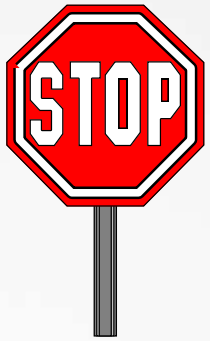
Basic First Aid





Securing the scene



Before performing any First Aid,

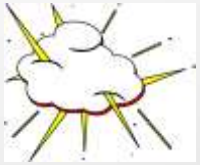
Check for:



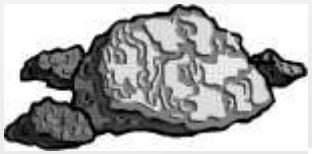
- 1. Electrical hazards
- 2. Chemical hazards



- 3. Noxious & Toxic gases



- 4. Ground hazards



- 5. Fire

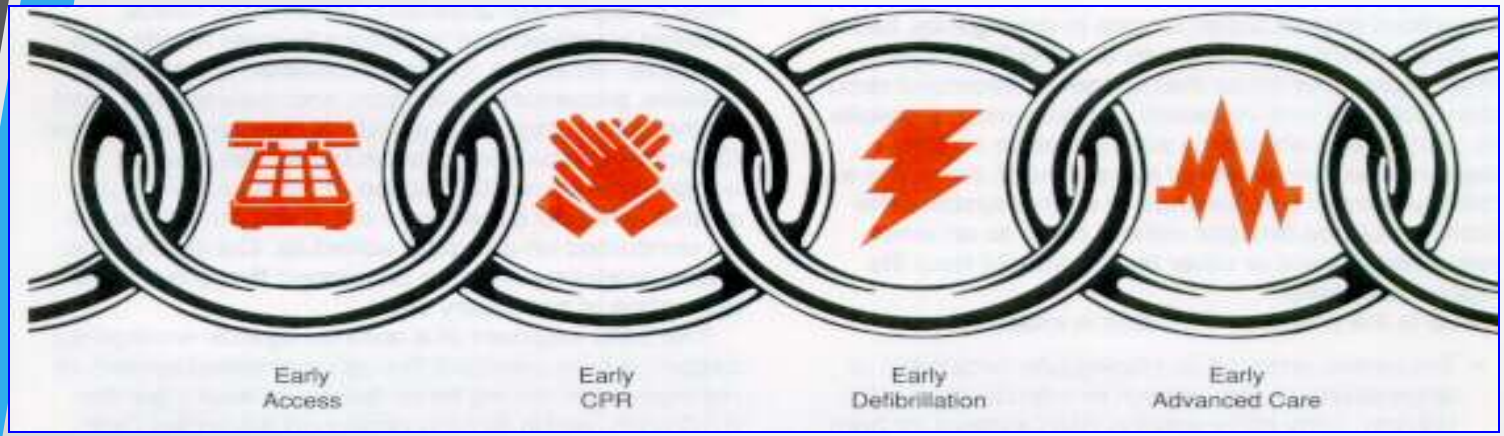


- 6. Unstable equipment



Chain of Survival

In order for a person to survive:



Early Access”108”

Early CPR or First Aid

You

Early Defibrillation

EMS on scene

Early Advanced Care

Hospital

Pay attention to:

HISTORY; ***what happened; from the casualty or bystanders***

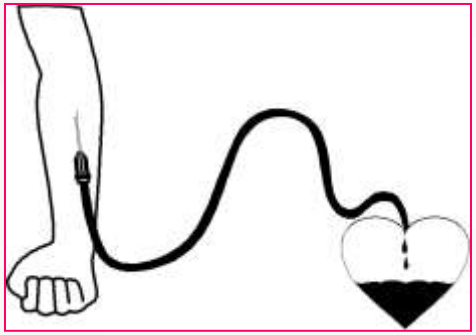
SYMPTOMS; ***what only the casualty can tell you***

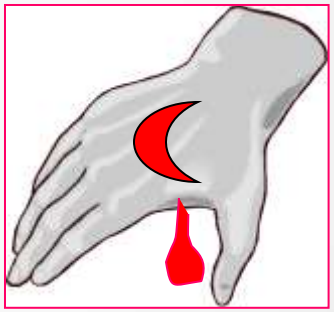
SIGNS; ***what you can see for yourself***

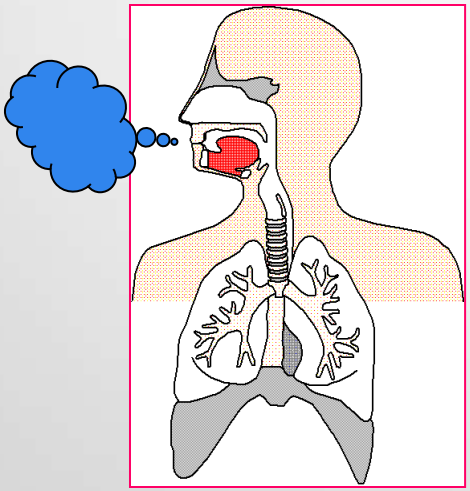
Universal Precautions for Airborne & Bloodborn Pathogens



HIV & Hepatitis







Tuberculosis

Gloves & Respiratory Barrier devise are a must to prevent transmission of diseases

DURING TREATMENT

- avoid coughing, breathing, or speaking over the wound
- avoid contact with body fluids
- use a face shield or mask with one-way-valve when doing active resuscitation
- use only clean bandages and dressings
- avoid treating more than one casualty without washing hands and changing gloves

AFTER TREATMENT

- clean up both casualty and yourself
- clean up the immediate vicinity
- dispose of dressings, bandages, gloves and soiled clothing correctly
- wash hands with soap and water

Fundamentals of First Aid



Activate EMS System

“102/108”

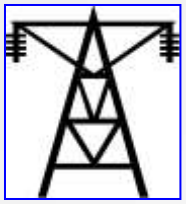
- **1. ABC** (airway-breathing-circulation)
- **2. Control bleeding**
- **3. Treat for Shock**(medical emergencies)
- **4. Open wounds & Burns**
- **5. Fractures & Dislocations**
- **6. Transportation**



ABC's

- **Causes of Respiratory/Cardiac Arrest**

Electrical

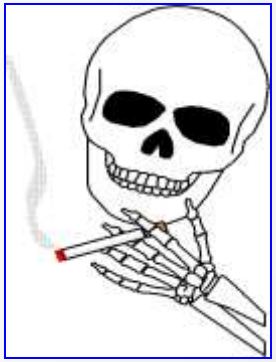


Drowning



Toxic - Noxious gases

Suffocation



Heart Attack



Trauma



Drugs



Allergic reactions





Reaction Time

- **If CPR/Artificial respiration is administered**
- **Chance of brain damage**

0 to 4 minutes - ⬇

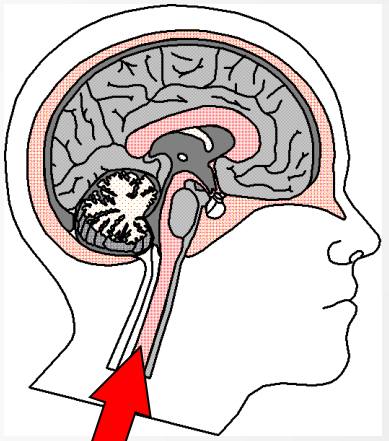
4 to 6 minutes - ⬌

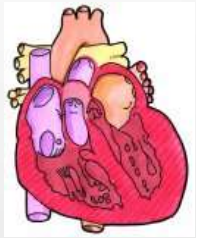
6 to 10 minutes- ⬆

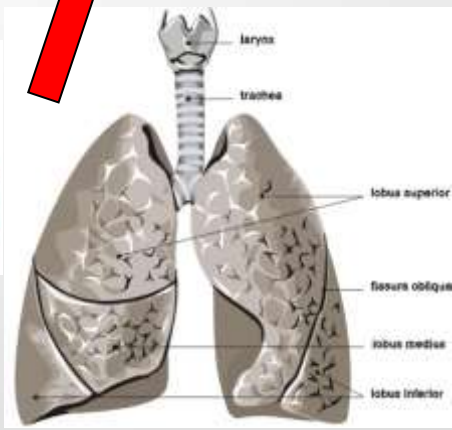
10 minutes + -

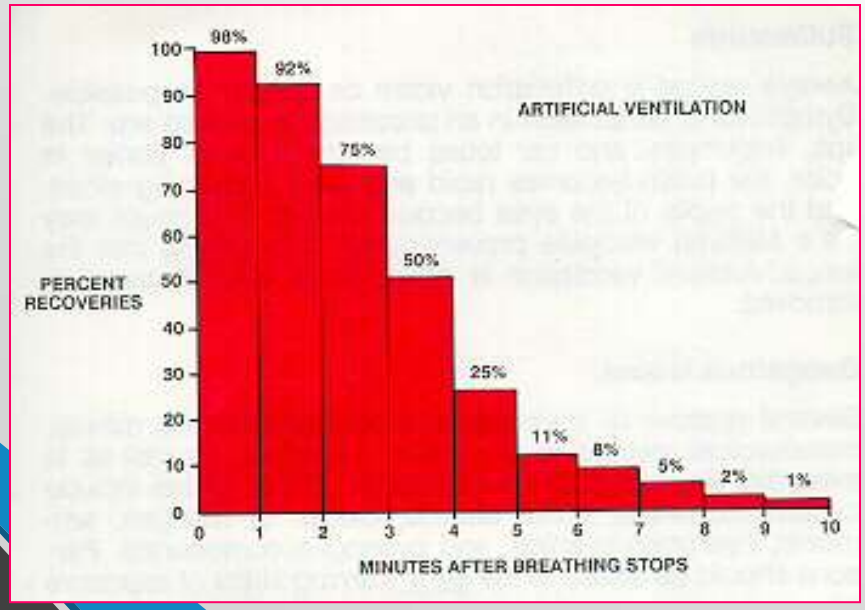


Oxygenated blood flow must get to brain









Recovery rate of victim if has artificial respiration done immediately

A-B-C's

- **Establish responsiveness**

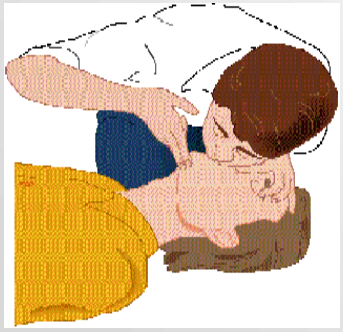




- **Use chin lift/head tilt**



Look.-listen-feel for breathing



Attempt to Ventilate

Ventilate Every 5 seconds

Check pulse



Recovery position



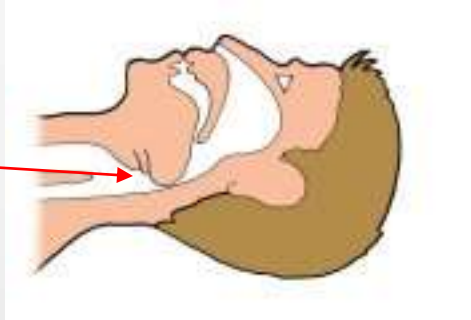
Fig 1.

Airwav Obstructions



open

Tongue



closed

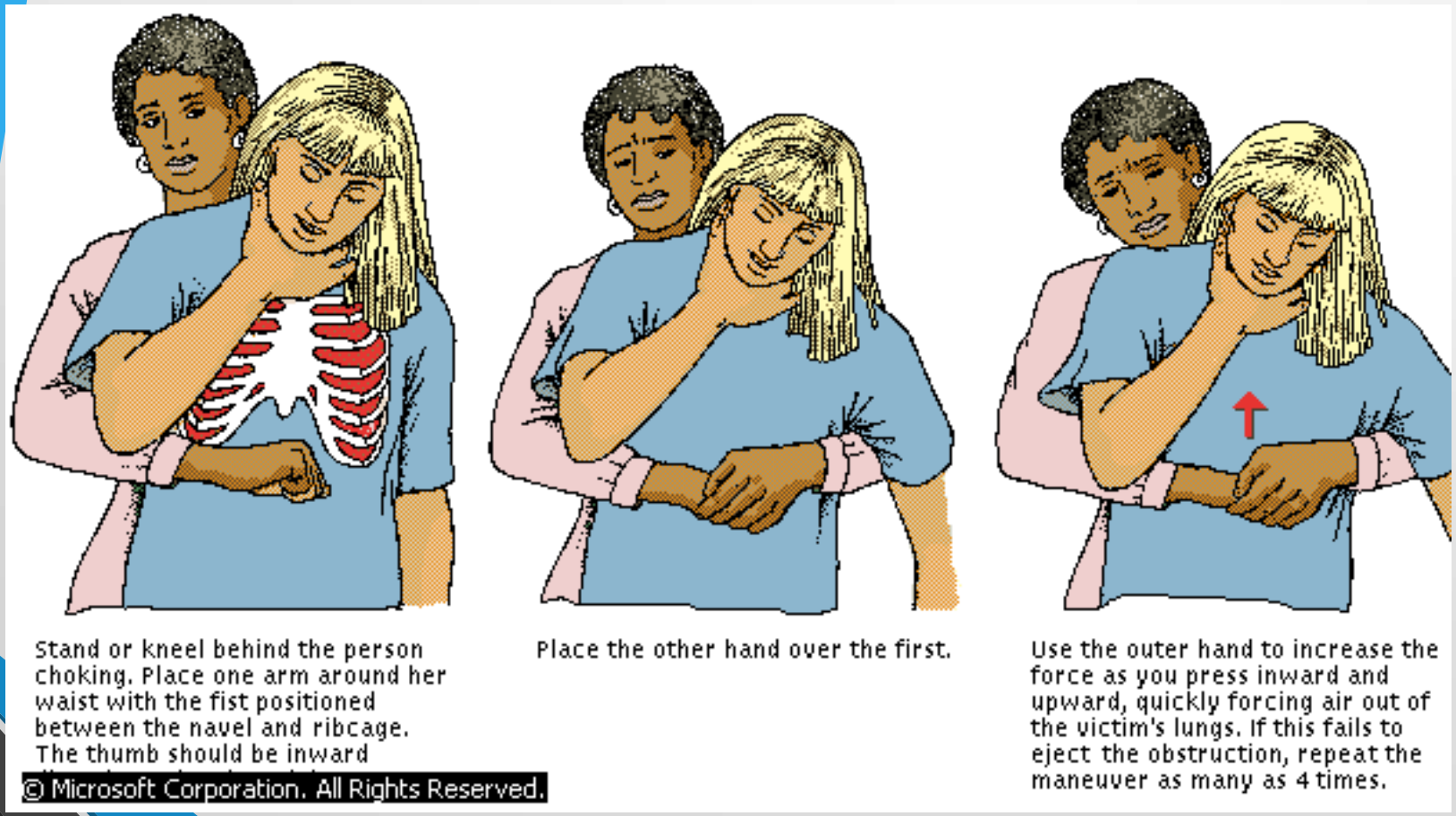
obstructed



Heimlich Maneuver

for

Conscious Airway Obstruction



Stand or kneel behind the person choking. Place one arm around her waist with the fist positioned between the navel and ribcage. The thumb should be inward

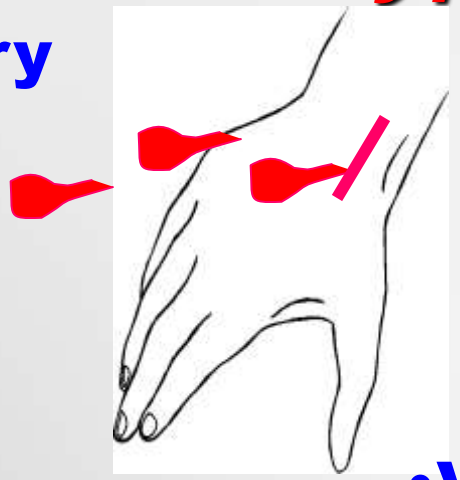
Place the other hand over the first.

Use the outer hand to increase the force as you press inward and upward, quickly forcing air out of the victim's lungs. If this fails to eject the obstruction, repeat the maneuver as many as 4 times.

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Types of Bleeding

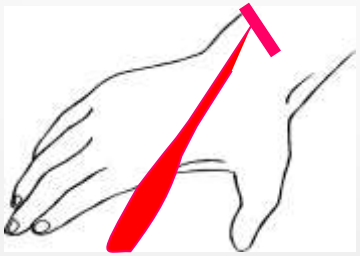
Artery



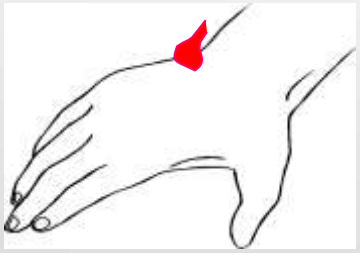
Spurting

Steady flow

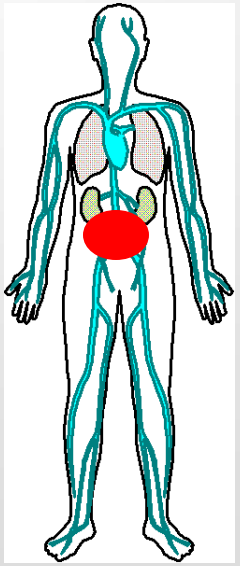
- **Veins**



- **Capillary**

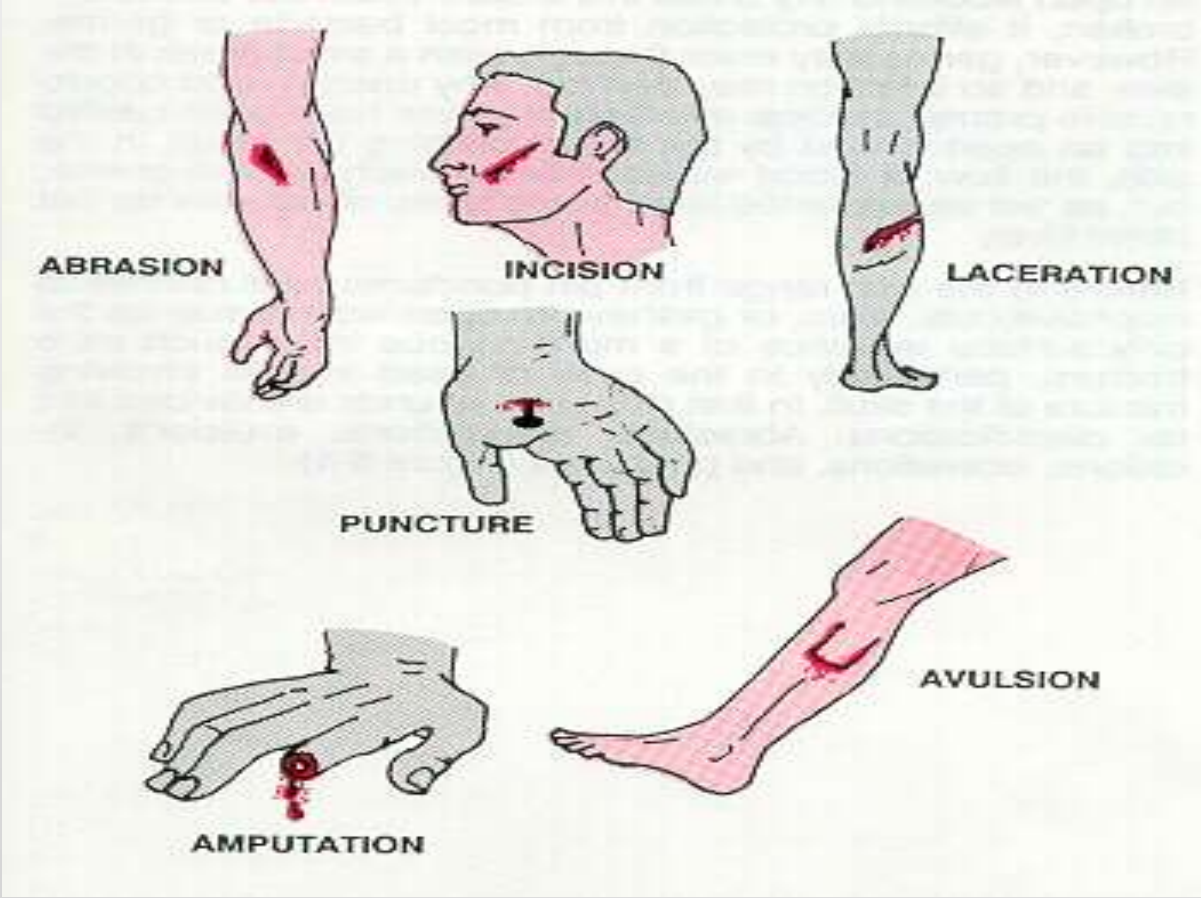


Oozing



Internal Injuries

Types of Wounds

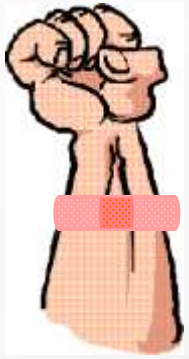


Control of Bleeding

Direct Pressure



Elevation



Cold Applications

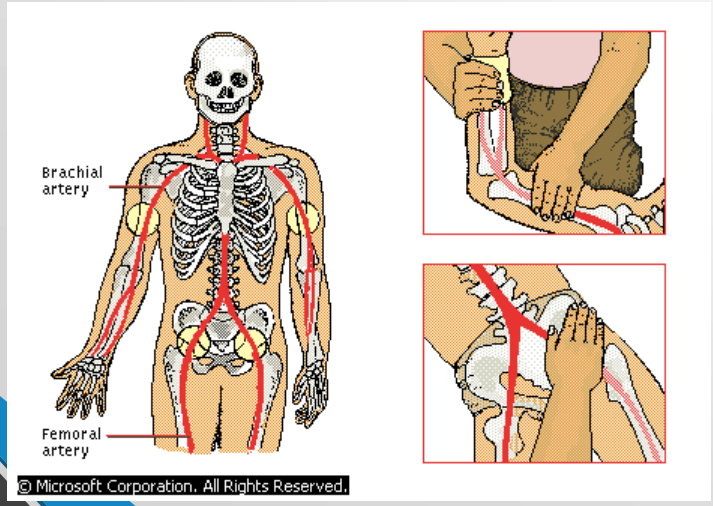


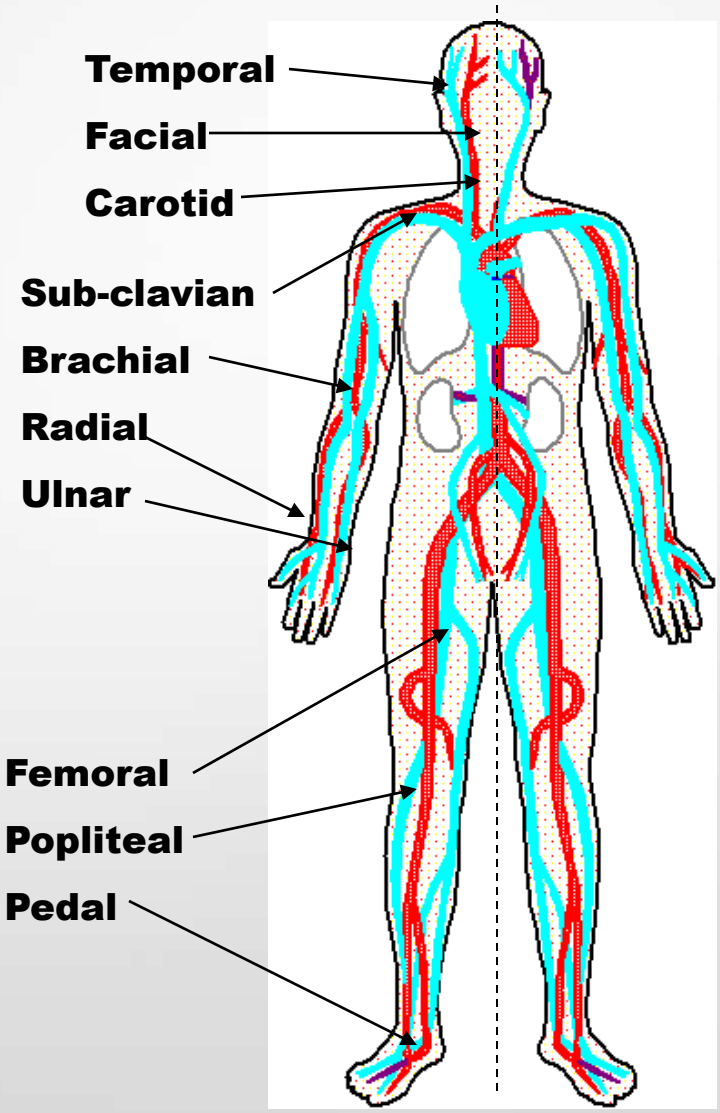
Pressure bandage



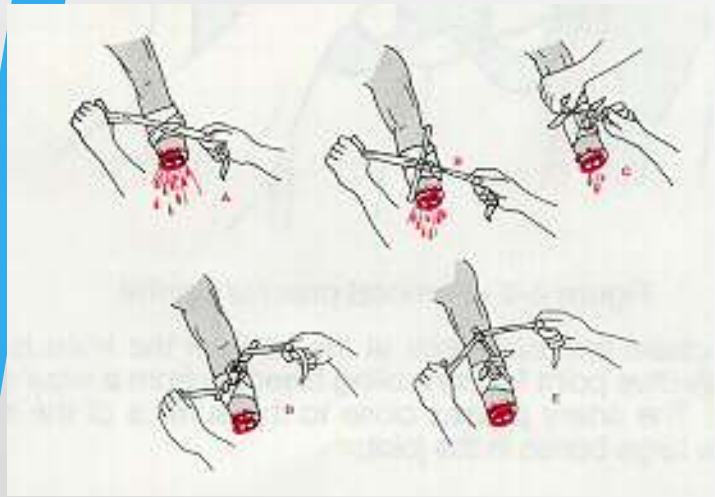
Pressure Points

Where the artery passes over a bone close to the skin

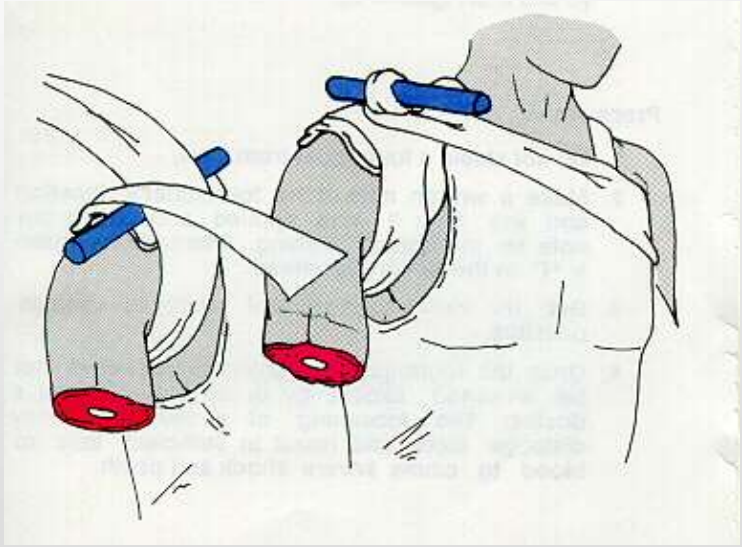




Tourniquet

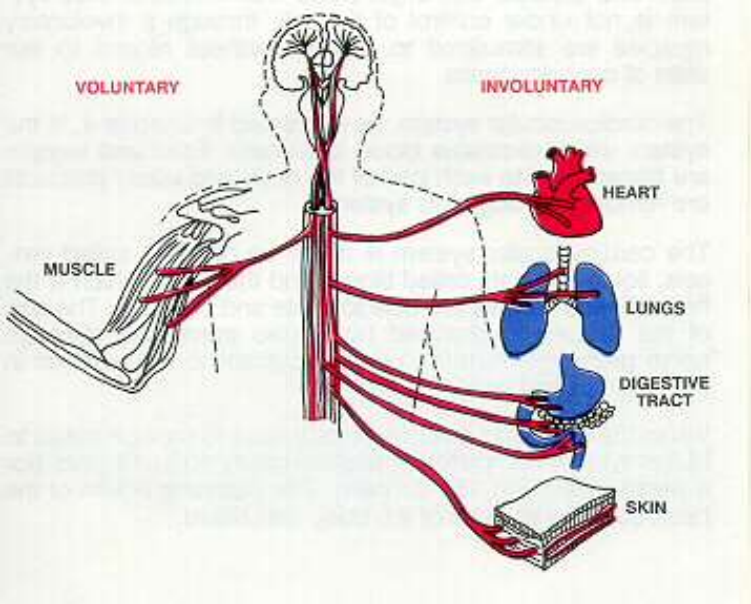


Absolute last resort in controlling bleeding
Remember - *Life or limb*



Once a tourniquet is applied, it is not to be removed , only by a doctor

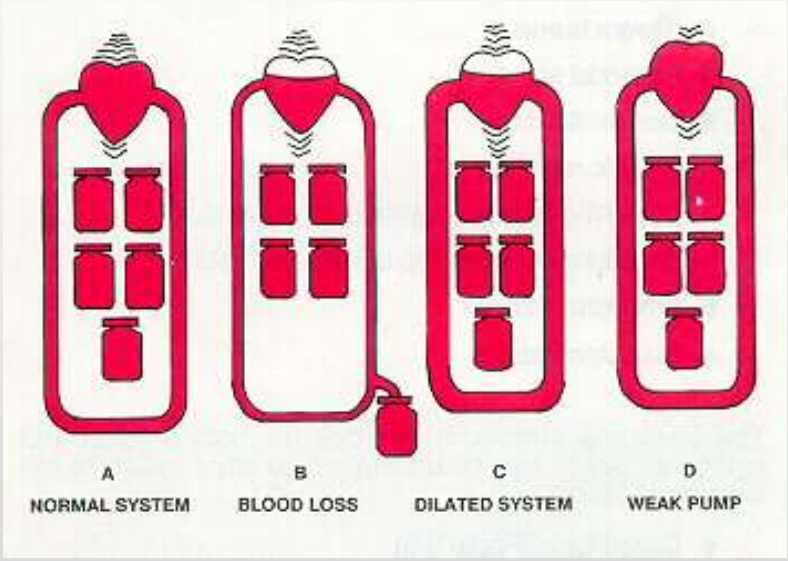
Shock

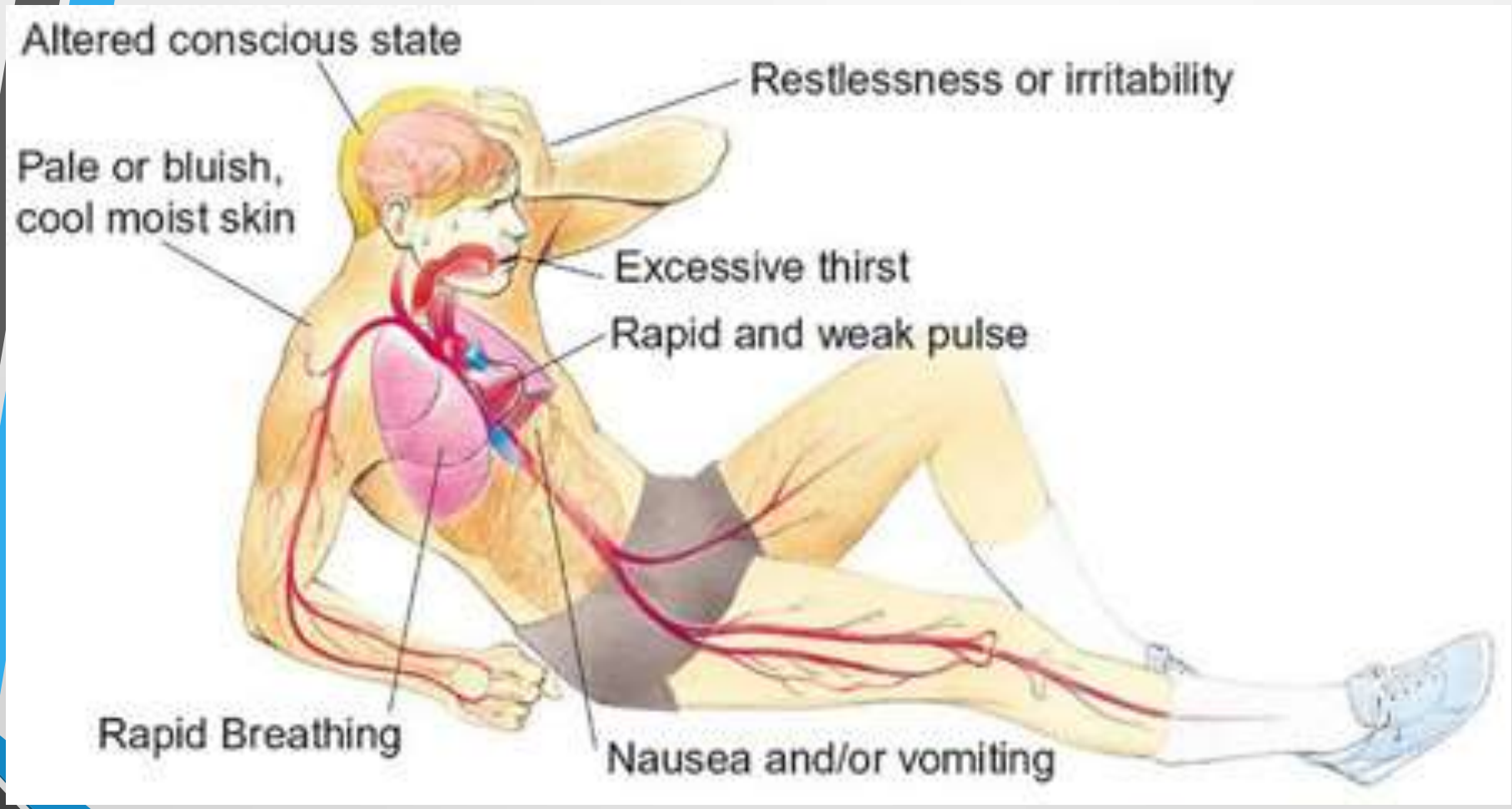


Shock affects all major functions of the body

loss of blood flow to the tissues and organs

Shock must be treated in all accident cases

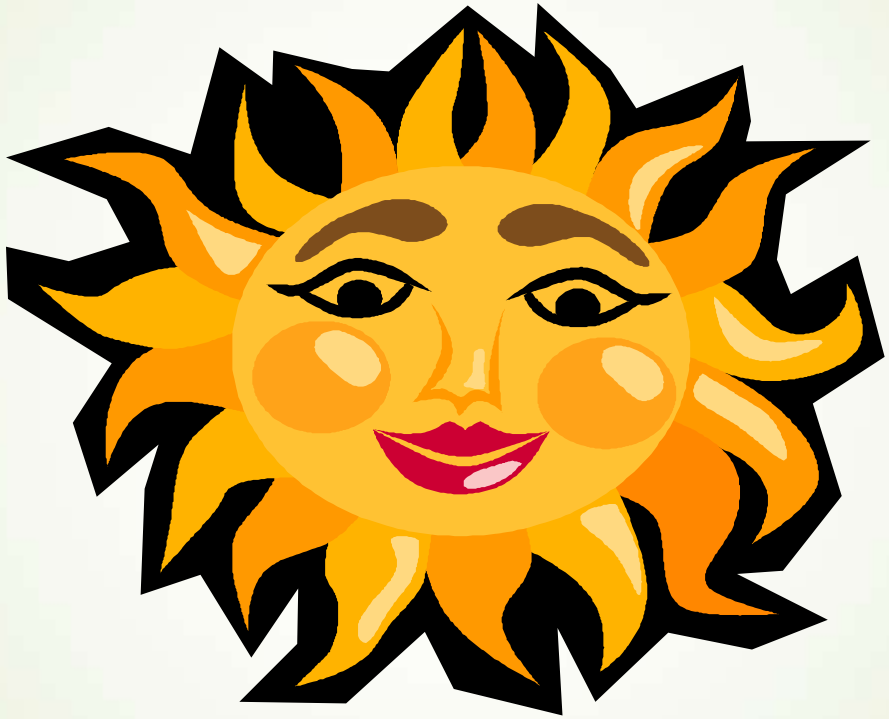



Altered conscious state
Restlessness or irritability
Pale or bluish, cool moist skin
Excessive thirst
Rapid and weak pulse
Rapid Breathing
Nausea and/or vomiting

Treatment for Shock

- Lie victim down if possible
- Face is pale-raise the tail
- Face is red-raise the head
- Loosen tight clothing
- Keep victim warm and dry
- Do not give anything by mouth
- No stimulants

HEAT



Emergencies

There are three types of heat emergencies you may be required to treat.

1. Heat Exhaustion
2. Heat Stroke
3. Heat Cramps

Heat exhaustion is less dangerous than heat stroke.

It is caused by fluid loss which in turn causes blood flow to decrease in vital organs, resulting in a form of shock.



Signs and Symptoms

Cool, Pale, and Moist Skin

Headache

Dilated Pupils

Heavy Sweating

Vomiting

Nausea

Body temperature will be near normal.

First Aid

Get the victim out of the heat and into a cool place.

Place in the shock position, lying on the back with feet raised.

Remove or loosen clothing.

Cool by fanning or applying cold packs or wet towels or sheets. If conscious, give water to drink every 15 minutes.

IMPORTANT:

WHILE HEAT EXHAUSTION IS NOT A LIFE- THREATENING EMERGENCY LIKE HEAT STROKE, IT CAN PROGRESS TO HEAT STROKE IF LEFT UNTREATED!

Heat cramps are muscular pain and spasms due to heavy exertion. They usually involve the abdominal muscles or legs. It is generally thought this condition is caused by loss of water and salt through sweating.



First Aid



Get victim to a cool place.

If they can tolerate it, give one-half glass of water every 15 minutes.

Heat cramps can usually be avoided by increasing fluid intake when active in hot weather.

Heat Stroke is the most serious type of heat emergency.
It is **LIFE-THREATENING** and requires
IMMEDIATE and
AGGRESSIVE treatment!



Heat stroke occurs when the body's heat regulating mechanism fails. The body temperature rises so high that brain damage -- and death-- may result unless the body is cooled quickly.

Signs and Symptoms

The victim's skin is **HOT**, **RED** and usually **DRY**.

Pupils are very small.

The body temperature is VERY HIGH,

sometimes as high as 105 degrees.

First Aid

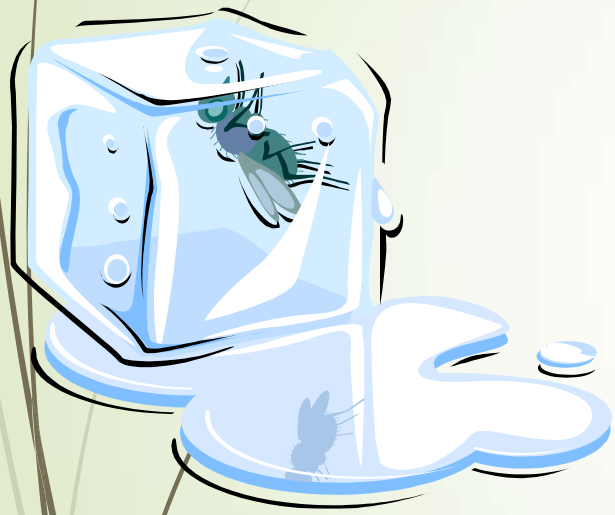
Remember, Heat Stroke is a life-threatening emergency and requires prompt action!

Summon professional help.

Get the victim into a cool place.

Do not give victim anything by mouth. Treat for shock.

COOL THE VICTIM AS QUICKLY AS POSSIBLE IN ANY MANNER POSSIBLE!





Place the victim into a bathtub of cool water, wrap in wet sheets, place in an air conditioned room.

Diabetic emergencies

Find out if victim has past diabetic history

Insulin Shock (Hypoglycemia)

Result of insufficient sugar- Fast onset

- **Cold clammy skin, pale, rapid respiration's and pulse, incoherent**
- **Treat by giving sugar bases products**

Diabetic coma (Ketoacidosis)

Too much sugar or insufficient insulin- Slow onset

- **Warm, dry skin, slow respirations, smell of rotten fruit on breath**
- **True medical emergency, activate EMS system immediately**

Snake & Spider bites

Rattlesnake



Copperhead



Black Widow



Brown Recluse



SNAKE BITE & FUNNEL WEB SPIDER BITE

Ensure the safety of everyone

Call the ambulance on Triple Zero (000)

Treat immediately

Snake Bite Signs & Symptoms



Any or all of the following:

- Double or single fang/bite marks or a scratch
- Headache
- Abdominal pain/nausea/vomiting
- Occasionally, collapse or confusion then recovery
- Blurred or double vision / drooping eyelids
- Difficulty speaking, swallowing, breathing
- Swollen tender glands in groin or armpit of bitten limb
- Limb weakness or paralysis
- Respiratory weakness or arrest

Funnel Web Spider Bite Signs & Symptoms



Any or all of the following:

- Intense pain at bite site, but little local reaction
- Tingling around the mouth
- Abdominal pain
- Profuse sweating, excessive saliva
- Muscular twitching
- Breathing difficulties
- Confusion leading to unconsciousness

Pressure Immobilisation Technique (PIT)

One method of immobilisation for bites on a limb. There may be other PIT methods that are acceptable to use.

Step 1

Broad pressure bandage*

Lay casualty down and stop them from moving

Apply firm pressure on bite

Apply a broad pressure bandage over the bite as firm as for a sprained ankle

(You should not be able to easily slide a finger between the bandage and the skin)

*Elasticised bandages 10 -15cm wide are preferred, if unavailable, use clothing or other material, torn into strips if possible



Step 2

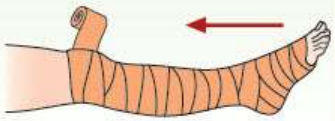
Second pressure bandage*

Apply a pressure bandage

Start at the fingers or toes of the bitten limb

Continue upward covering as much of the limb as possible

*No second bandage? – apply the initial bandage to fingers, or toes of the bitten limb, and work up the limb as far as possible



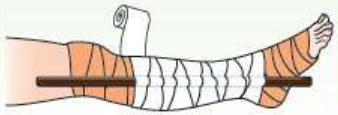
Step 3

Splint the limb

Splint the limb including joints on either side of the bite to restrict movement of the limb

Keep the casualty and the limb completely still

Bring transport to the casualty if possible, get to medical care urgently (preferably ambulance)



Note: If casualty stops breathing cease all treatment and provide CPR

If the bite is not on the limb, firm direct pressure on the bite site may be useful.

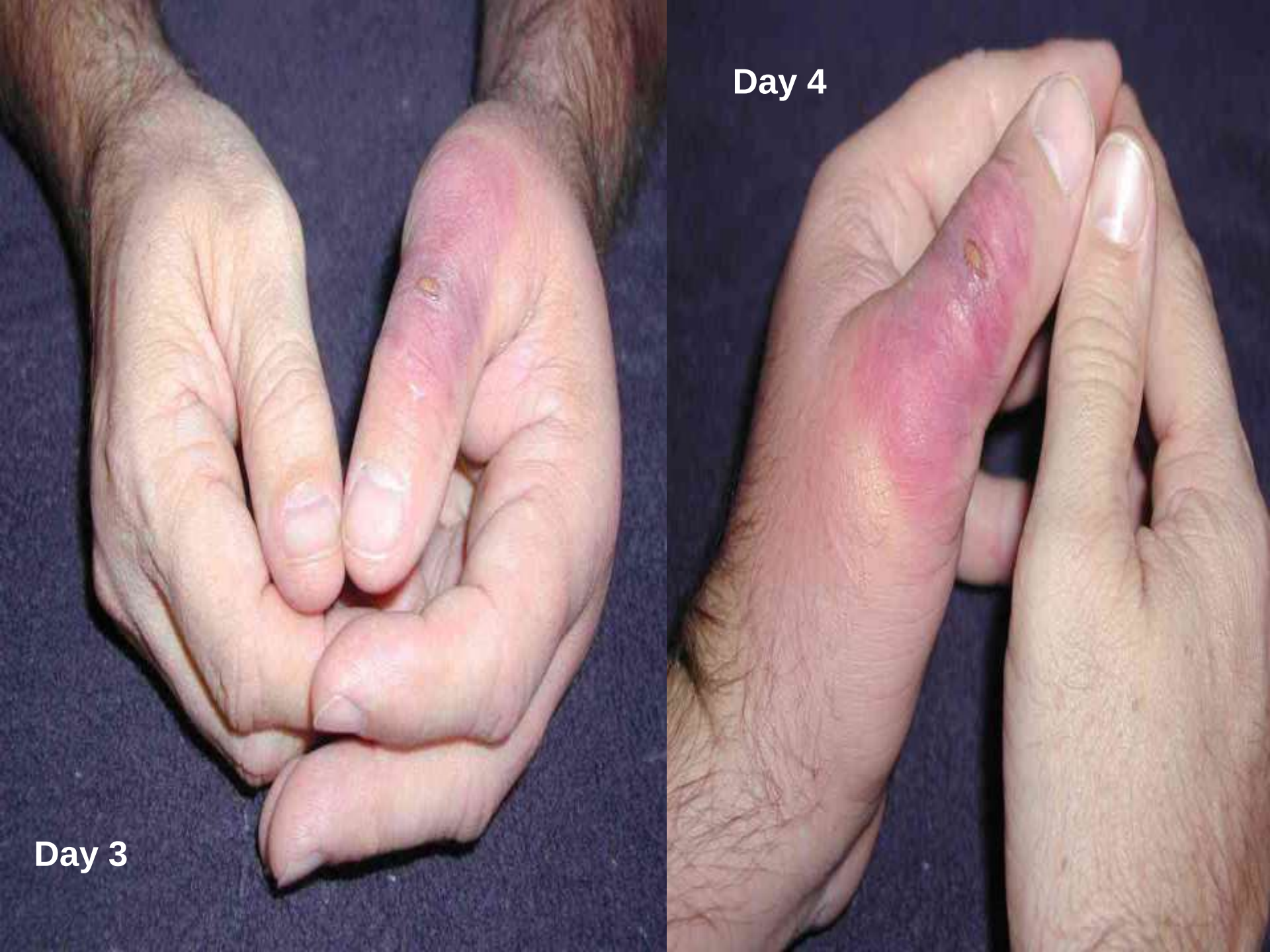
If alone, the casualty should try to apply PIT and seek help. If help can't come to the casualty then they may have to move to find urgent help.

Advice on all types of envenomation is available from:

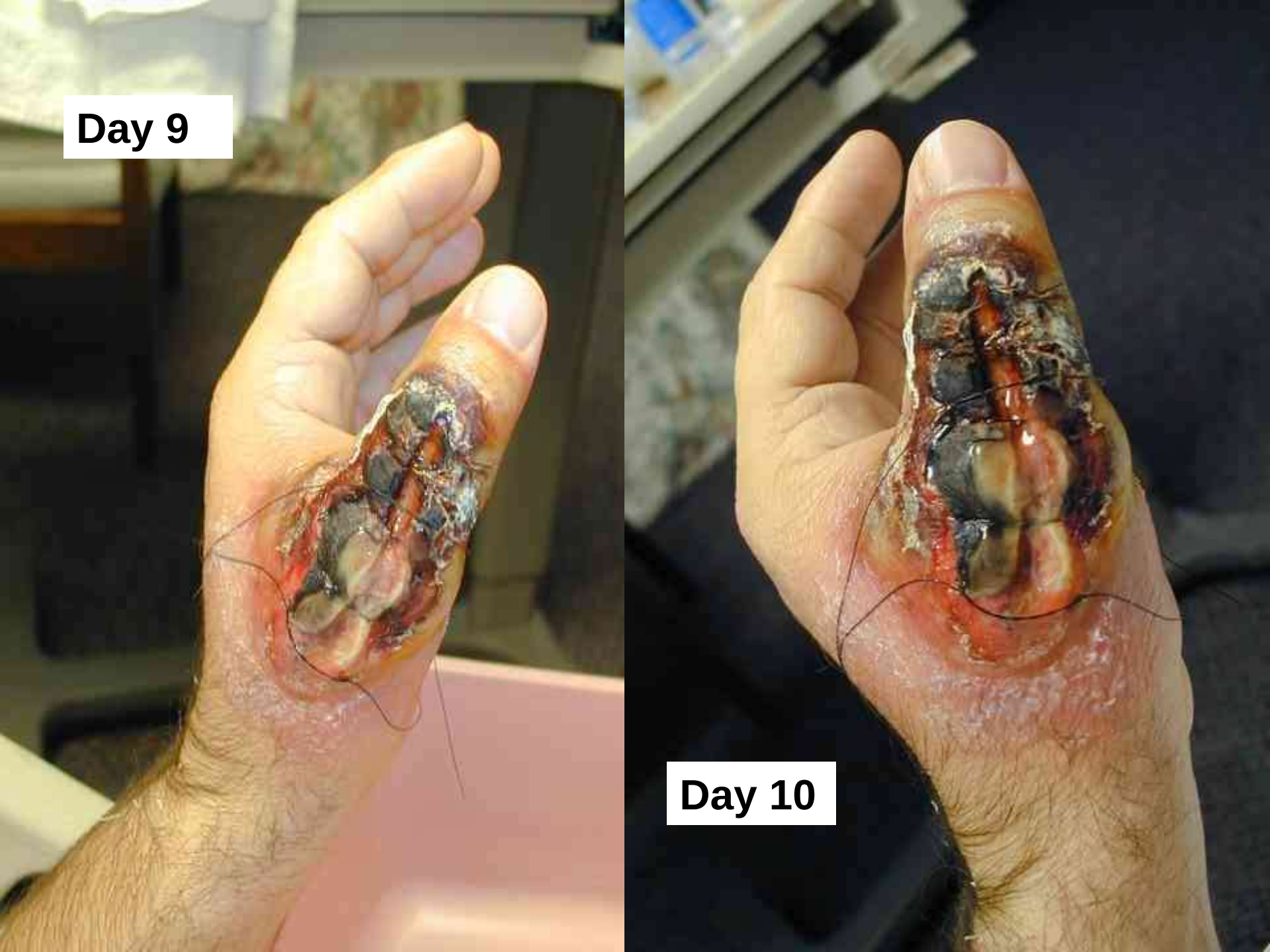
- Poisons Information Centre: phone 13 11 26
- Australian Resuscitation Council: www.resus.org.au

PIT is also recommended for Blue-Ringed Octopus and Cone Shell bites and stings


Brown
Recluse


Day 4
Day 3

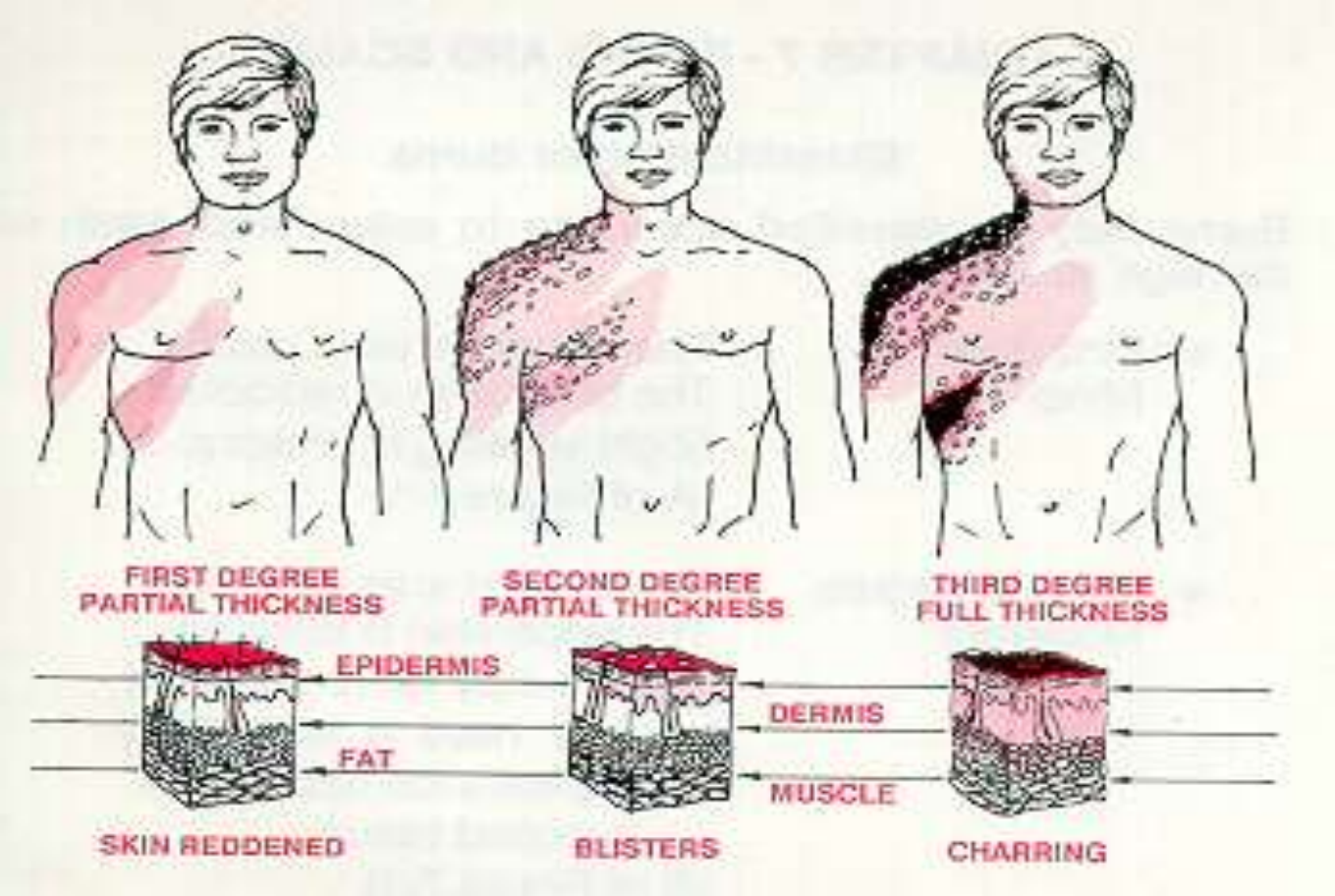

Day 5
Day 6


Day 9
Day 10

Burns

Cool application **Don’t break blisters** **Dry sterile dressing, treat for shock**

RAPID TRANSPORT!!!



Severe Burns and Scalds

Treatment:

- **Cool the burn area with water for 10 to 20 minutes.**
- **Lay the casualty down and make him as comfortable as possible, protecting burn area from ground contact.**
- **Gently remove any rings, watches, belts or constricting clothing from the injured area before it begins to swell.**
- **Cover the injured area loosely with sterile unmedicated dressing or similar non fluffy material and bandage.**
- **Don't remove anything that is sticking to the burn.**
- **Don't apply lotions, ointments, butter or fat to the injury.**
- **Don't break blisters or otherwise interfere with the injured area.**
- **Don't over-cool the patient and cause shivering.**
- **If breathing and heartbeat stop, begin resuscitation immediately,**
- **If casualty is unconscious but breathing normally, place in the recovery position.**
- **Treat for shock.**
- **Send for medical attention and prep for transport.**

Minor Burns and Scalds

Treatment:

- **Place the injured part under slowly running water, or soak in cold water for 10 minutes or as long as pain persists.**
- **Gently remove any rings, watches, belts, and shoes from the injured area before it starts to swell.**
- **Dress with clean, sterile, non fluffy material.**
- **Don't use adhesive dressings.**
- **Don't apply lotions, ointments or fat to burn/ scald.**
- **Don't break blisters or otherwise interfere.**
- **If in doubt, seek medical aid.**



Chemical Burns

Treatment:

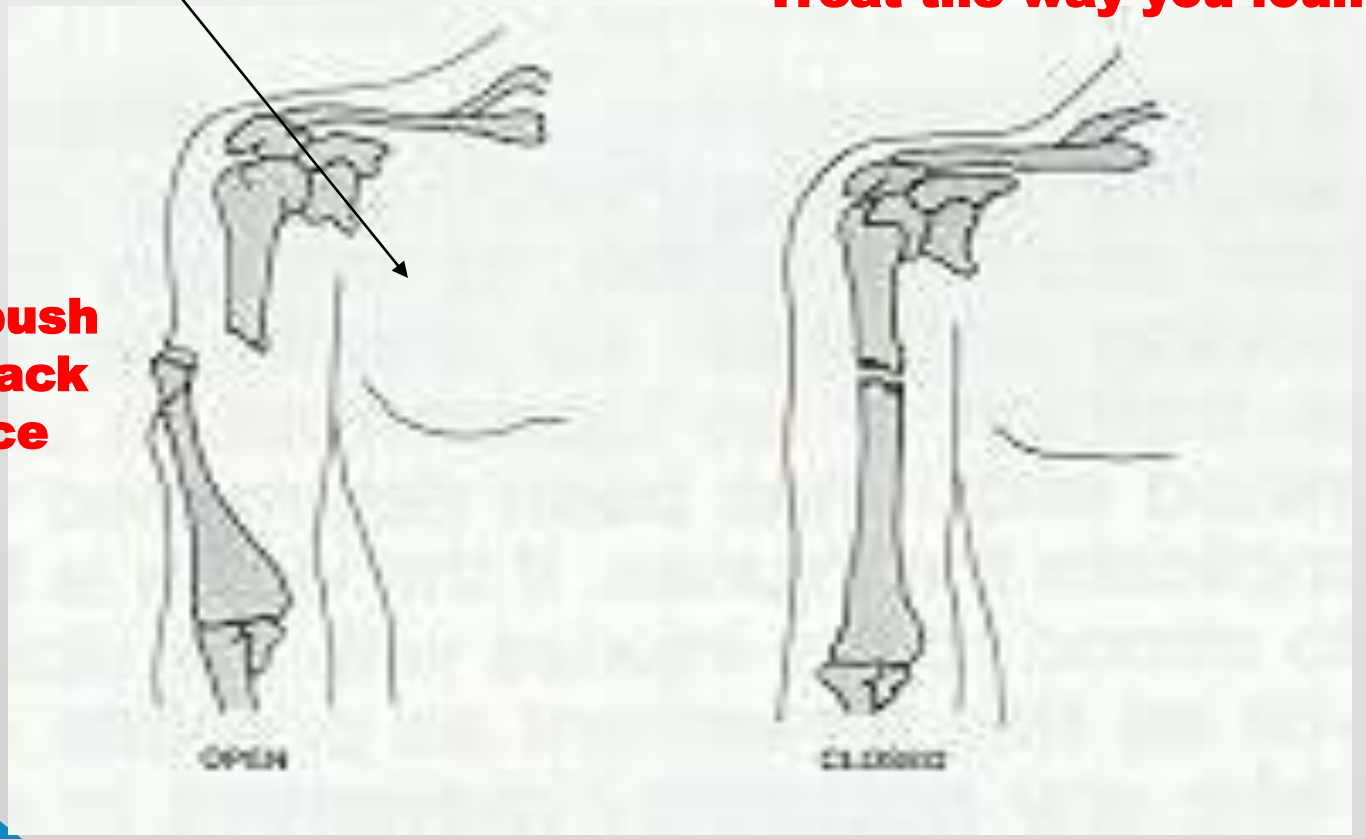
- **Flood the area with slowly running water for at least ten minutes. (or proper neutralizing agent)**
- **Gently remove contaminated clothing while flooding injured area, taking care not to contaminate yourself.**
- **Continue treatment for SEVERE BURNS**
- **Remove to hospital.**

Fractures & Dislocations

Must treat for bleeding first

Don't straighten break
Treat the way you found it

Do not push bones back into place



Dislocations

The most common dislocations occur in the shoulder, elbow, finger, or thumb.

LOOK FOR THESE SIGNS:

1. swelling
2. deformed look
3. pain and tenderness
4. possible discoloration of the affected area

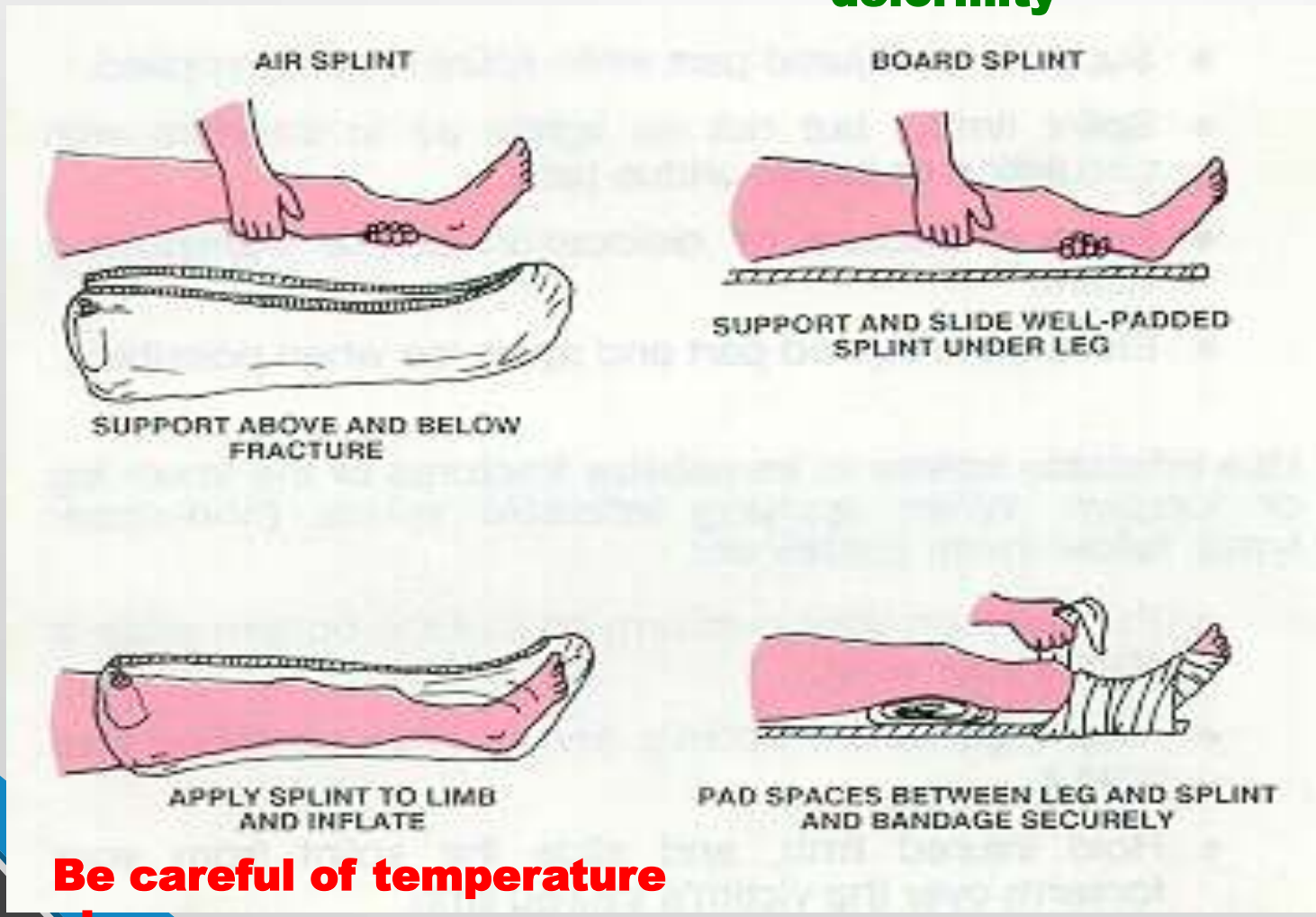
IF A DISLOCATION IS SUSPECTED...

1. Apply a splint to the joint to keep it from moving.
2. Try to keep joint elevated to slow bloodflow to the area
3. A doctor should be contacted to have the bone set back into its socket.

Splints

Must be a straight line break

Can be formed to shape of deformity



Be careful of temperature change

Head Injuries

A sharp blow to the head could result in a concussion, a jostling of the brain inside its protective, bony covering. A more serious head injury may result in contusions, or bruises to the brain.

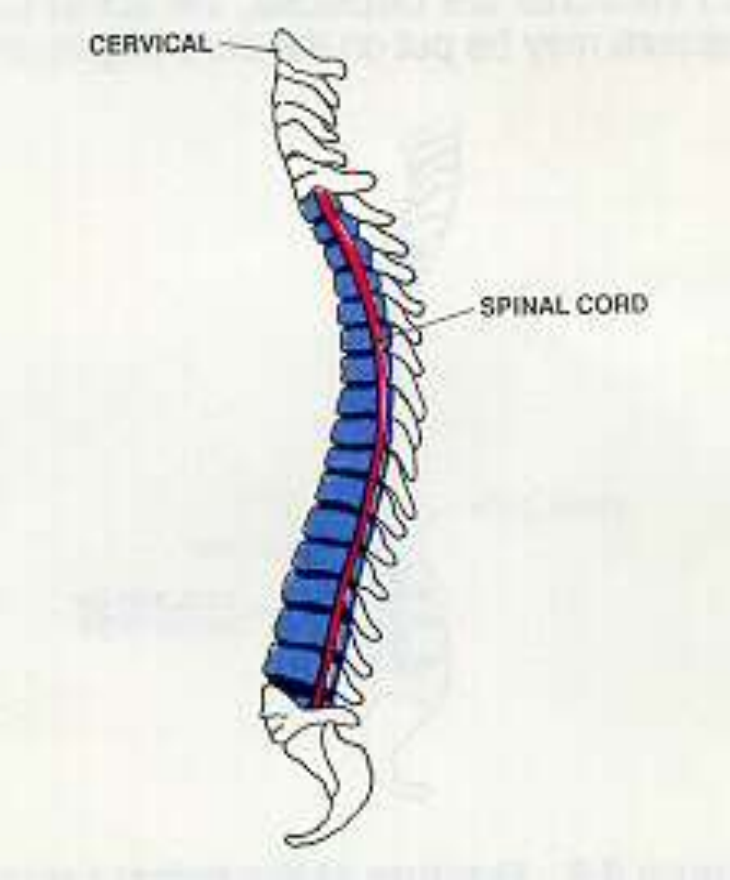
OTHER SYMPTOMS TO LOOK FOR IF YOU SUSPECT A VICTIM MAY HAVE A BRAIN INJURY:

1. clear or reddish fluid draining from the ears, nose, or mouth
2. difficulty in speaking
3. headache
4. unequal size of pupils
5. pale skin
6. paralysis of an arm or leg (opposite side of the injury) or face (same side of the injury)

PROPER CARE:

1. While waiting on help to arrive, keep the victim lying down in the recovery position
2. Control any bleeding, and be sure that he is breathing properly.
3. Do not give the victim any liquids to drink.
4. If the victim becomes unconscious for any amount of time, keep track of this information so that you can report it when medical help arrives.

Neck & Spinal Injuries



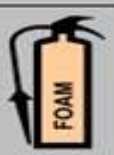
CARE AND TREATMENT

- ABC
- extreme care in initial examination — minimal movement
- urgent ambulance transport
- apply cervical collar
- treat for shock
- treat any other injuries
- maintain body heat
- if movement required, 'log roll' and use assistants
- always maintain casualty's head in line with the shoulders

Fire safety

Classification	Fire Risk
 Class A	Solid Combustible Materials i.e. Paper, Wood, Textiles.
 Class B	Flammable Liquids i.e. Petrol, Diesel, Oil.
 Class C	Flammable Gases i.e. Natual Gas, Propane.
 Class D	Combustible Metals i.e. Sodium, Potassium, Lithium.
 Class F	Cooking Oils/Fats i.e. Deep Fat Fryers
 Class E*	Electrical Fires i.e. Short Circuiting Equipment

Extinguisher Quick Guide (Always check manufacturer's instructions & specifications):

Old Colour BS 5406	New Colour BS EN3	Class A Paper or Wood etc.	Class B Flammable Liquids	Class C Flammable Gas Fires	Class D Metal Fires	Electrical Fires
		☑	Do Not Use ☒			Do Not Use ☒
	*6 Litre - Water Mist multi-purpose extinguisher	☑	*Note - can be used on up to 21 Litres (21B rating). ☑			*Note - safe to use on up to 35Kv ☑
 Fire hose reel		☑	Do Not Use ☒			Do Not Use ☒
		**Note:** Multi-Purpose Foams may be used. ☑	**Note:** Specialist Foams **(Polar) required for industrial alcohol.** ☑			Do Not Use ☒
			Secondary ☑			Primary ☑
		☑	**Note:** specialist dry powder required for Solvents & Esters (Monnex). ☑	☑	**Note:** specialist dry powders may be required (M28 / L2): ☑	☑
Fire blanket			Primary ☑	**General Note** - may be used in conjunction with other extinguishing agents / or fire extinguishing techniques.		
	*75F Rating 		**SPECIALIST HOT COOKING OIL FIRES ONLY** **6 Litre Class F extinguisher** specifically for dealing with large high temperature (360°C+) cooking oils used in large industrial size catering kitchens, restaurants and takeaway establishments with deep fat frying facilities. ***Water Mist Safe to use on Class F fires** - this includes small domestic size containers of high temperature (360°C+) cooking oils used in food frying (*this unit has a **75F** rating*).*			

Water Fire Extinguishers

WATER

Use On:



Don't Use On:





AQUA SPRAY

Use On:



Don't Use On:





WATER MIST

Use On:





Don't Use On:



Powder Fire Extinguishers

POWDER

Use On:





Don't Use On:



POWDER
(L2 or M28)

Use On:



Don't Use On:





Foam, CO2 & Wet Chemical Fire Extinguishers

FOAM

Use On:



Don't Use On:



CO_2

Use On:



Don't Use On:



WET CHEMICAL

Use On:



Don't Use On:

