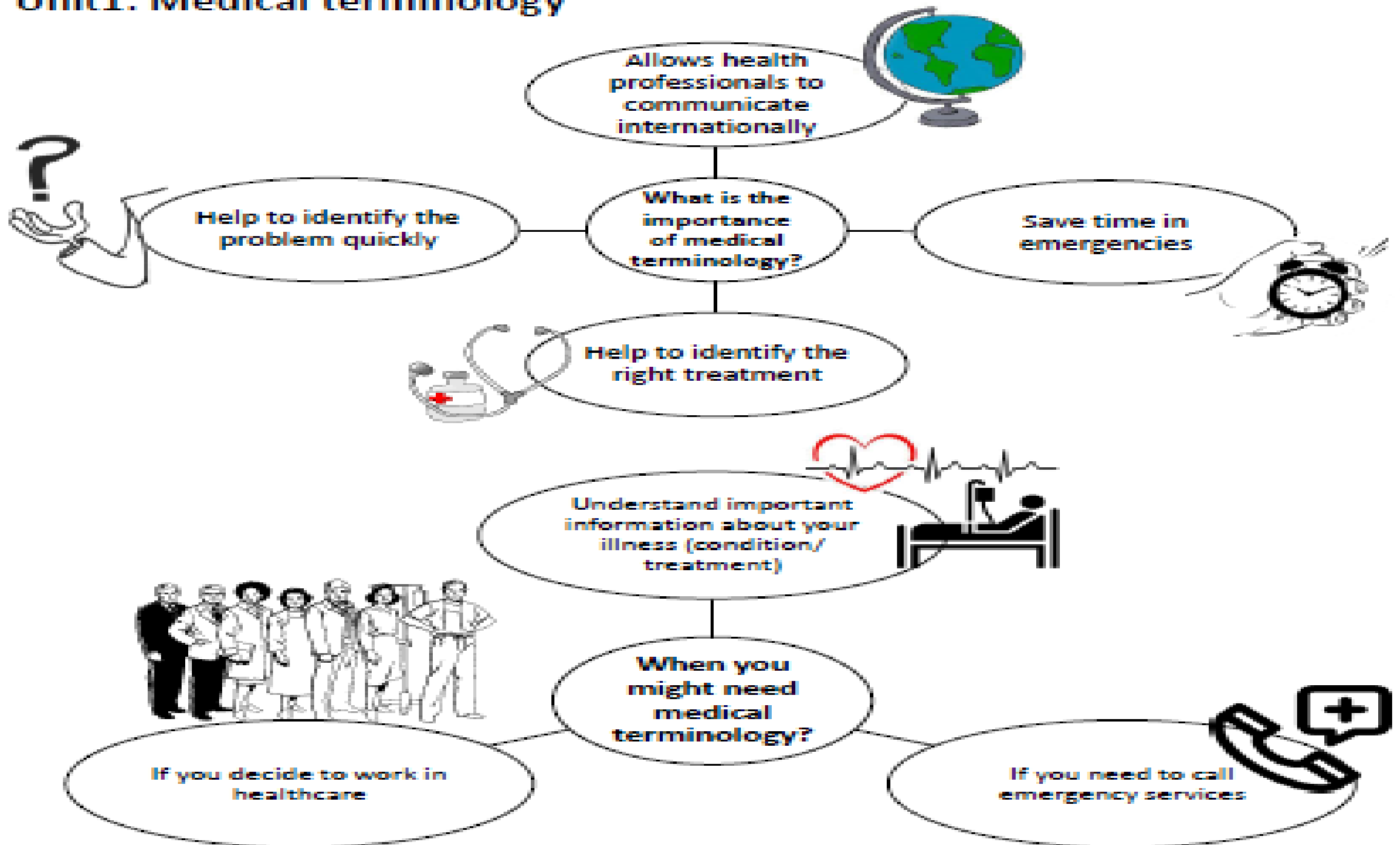


Unit 1

Medical terminology



Unit1: Medical terminology



Terminology	1. Prefix (before)	2. Root word (main word)	3. Suffix (after)	Combining vowels (uae io)
Hyperthyroidism فرط نشاط الغدة الدرقية	Hyper- (high level)	Thyroid الغدة الدرقية	-ism (condition)	
Abnormal غير طبيعي	Ab- (not)	normal طبيعي		
Biology علم الحياة		Bio (life)	-logy (study)	
Anesthetic مخدر	An- (no)	esthetic (sense)		
Antibacterial مضاد بكتيري	Anti- (against)	bacterial		
Antenatal قبل الولادة	Ante- (before)	natal (birth)		
Bradycardia نبضات قلب بطيئة	Brady- (slow)	cardia (heart)		
Epidermis بشرة خارجية	Epi- (outside)	dermis (skin)		
Hyperglycemia زيادة السكر في الدم	Hyper-	glyc (sugar)	-emia (blood)	
Hypoglycemia هبوط السكر في الدم	Hypo-	glyc	-emia	
Intercellular ما بين الخلايا	Inter- (between)	cellular خلوي		
Intravenous داخل الوريد	Intra- (inside)	Venous وريدي		
Myocardial عضلة قلبية	Myo- (muscle)	cardial		
Tachycardia نبضات قلب سريعة	tachy- (fast)	cardia		
Leukemia سرطان الدم	Leuk- (white/ light)		-emia	
Carcinogenic تكون السرطان		carcin (cancer)	-genic (forming)	o
Arthritis التهاب المفاصل		Arthr (joints)	-itis (inflammation)	
Osteoporosis هشاشة العظام		Ostoe (bone) / poro (pore ثقوب)	-sis (condition)	

Terminology	1. Prefix (before)	2. Root word (main word)	3. Suffix (after)	Combining vowels
Neuropathy مرض عصبي		Neuro عصبي	-pathy (disease)	
Apnea انقطاع التنفس	A-		-pnea (breathing)	
Acidosis حموضة الدم		Acid	-sis	o
Dehydrate جفاف	De- (without)	hydrate (water)		
Dermatology علم الجلدية		dermat	-ology	
Chemotherapy علاج كيميائي		Chemo (chemistry)	-therapy (treatment)	
Gastroenteritis التهاب المعدة والأمعاء		Gaster (stomach)/ enter (intestine)	-itis	o
Hemoglobin صبغة الهيموجلوبين		Hem (blood)/ globin (protein)		o
Immunotherapy علاج مناعي		Immun مناعة	-therapy	o
Radiotherapy علاج بالأشعة		radio	-therapy	
Cardiovascular وعائي قلبي		Cardio / vascular (blood vessels)		

Medical record report

1- Demographic information:

Age/ date of birth “DOB”

Gender

Ethnicity (nationality)

Contact information (address & contact number)



2- Medical complaint (what the patient is suffering from)

3- Medication & allergies

4- Physical examination:

Blood pressure/ pulse rate (heart rate)/ respiration/ temperature

5- Results (physical examination test results or any other diagnosis)

6- Treatment plan & progress

6- Treatment plan & progress

Common medical words	Definition
Acute حاد	Short-term illness
Chronic مزمن	Long-term illness (lasts 3 months or more)
Report تقرير	Health professionals use it to keep track of patient's medical complaint & progress
Progress تقدم وتطور	How well a person is doing
Symptoms أعراض	What the patient experiences (you have to ask the patient e.g. feeling pain)
Signs علامات	Evidence of a disease or an illness (things you can see on patient's body)
Remission تعافي	When the symptoms of a disease go away
Birth مولد	When the person is born
Demographic سكاني	Information about age, gender & ethnicity
Fracture كسر	A break in a bone (complete/ incomplete)
Prognosis تنبؤ	An opinion about the outcome of a disease (possibilities)
Inflammation التهاب	Body's respond to an injury (redness, swelling & pain)
Infection عدوى	When germs (bacteria/ viruses or parasites) enter the body
Diagnosis تشخيص	The disease or condition that explains a person's symptoms
Illness مرض	When someone is sick
Medical طبي	Something related to healthcare

Unit 2

Disease prevention



Unit 2: Disease Prevention



2.2: Personal health behaviours for disease prevention

Benefits of a healthy diet

To maintain a healthy weight

Controls cholesterol



Certain nutrients affect certain body parts

Improves mood



Personal Hygiene: hand washing



2.3: Physical activity and disease

Physical benefits

- ✓ Improves fitness and bone strength
- ✓ Reduces risk of disease
- ✓ Control body weight
- ✓ Muscular strength & endurance

Emotional benefits

- ✓ Improves energy levels
- ✓ Improves emotional well-being
- ✓ Good for brain function



How much physical activity is enough?

Type of activity	5-17 years old	18-64 years old
Moderate-vigorous	60 minutes per day	150 minutes per week
Aerobic	-	10+ minutes at a time
Strengthening	3 times per week	2 times per week

Definition ← Sedentary lifestyle → Risk factors

"A lifestyle where someone does not do regular physical activity".



- Increased risk of disease
- More likely to be overweight
- Decrease skeletal muscle mass
- Linked to high blood pressure and cholesterol

2.4: Immunisation

1. Injection with small amount of virus/bacteria in it: not enough to make you sick
2. Immune system creates antibodies to fight off the disease
3. If the disease enters again your body will immediately fight it.



2.5: Screening

Can identify apparently healthy people who might have an increased risk of a disease.

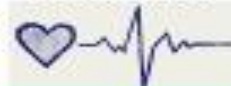
Positive result: they may have the disease they were screened for & need more tests

Detects problems early



Benefits

Saves lives!

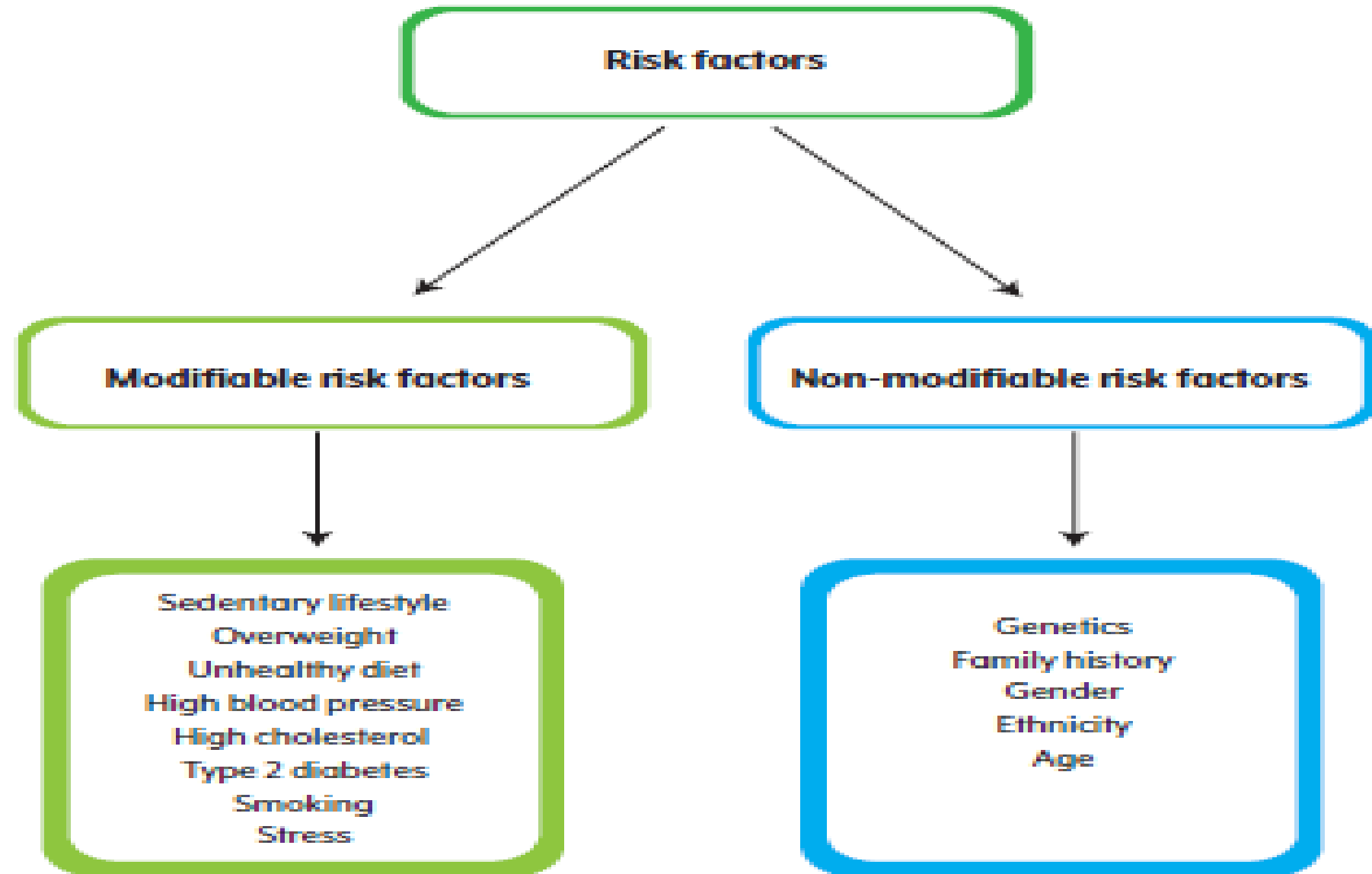


Can mean more successful treatment



Difference between screening & diagnostic tests

Screening is used on the 'well population'.
Diagnostic tests are used when there are symptoms of a disease.



Personal health behaviours
are lifestyle habits that can affect your health.

```
graph TD; A[Personal health behaviours are lifestyle habits that can affect your health.] --> B[Healthy diet]; A --> C[Adequate sleep]; A --> D[Personal hygiene];
```

Healthy diet

- 1-To maintain healthy weight
(Eating an unhealthy diet can lead to weight gain. Carrying extra weight can result in the weakening of bones and makes your organs work harder.)
- 2- Certain nutrients affect certain parts of the body/your health. Calcium is important for your bones. Without enough, your bones can become unhealthy, brittle and weak
- 3- Healthy eating improves mood
A good mood usually means stress levels are low. A high stress level is a risk factor for disease and illness.
- 4- Healthy diet controls cholesterol levels
A healthy diet increases the “good” cholesterol (high-density lipoprotein) and decreases “bad” cholesterol (low-density lipoprotein) in your blood.

Adequate sleep

Sleep should take place in a quiet, dark place. You should try to get 7-9 hours of sleep every night.
Lack of sleep, especially on a regular basis can have long-term health effects.
These include developing chronic medical conditions such as diabetes,

Personal hygiene

Hygiene refers to clean living habits that keep us healthy. Personal hygiene refers to the things we do to clean and care for our bodies.

Why is personal hygiene important?

- To kill bad bacteria (germs)
- Avoid bad breath and body odour
- For good health and to prevent illness

Washing your hands



Keeping hands clean is one of the most important steps you can take to avoid getting an illness or disease and spreading germs to others. Many diseases and infections are spread by not washing hands with soap and clean, running water.

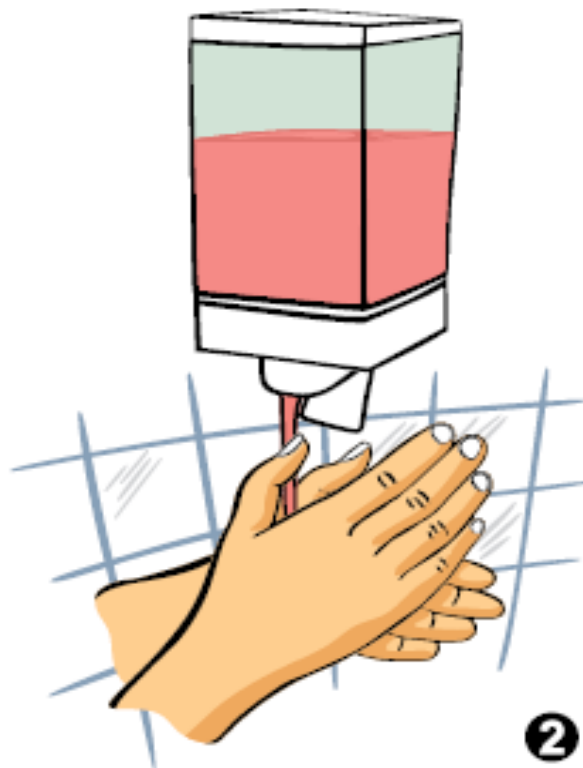
You need to wash your hands:

- before, during and after preparing food.
- before eating food.
- before and after caring for someone who is sick.
- before and after treating a cut or wound.
- after using the toilet.
- after changing nappies or cleaning up a child who has used the toilet.
- after blowing your nose, coughing or sneezing.
- after touching an animal, animal feed or animal waste.
- after touching rubbish.

How to wash your hands



1 Wet your hands under running water



2 Apply soap and rub palms together to ensure complete coverage



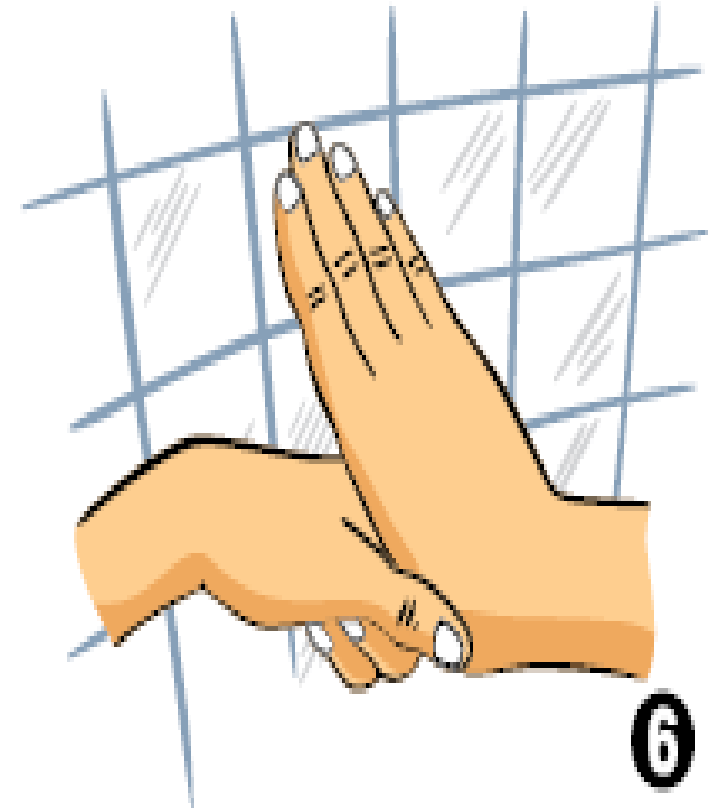
3 Spread the lather over the back of hands



Make sure soap gets in between your fingers



Grip the fingers on each hand



Pay particular attention to the thumbs



Press fingertips into the palm of each hand



Dry your hands thoroughly with a clean towel

What do the results mean?

If someone gets a “normal result” from a screening (a **negative result**), this means they are at low risk of having the condition they were screened for.

If a person gets a **positive** result from a screening, it means they may have the condition they were screened for. It will usually require further tests (diagnostic tests) to confirm the results.

Health checks and screenings

```
graph TD; A[Health checks and screenings] --> B[In your 20's and 30's]; A --> C[In your 40's]; A --> D[In your 50's and 60's];
```

In your 20's and 30's:

- Blood pressure
- Cholesterol and glucose levels
- BMI, waist and hip measurements
- Dental check and cleaning
- Skin cancer checks
- Breast self-checks
- Cervical screening

In your 40's

- All of the health checks and screenings as in your 20's and 30's plus:
- Type 2 diabetes risk assessment
 - Cardiovascular risk assessment
 - Eye checks for glaucoma

In your 50's and 60's

- All of the health checks and screenings as in your 40's plus:
- Mammogram (breast screening)
 - Osteoporosis risk assessment
 - Colorectal (bowel cancer) screening
 - Sight and hearing impairment tests

Unit 3

Medical emergencies



Unit 3: Medical Emergencies

For all emergencies: Make sure the scene is safe, wear PPE, be prepared to give CPR, use recovery position if choking or difficulty breathing and get the first aid kit

Spinal cord injury

Signs: back pain, weakness, numbness, loss of bladder/bowel control, balance difficulty, twisted neck/back
Emergency care: Keep the person still, place cushions/towels/clothes on both sides of the neck to stop it moving.



Head injuries

Signs: unconscious, unresponsive, sleepy, confused, vomiting, memory loss
Emergency care: stop any bleeding with a clean dressing, apply ice to swollen areas



Stroke

F A S T

Signs: face drooping, arm weakness, speech difficulty, time
Emergency care: Take note of the time the symptoms started, stay with the person



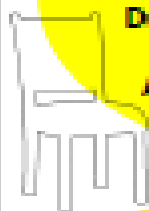
Diabetic episode

Hypoglycemia: dizziness, hunger, irritated, pale, shaking, sweating, sleepiness
Emergency care: get them to eat or drink and lie/sit down, call 998 if they can't sit up/swallow,
Hyperglycemia: feeling sick, polydipsia, polyuria, headache



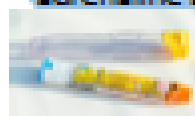
Seizures

Signs: lose control of muscles, fall to the ground, jerking movement, not able to respond
During: protect their head, move furniture out of the way
After: Stay with them until the emergency services arrive



Allergy

Mild signs: stuffy nose, sneezing and itching
Severe signs: difficulty breathing, anaphylaxis
Emergency care: adrenaline autoinjector



Poisoning

Signs: redness, chemical smell on breath, vomiting, difficulty breathing, drowsiness, seizures
Emergency care: Take note of time, look for clues/signs of poison, wash off skin or clothing, don't touch poison, keep an affected eye lower than the other



Burns

Signs: Red skin, blisters & pain
Small burns: Cool the burn, cover with non stick dressing if needed.
Large burns: If they are on fire get them to 'Stop, drop and roll', remove clothing/jewellery that could stick, check for shock



Electrical injury

Signs: Maybe marks where the electricity has gone in and out of the body
Emergency care: Make sure the power is switched off before CPR or other medical care, anyone who has had a shock should be checked over



Dehydration

Signs: weakness, feeling thirsty, dizziness, confusion, less urination
Emergency care: encourage them to drink some water, call the emergency services if they get worse



Fracture

Signs: Intense pain, numbness, bluish colour, swelling, bone protruding through the skin (compound), heavy bleeding (compound), snap or grinding at the time of injury, tingling/numbness
Closed: advice them to keep still, support the joint above and below injury, take them to hospital
Compound: Cover with a dressing, apply pressure, bandage without pressing injury

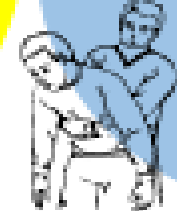
Spider bite or insect sting

Signs: pain, itching, cramp, headache, fever, vomiting, difficulty breathing, seizure
Emergency care: Do not touch the spider/insect, wash the area with water and soap, put ice in a towel to put on the bite, scratch sting out (do not squeeze it)



Airway obstruction

Signs of a partial obstruction: noisy breathing, wheezing
Signs of a complete obstruction: unable to speak/breathe/cough, grasp neck, no signs of normal breathing
Clearing a complete obstruction:
Abdominal thrusts (TB page 111)



Medical emergencies

Stroke (FAST test)

Diabetic episode (hypoglycemia)

Seizures

Allergic reaction (anaphylaxis)

Poisoning

Burns

Electrical injury

Fracture

Heat related illness

Spider bite & insect sting

Swallow

Breathe in

Get into eyes/ on skin

Heat (hot liquid or surfaces/ steam/ sun/ fire)

Chemicals

Electrical

External (burn)

Internal (stop breathing/ abnormal heartbeats or cardiac arrest)

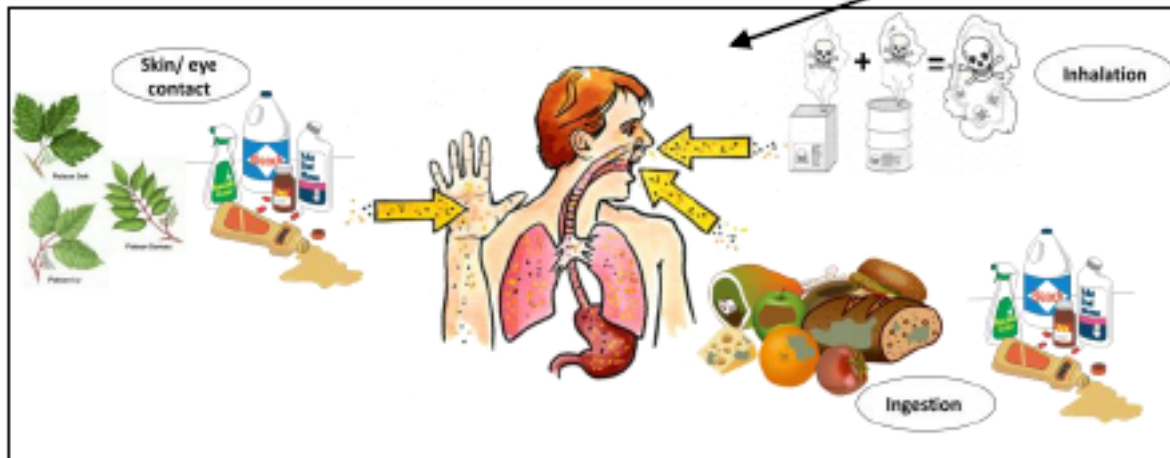
Simple/ closed

Compound/ open

Dehydration

Heat exhaustion

Heat stroke



Types of burns



Flame Burn



Electric Burn



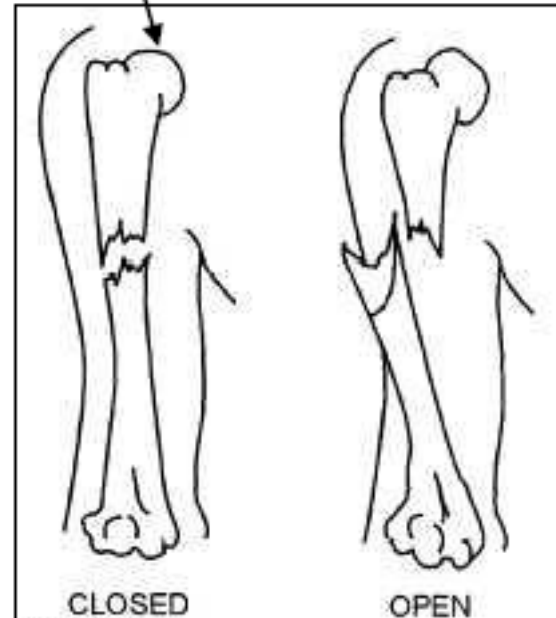
Scald Burn



Radiation Burn



Chemical Burn



Spinal cord injuries

Traumatic injuries(causes):

- Car crash
- Sports injuries
- Falls from a height
- Gymnastics
- Violence
- Diving into shallow water

Non-traumatic injuries and illnesses(causes):

- Cancer
- Osteoporosis
- Multiple sclerosis
- Inflammation of the spinal cord
- Arthritis

Signs and symptoms of a potential spinal injury:

- extreme back pain
- weakness, lack of coordination
- numbness, tingling or loss of sensation in the hands,
- .
- loss of bladder or bowel control.
- difficulty with balance and walking.
- impaired breathing after the injury.
- an oddly positioned or twisted neck or back.

Emergency care

: Keep the person still, place cushions/towels/clothes on both sides of the neck to stop it moving.

Do not twist or turn the head or neck unless you need to do any of the following:

- Turn the person face-up to give CPR.
- Move the person out of further danger.
- Turn the person because of difficulty breathing, vomiting or fluid in the mouth.

Head injuries

- A closed head injury is when there has been a hard blow to the head by an object which did not break the skull.

-An open or penetrating head injury means that an object broke the skull.

Head injuries include the following:

- concussion
- scalp wounds
- skull fractures

symptoms of a potential spinal injury:

-Unconsciousness , Unresponsive or only moans

Acts sleepy or confused , Fits or seizures

Difficulty speaking or staying awake , Vomiting

- Problems with the senses hearing loss , Memory loss , Blood or clear fluid coming from the ears or nose , swelling bruising around both eyes

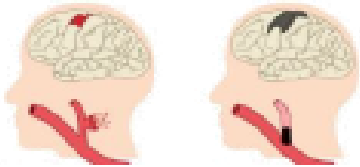
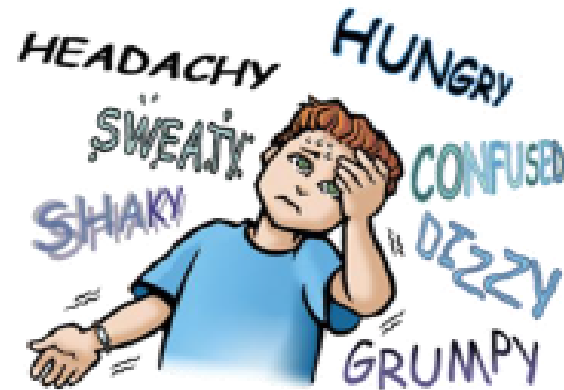
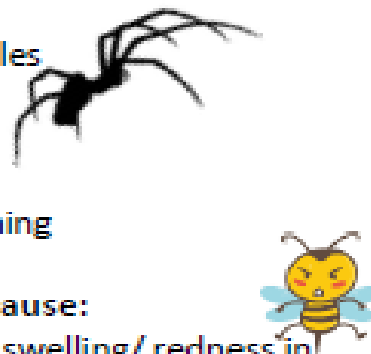
-Difficulty walking or with coordination

Emergency care

: stop any bleeding with a clean dressing, apply ice to swollen areas

get medical help straight away if the person:

- becomes very sleepy.
- behaves abnormally.
- develops a severe headache or stiff neck.
- has pupils (the dark central part of the eye) with unequal sizes.
- is unable to move an arm or leg.
- loses consciousness – even briefly.
- vomits more than once.

Medical emergency	Stroke	Diabetic episode (hypoglycemia)	Insect stings and bites
Definition/ causes	Lack of oxygen to the brain because of blockage or rupture of blood vessel 	Diabetes: problems with producing (type1) or responding (type2) to Insulin .  Hypoglycemia: low blood sugar.	A venomous bite or sting is more serious than non-venomous ones.
Signs & symptoms	FAST test:  F  A  S  T Time: Face drooping Arm weakness Speech difficulty:		Spider bite signs: ✓ Pain / itching ✓ Cramps in muscles ✓ Headache ✓ Fever ✓ Vomiting ✓ Difficulty breathing ✓ Seizures Insect sting may cause: Mild pain/ itching/ swelling/ redness in the area 
First aid (what to do?)	1) Call 999 2) Take note of the time of the stroke 3) Stay with the patient until emergency services arrive 4) If the person becomes unresponsive or not breathing start CPR	1) Make the patient rest 2) Measure their blood sugar 3) Give them something sweet to eat or drink 4) If they don't improve after 15 minutes call the emergency	Spider bite first aid: 1. Make sure the scene is safe. 2. Get the first aid kit out. 3. Wear PPE (Personal Protective Equipment) such as gloves. 4. Move people away and call 999. 5. Try to keep the patient calm & keep them in place. 6. Wash the area with water and soap and put icepack. 7. Give the emergency services any information (spider).

Signs of low blood sugar (hypoglycaemia):



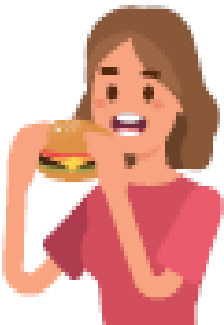
SWEATING



PALE



IRRITABILITY



HUNGER



DIZZINESS



SLEEPINESS

Low blood sugar can occur when a person with diabetes:

- misses a meal.
- has not eaten enough food.
- takes too much insulin.
- does a lot of physical activity without eating enough food.

Hyperglycaemia can lead to damage to the:

- blood vessels
- eyes
- kidneys
- nerves

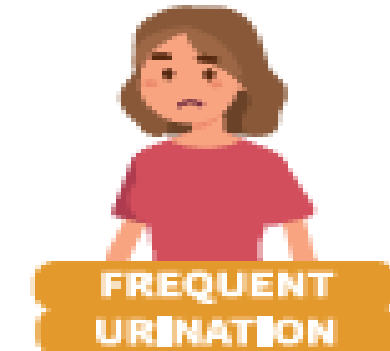
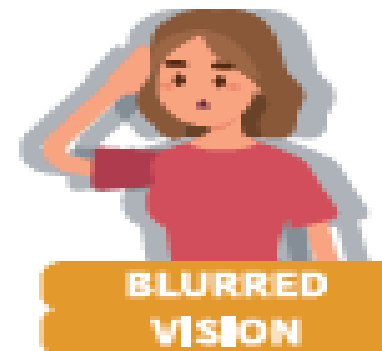


Hyperglycaemia can be caused by many factors. These include:

- Eating too much
- Feeling stressed
- Forgetting to take diabetic medication
(insulin)
- Not doing physical activity

Signs of hyperglycaemia include the following:

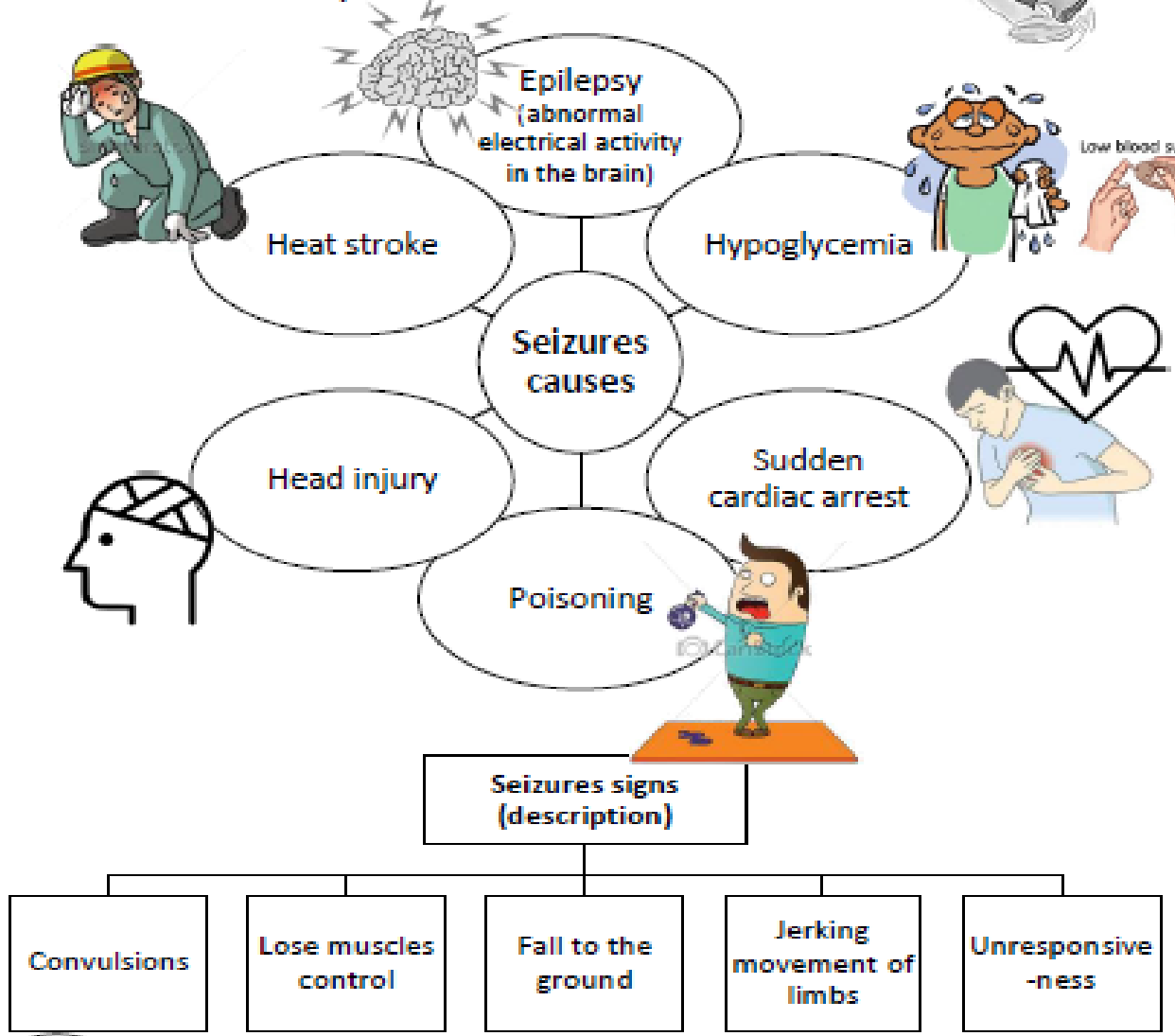
- Feeling sick
- Fruity smelling breath
- Polydipsia (excessive thirst)
- Polyuria (excessive urination)
- Tiredness and fatigue
- Blurred vision
- Headache



Unit3: Medical emergencies

Lesson3: Seizures

Seizure: involuntary movement of the muscles.



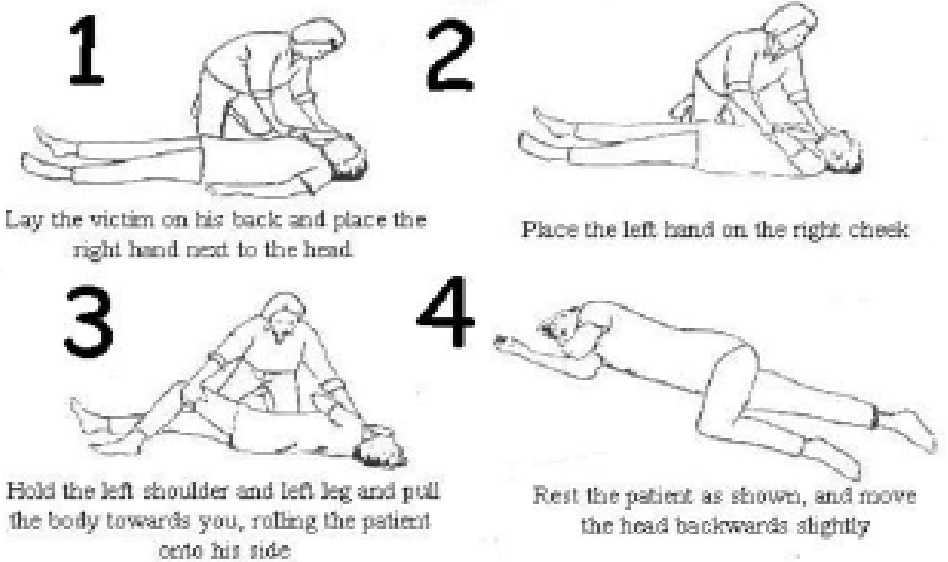
Seizure first aid:

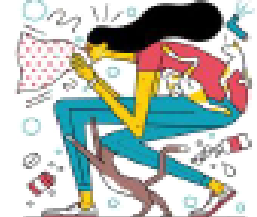
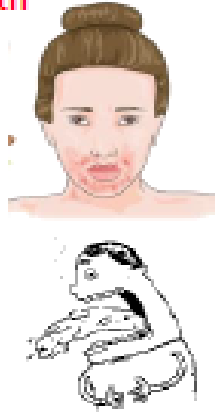
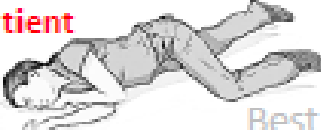
- 1) Remove anything that may harm the victim during the seizure.
- 2) Do not hold them or try to stop them from having the seizure.
- 3) Put something soft under the victim's head.
- 4) Call the emergency.

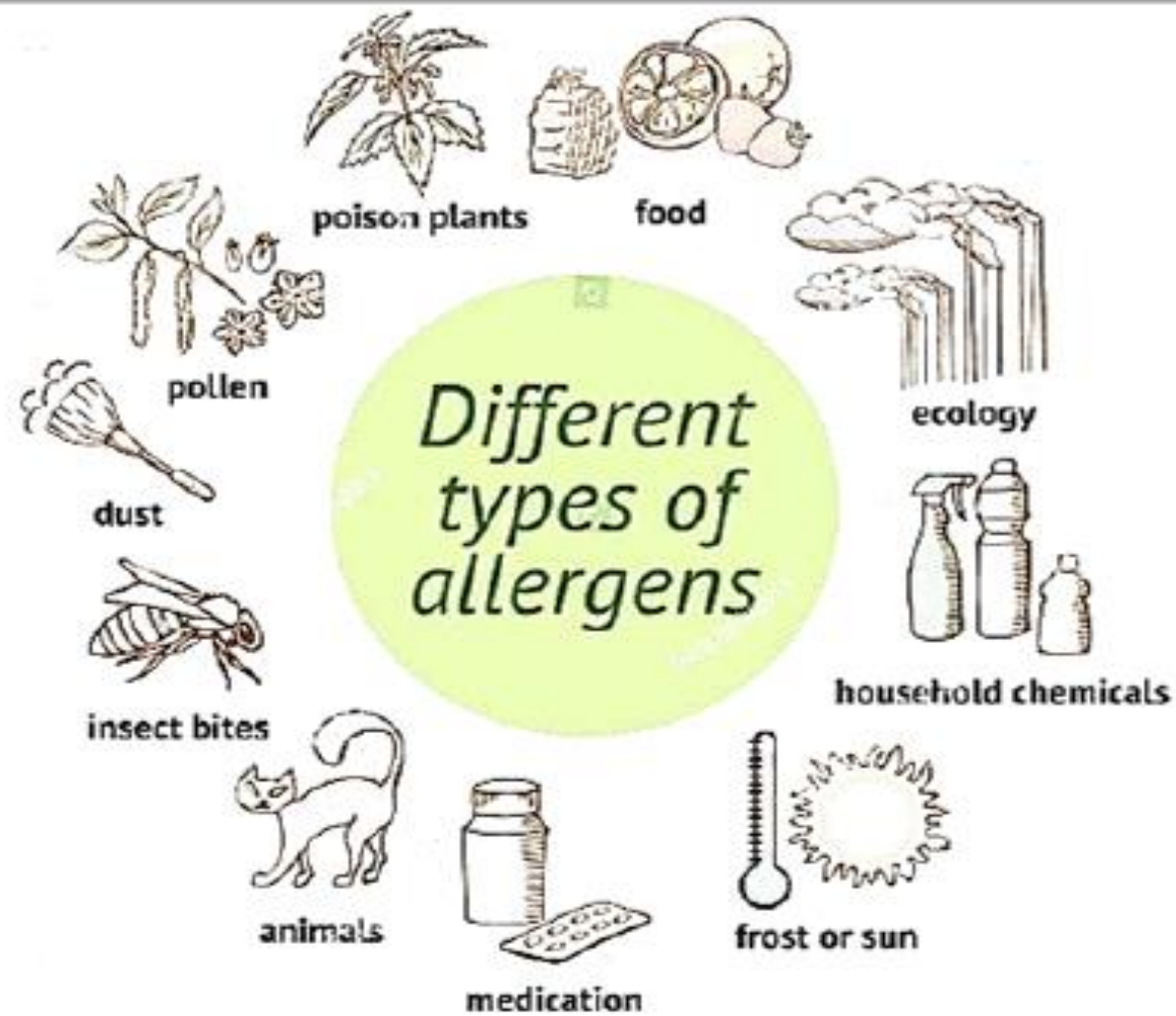


After the seizure:

- ✓ If the patient unresponsive and not breathing give CPR.
- ✓ If they have breathing difficulties check for obstruction.
- ✓ If they are vomiting put them into the "recovery position".



Medical emergency	Seizures	Allergic reaction (anaphylaxis)	Poisoning
Definition/ causes 	Convulsions because of: - Abnormal electrical activity in the brain (epilepsy) - Severe head injury - Hypoglycemia & heat stroke - Poisoning - Cardiac arrest	Allergy: immune response to substances. Anaphylaxis: sever allergic reaction. 	Anything that someone swallows, breathes, get in their eyes, skin . That can cause long-term or short-term damage 
Signs & symptoms	✓ Lose control of the muscles ✓ Fall to ground ✓ Jerking movement in the legs and arms (spasm) ✓ Not able to respond 	THINK "FAST"  Face itching, redness, swelling  Stomach pain, vomiting, diarrhea, nausea  Airway trouble breathing, coughing, wheezing, trouble swallowing and speaking  Total body hives, rash, weakness, paleness, sense of doom, loss of consciousness Other: dizziness, pale/blue colour	✓ Redness around the mouth ✓ Chemical smell ✓ Vomiting ✓ Drowsiness ✓ Confusion ✓ Seizures ✓ Breathing difficulty 
First aid (what to do?)	<u>During the seizure:</u> - Put something soft under the patient's head & do not restrain the person - Move objects out of the way - Call 999 <u>After the seizure:</u> - Check responsiveness and breathing - Put the patient in the recovery position - Give CPR if the patient is unresponsive 	1  2  3  4  Adrenaline/ epinephrine auto-injector (Epi pen)	- Check if the scene is safe (search for any liquid/ powder) - Call 999 - Take the first-aid kit out - Take note of the time - Look for signs of poisoning - Avoid touching the poison - If the person vomits put them into recovery position - If the person is unresponsive give CPR using mask or only compression - If the poison gets into eyes or on skin wash with lots of water



A mild allergic reaction can result in a stuffy nose, sneezing or itching. It can also result in a skin rash or hives.

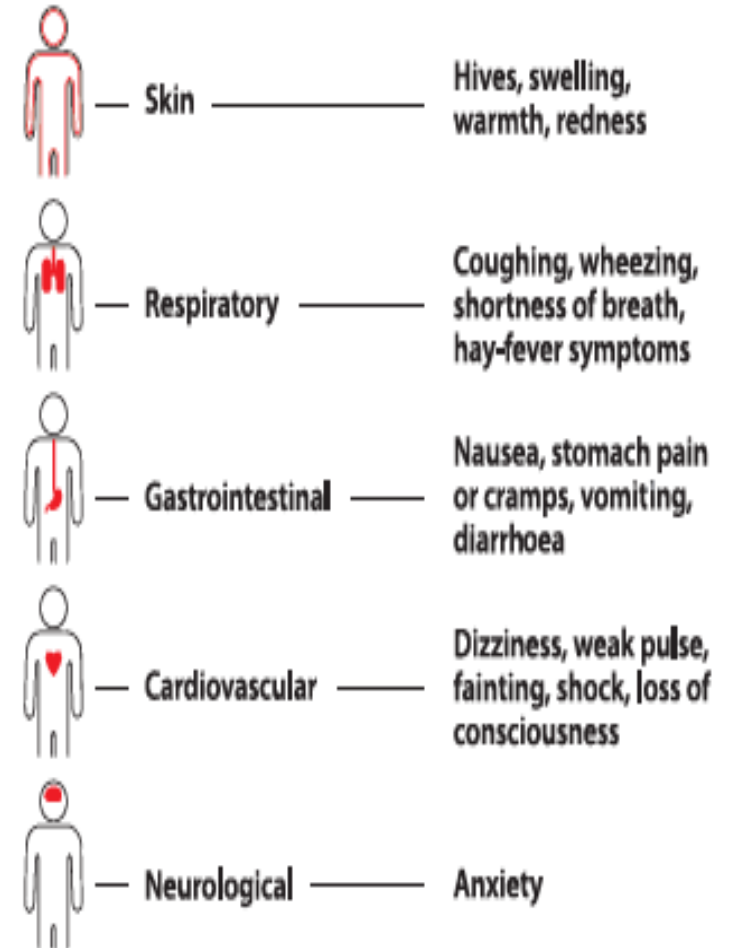
A severe allergic reaction can make it difficult to breathe. It can lead to swelling of the face or tongue.

Administering an epinephrine pen

- Ask the person if they are having an allergic reaction
 - help them to locate it.
- read the instructions on the auto-injector.
- Remove the safety cap.
- Hold the person's leg firmly in place.
 - hard against the person's thigh.
- held in place for the advised length of Time(between three and ten seconds.)
 - rub the thigh,
- All details should be passed on to the emergency services

Anaphylaxis

Symptoms



For insect sting:

When is an insect sting serious?

1. If the person is allergic
2. If the insect is venomous

First aid for insect stings:

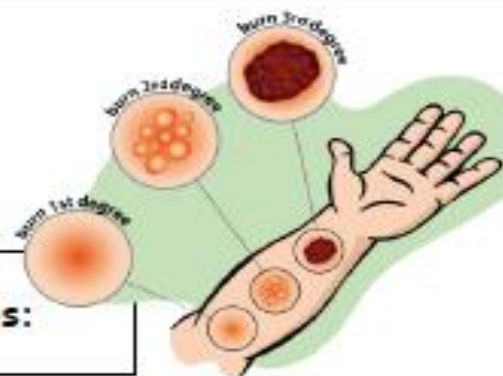
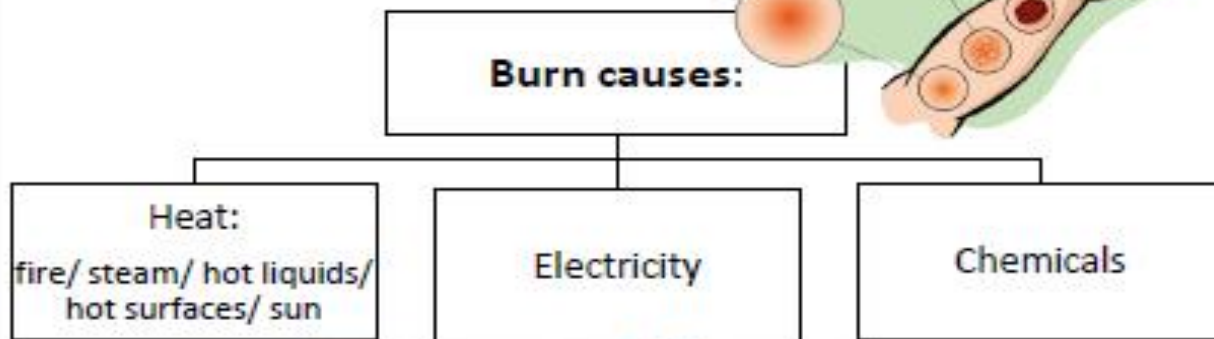
1. Check the scene
2. Get the first aid kit out & wear PPE
3. Try to scratch the sting out with tweezers (don't squeeze it)
4. Put icepack
5. Monitor the patient for allergic signs (use adrenaline auto-injector)



Note: a bee is the only insect that leaves the stinger in the patient!



What are burn causes?



Types of burns



Flame Burn



Radiation Burn



Electric Burn



Scald Burn



Chemical Burn

Burning first aid:

Run cool water
over area of
burn

1



Cover the burn
with a sterile
bandage

2



Avoid using
these to
treat a
burn!



If the person's clothing catches on fire tell them to stop/ drop/ roll and cover them with a fire blanket.



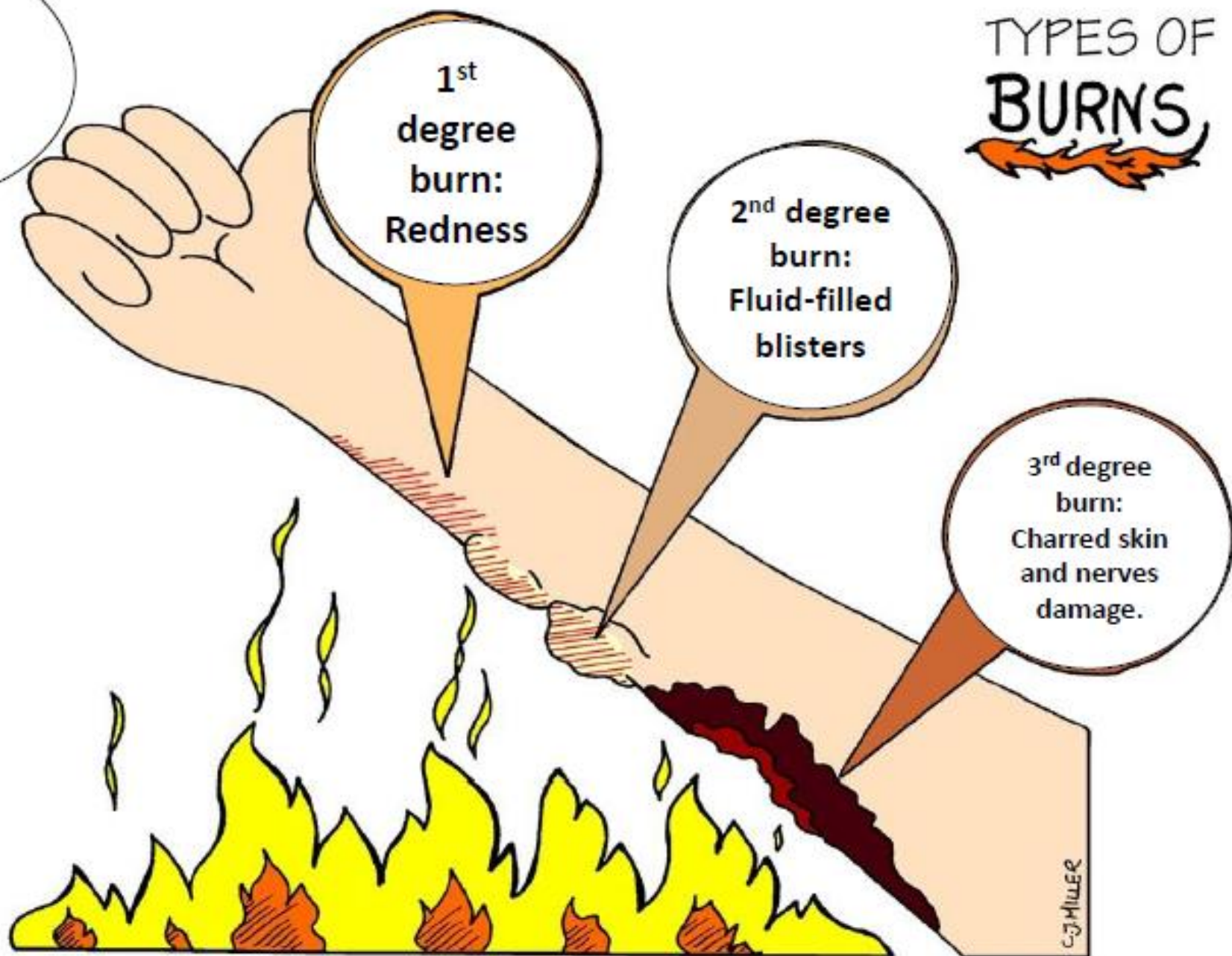
**Burn
signs:**

**1st
degree
burn:
Redness**

**2nd degree
burn:
Fluid-filled
blisters**

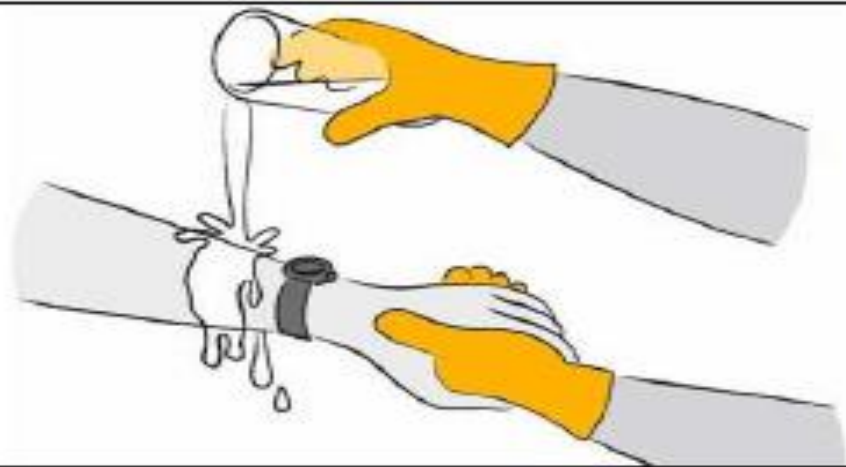
**3rd degree
burn:
Charred skin
and nerves
damage.**

TYPES OF BURNS



**Emergency medical
care for burns
Large burns**

1	Make sure the scene is safe.
2	Get a first aid kit and wear protective equipment, such as gloves.
3	If there is a fire or the burn is across a large area of the body, call the emergency services.
4	If the person or clothing is on fire, quickly put the fire out. Get them to ‘stop, drop and roll’, then cover them with a wet blanket.
5	When the fire is fully out, remove the blanket. Then remove any clothing or jewellery that is covering the burn so that they do not stick to the skin.
6	Cool the burn with cold water for at least 10 minutes. Then, cover with a non-stick sterile dressing.
7	Cover the person with a dry blanket.
8	Check for signs of shock and treat as needed.



Burn treatment:

1. Wash with cool water for at least 10 min.



2. Strip any jewelry that may stick to skin.



3. Cover the area with a nonstick sterile bandage.

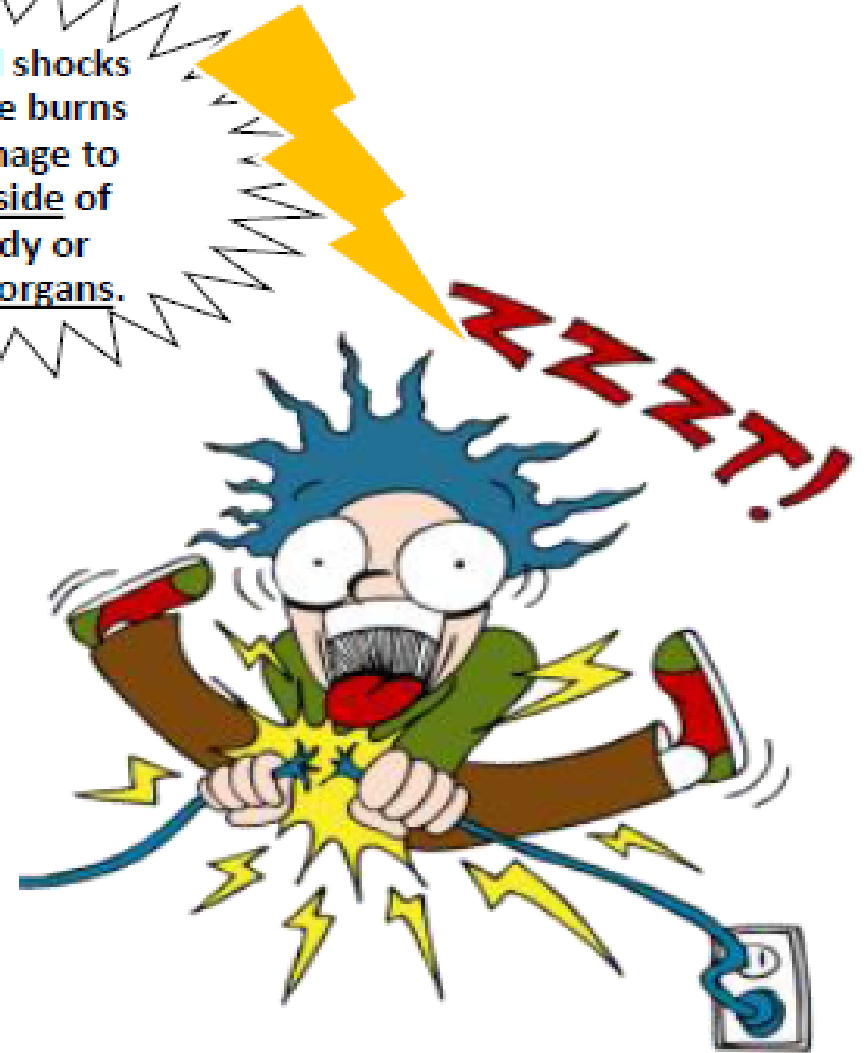
Lesson7: Electrical injury:

Electrical burn first aid:

Check the environment and stop the current or take the victim into a safe place:



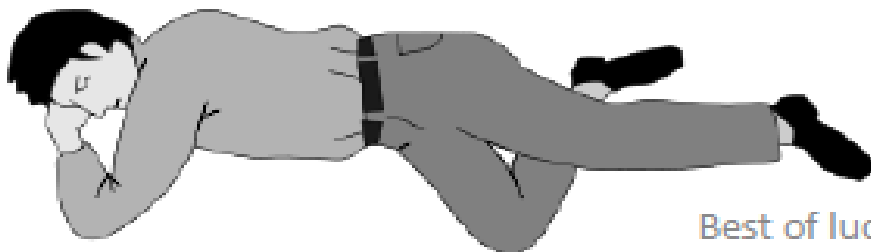
Electrical shocks can cause burns and damage to the outside of the body or internal organs.



Apply CPR if the victim stops breathing:



Put the victim into recovery position:



Note: there are 206 bones in the adult human body

Fracture types:

simple fracture
(closed fracture)

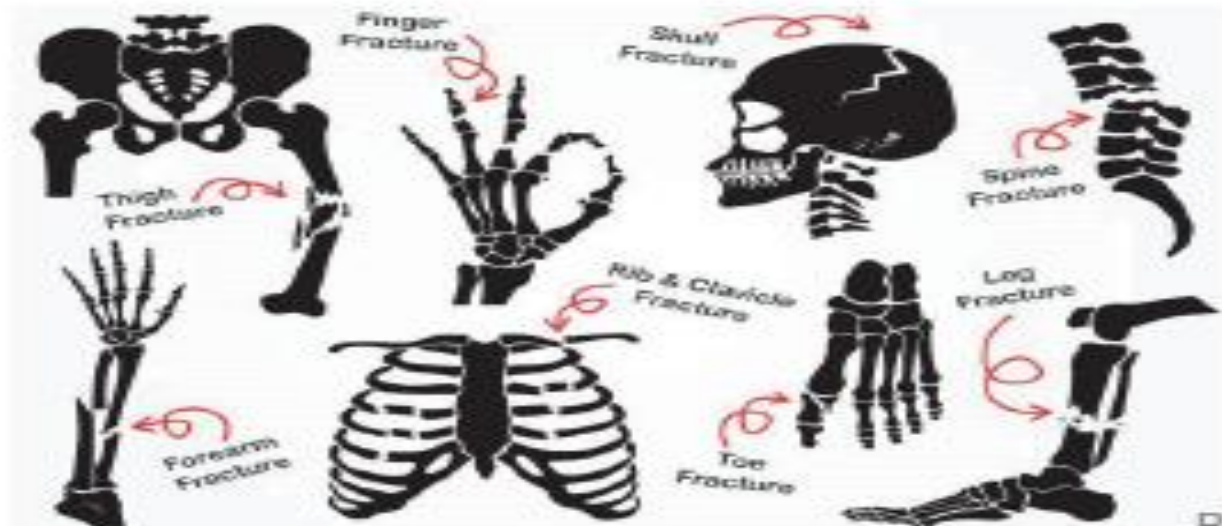


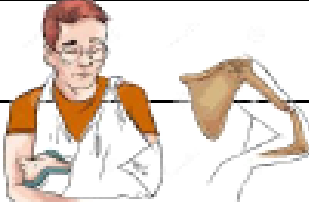
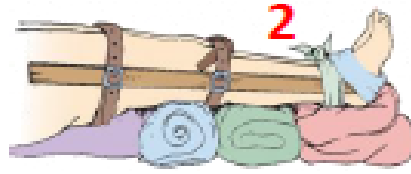
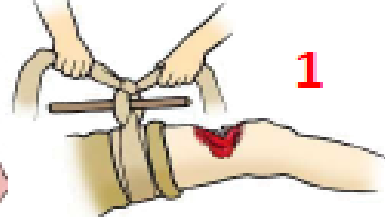
compound fracture



(open fracture)

Compound/ open fracture	Simple/ closed fracture
The bone damages the surrounding tissue and breaks through the skin. Infection may happen	The bone does not break through the skin.



Medical emergency	Fracture  	
Fracture type	Closed	Open
Signs & symptoms	1) Sharp pain especially when moving. 2) Tingling and numbness. 3) Bluish color/ swelling/ deformity. 4) The bone may break through the skin. 5) Heavy bleeding. 6) Snap or grinding noise at the time of injury. 7) Feel faint/ dizzy or sick because of the shock & pain. 8) A bone protruding through the skin.	
Fractured bone first aid	✓ Check the scene + get first aid kit + wear PPE ✓ Immobilize the injured area using a <u>splint</u> or <u>sling</u> ✓ Apply ice to the area. ✓ Get professional help (call an ambulance if there is neck, head or back injury or heavy bleeding/ take the casualty to the hospital if it is a limb injury) Closed fracture	
	Open fracture ✓ Stop any bleeding using a sterile bandage or clean cloth. ✓ Treat the casualty for shock. ✓ Give CPR if the causality becomes unresponsive  	

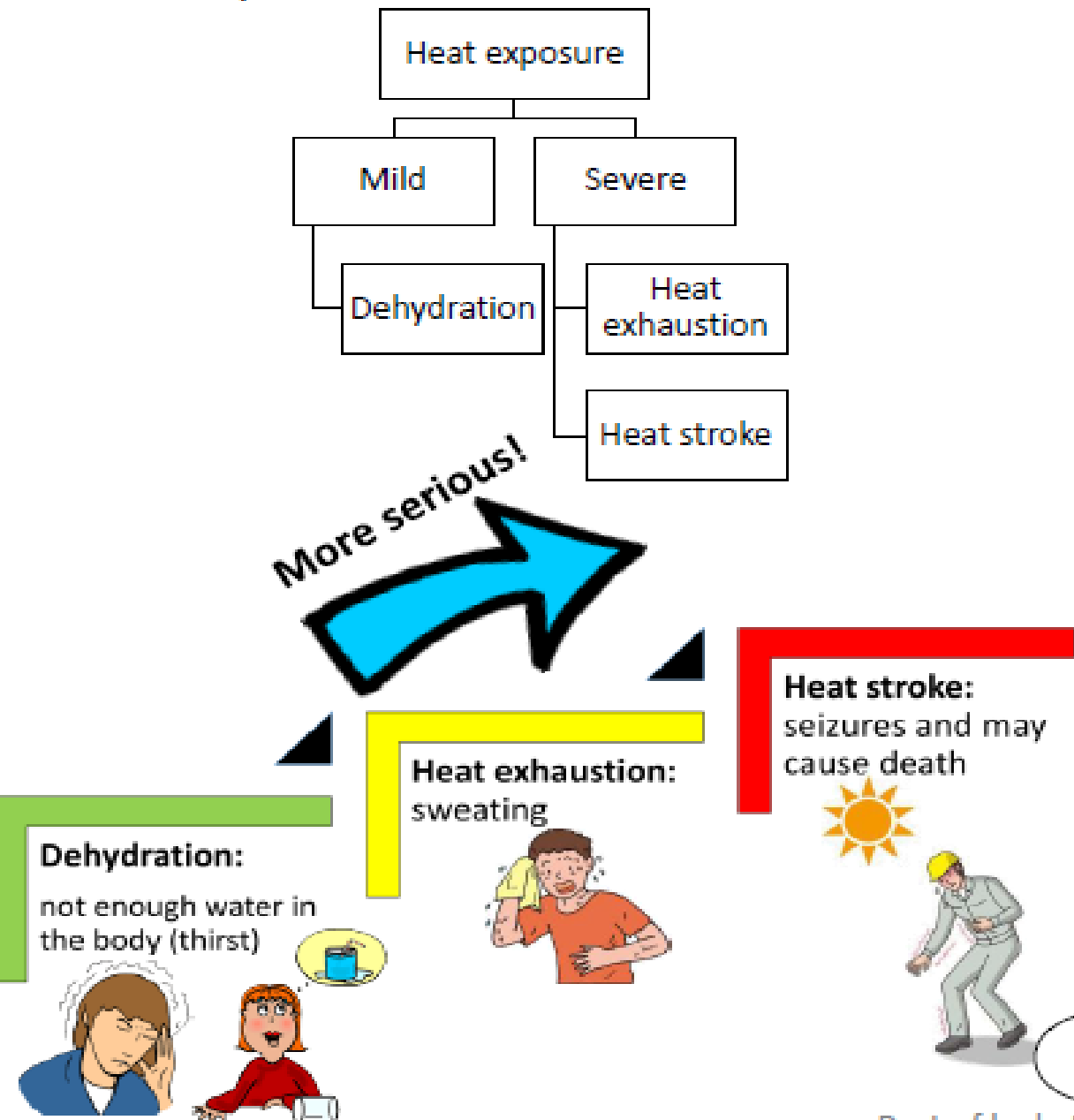
Emergency medical care for Compound fracture

Call the emergency services if:

- the casualty becomes unresponsive.
- there is a large open wound.
- you suspect they have an injury in their head, neck or spine.
- you do not know what to do.

No.	Practical Step
1	Make sure the scene is safe.
2	Get the first aid kit and the AED.
3	Wear PPE, such as gloves.
4	Cover the wound with a dressing.
5	Apply pressure to stop the bleeding. Be careful not to press on a protruding bone.
6	Build up pads of clean and soft material around the bone until it can be bandaged over without pressing on the injury.
7	If needed, treat the casualty for shock.
8	Get the casualty to the hospital.

Unit3: Medical emergencies
Lesson9: Dehydration and heat related illness



Heat-related illness	Dehydration	Heat exhaustion	Heat stroke
Definition	No enough water in the body	Body overheat	Happens when dehydration & heat exhaustion in not treated & it is life threatening
Causes	* Mild heat * Not drinking enough water * Playing sports * Eating salty things * Eating sweets * Fever * Vomiting * Diarrhea	Severe heat exposure	Severe heat exposure
Signs	*Feeling thirsty *Headache *Weakness *Confusion *Dizziness *Less urination than usual	*Heavy sweating *Nausea *Dizziness *Vomiting *Muscles cramps *Fainting	*Confusion *Dizziness *Fainting *Nausea or vomiting *No sweat *Muscle cramps *seizure
How to avoid/ treat it?/ first aid	*Drink water *Eat juicy fruits *Eat yogurt *Put sunblock *Carry umbrella *Drink juice or sports drink	1)First aid kit + PPE + call 999 2) Let the patient lie in cool place 3)Cool the person by water spray & give them water	1)Call 999 2)Put the person in cool water to their neck. If you can not spray them with cool water

Common causes of upper airway obstruction:

- Obstruction by the tongue (anatomical obstruction)
- Foreign objects, such as food or other items which may have been accidentally swallowed (mechanical obstruction)
- Tissue damage
- Allergic reactions
- Infections



Signs of partial airway

obstruction include noisy breathing such as snoring, gurgling, crowing, wheezing and stridor (high-pitched, wheezing sound).

When there is a partial airway obstruction:

- encourage responsive patients to cough to try to clear the airway.
- do not interfere with the patient's efforts to clear the airway themselves.
- if they are not able to clear the obstruction, begin first aid as if there is a complete airway obstruction.

Signs of a complete airway obstruction:

- Responsive patients will be unable to speak, breathe or cough.
- The patient will often grasp their neck and open their mouth. These are visible signs and signals that they are choking.
- They will not have normal chest movements or signs of normal breathing.

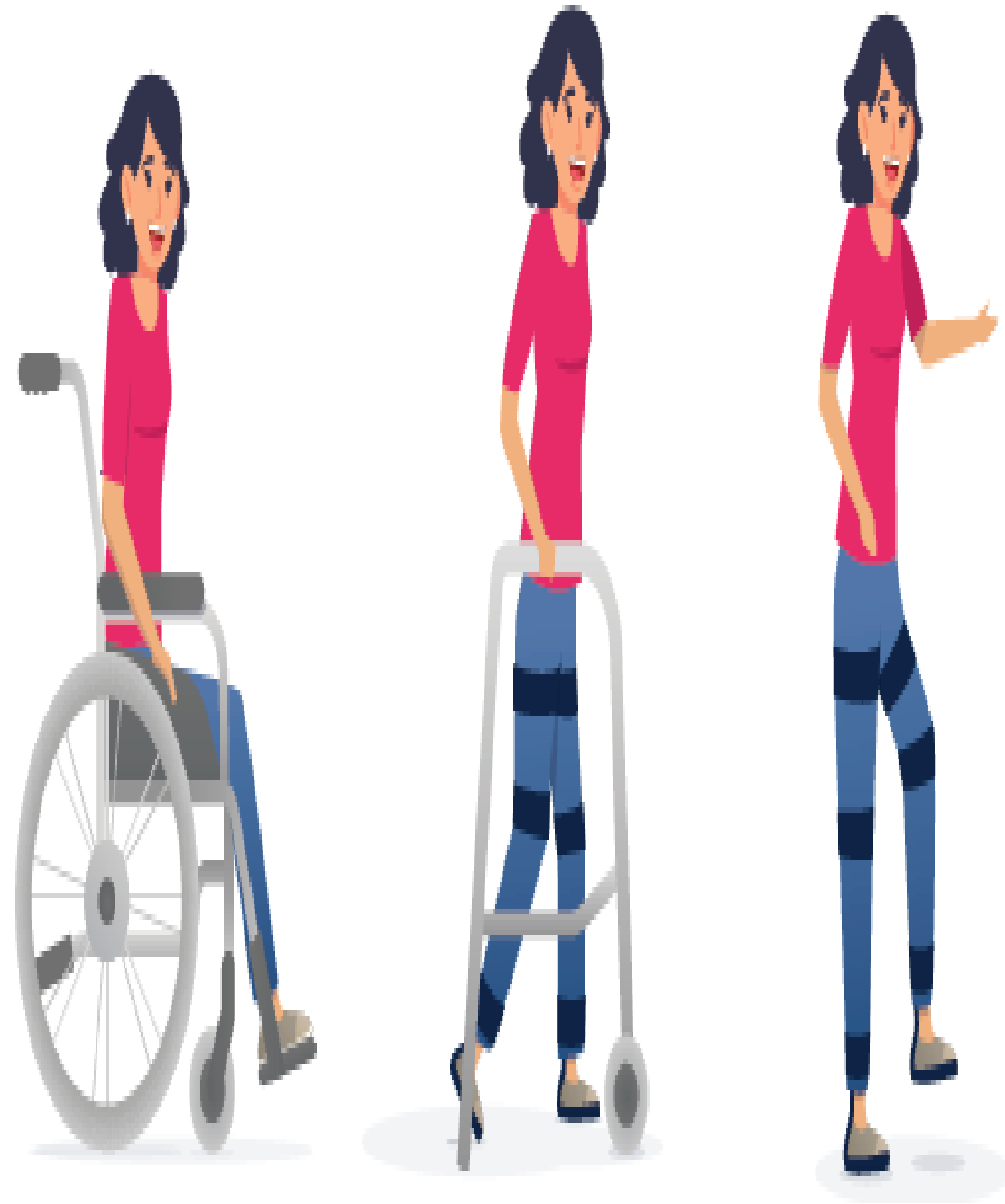


Clearing a complete foreign body airway obstruction from a responsive adult or child

- Identify if there is a complete obstruction.
- Position yourself behind the patient, and with your index finger find their navel (belly button).
- Make a fist and place your fist against the abdomen with your thumb just above the belly button.
- Grab your fist with your other hand and give up to five abdominal thrusts in rapid succession. This method of removing an obstruction is called the **Heimlich manoeuvre.**

Unit 4

Physical therapy and patient ambulation



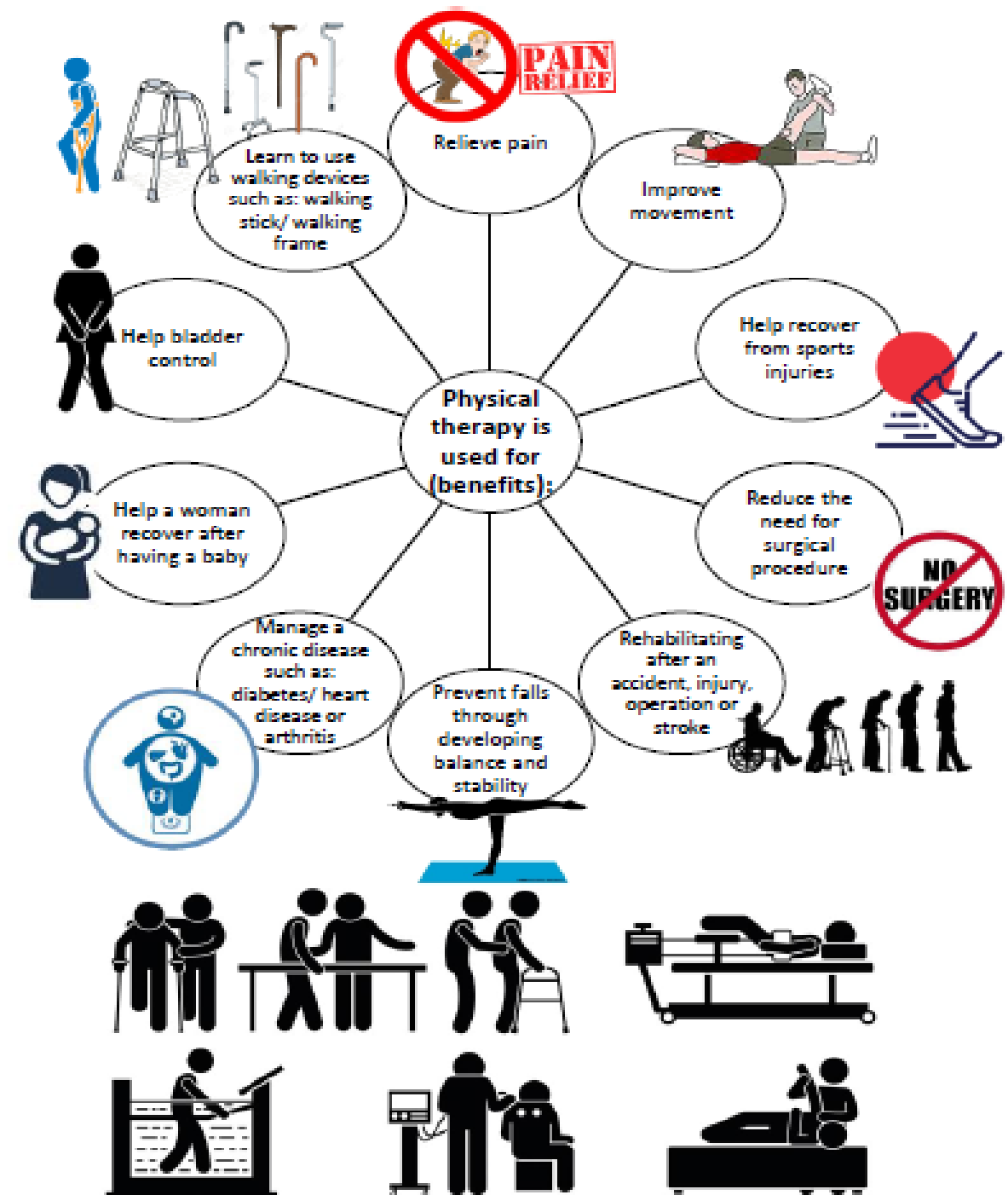
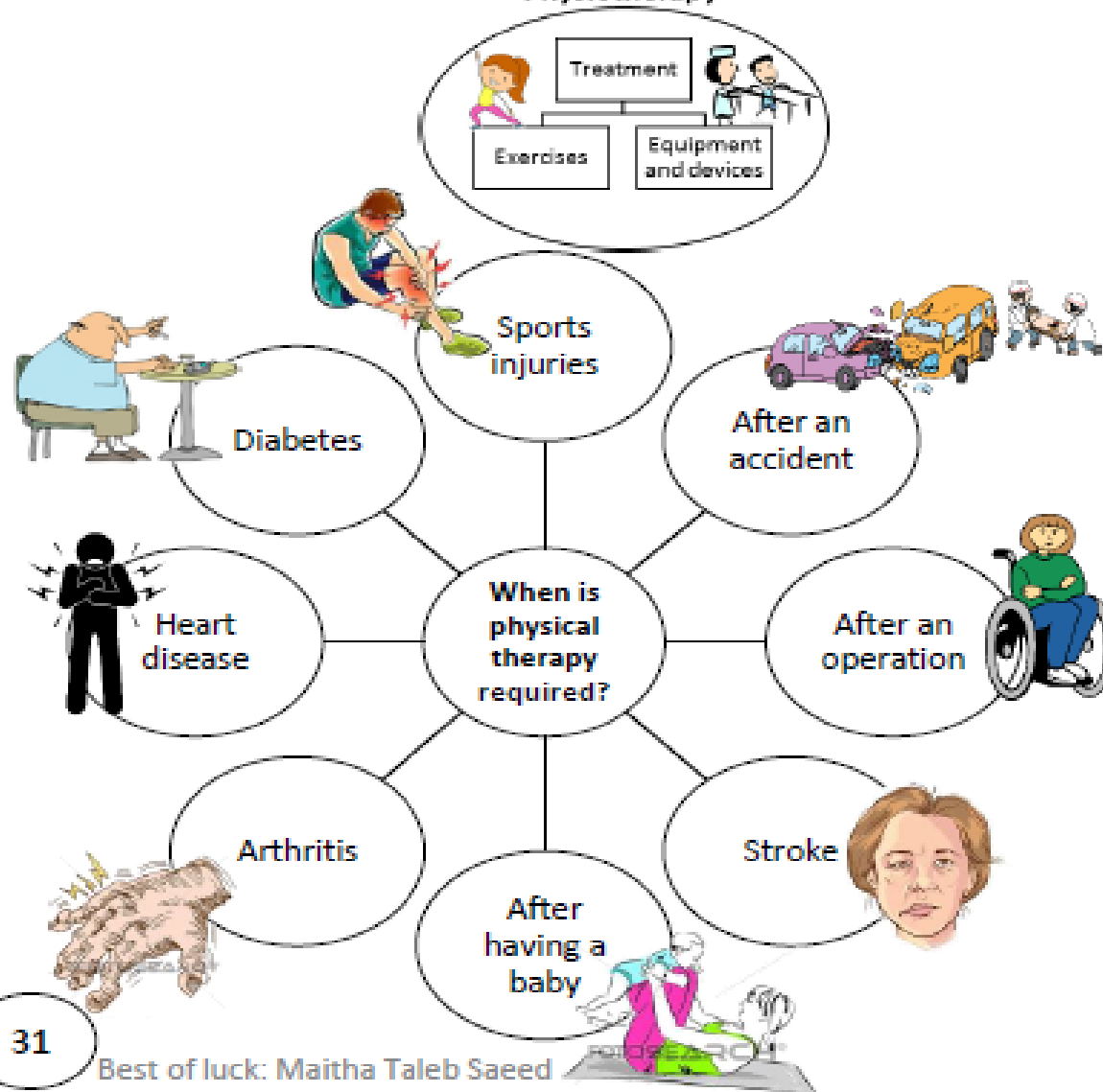
Unit4: Physical therapy and patient ambulation

Lesson1: The purpose of physical therapy interventions

What is physical therapy (physiotherapy)?

Physical therapy: treatment that uses specially designed exercises and equipment to help patients regain or improve their physical abilities.

Physiotherapy



Unit4: Physical therapy and patient ambulation

Lesson1: The purpose of physical therapy interventions

What does physical therapy involve?

First appointment with a physical therapist involve:

1) Initial assessment

Ask questions about:

- *Pain
- *Symptoms
- *How to carry out everyday tasks
- *Sleeping patterns
- *Patient medical history

Test to measure:

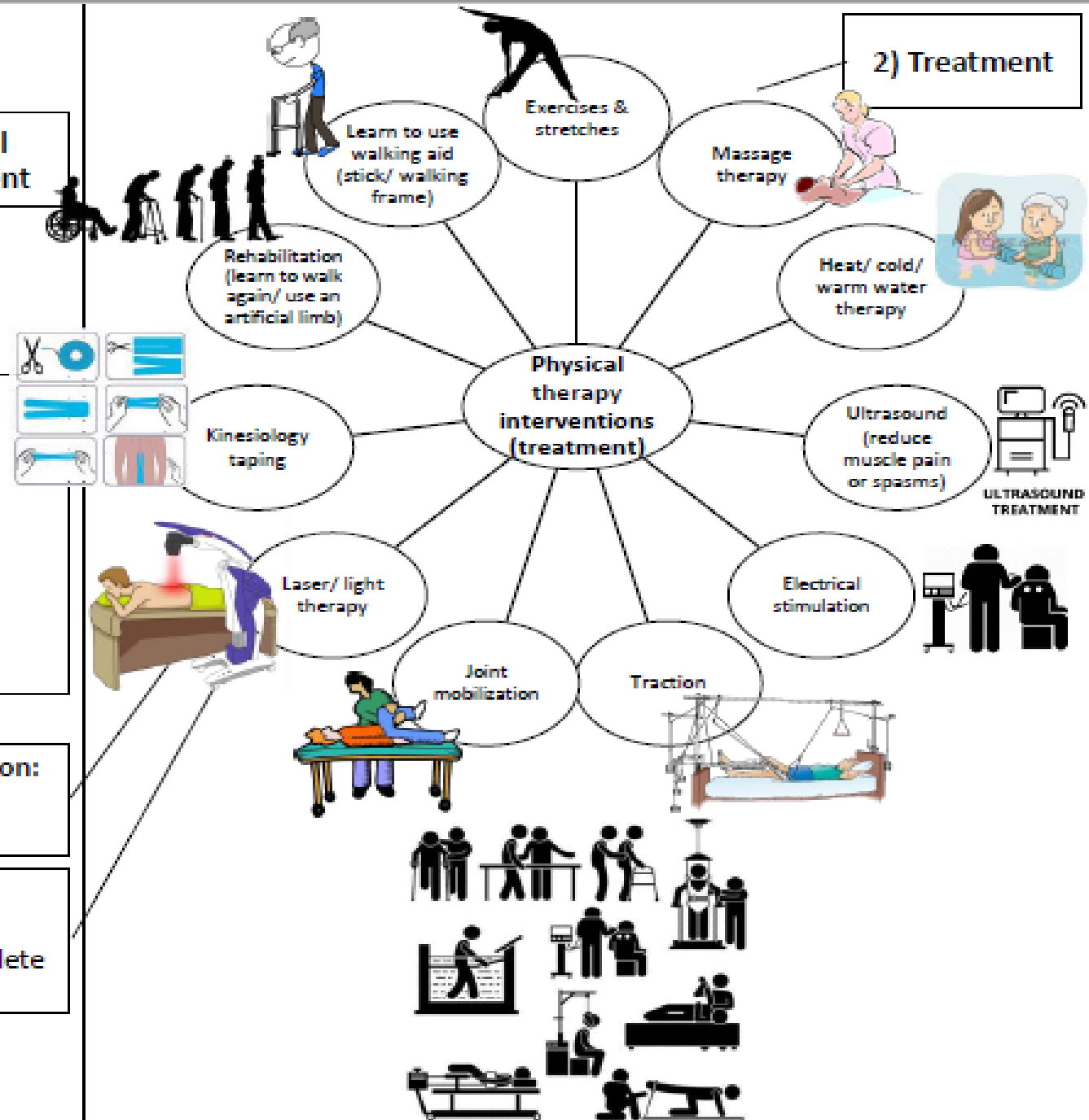
- *How well the patient can move, reach, bend, grip or climb the stairs.
- *Range of movement
- *Heart rate while moving
- *Posture and balance

Treatment length depend on:

- ✓ Severity of the issue.
- ✓ Goal of the treatment.

Note:

Physical therapist will give patients exercises to complete at home



Unit4: Physical therapy and patient ambulation

Lesson2: Patient ambulation and proper movement of patients

Ambulation: moving a person or patient from one place to another.

Ambulation can happen in:

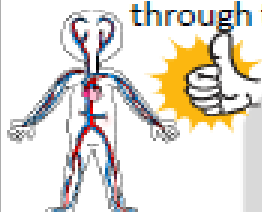
Hospital sitting

At the scene of an accident

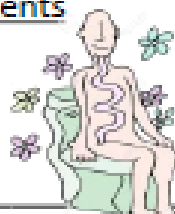
In the home

Moving benefits

Necessary for circulating blood through the body



Being able to have regular bowel movements



Why it is important to ambulate an immobile patient (can not move on their own)?



Maintain strong bones & muscles

Prevent pressure ulcers which may form due to not moving for a long time which put too much pressure on certain parts



Ambulating patients who are immobile

How to safely move a patient up the bed?

- *2 Nurses should work together to move a patient.
- *There should be a sliding sheet or bed pad under the patient.
- *The nurses should stand on opposite sides of the bed.
- *They should hold the sheet & on the count of 3 move the sheet with the patient towards the top of the bed.
- *Stand at top of the bed and pull the sheet towards you.



Turning patients:

There are 3 different positions an immobile patient can be in when in bed:
Their back + on either side.

Warning!
Do not put the patients on their stomach as this can cause suffocation



Assisting patients to stand and walk:

Not walking = weaker bones & muscles.

Nurses can help to reduce the time patient's are not walking by assisting them using walker.

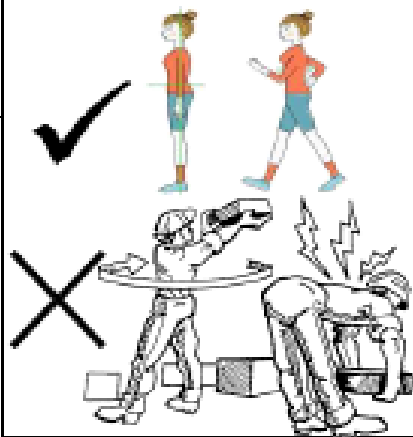
Keep your knees bent.



How to safely move patients?

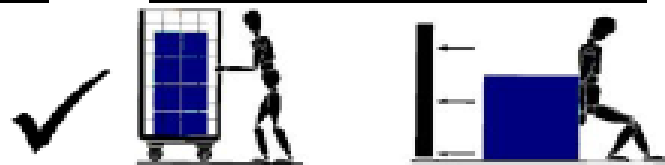
Safe reaching technique

- *Keep your back "locked in"
- *Avoid twisting while reaching
- *Avoid reaching more than 40-50cm in front of your body



Safe pushing & pulling technique

- *Always try to push rather than pull
- *Keep your back "locked in" as much as possible
- *Keep the weight of the patient closer to your body
- *Keep your knees bent
- *Avoid pushing or pulling overhead
- *Keep your elbows bent and your arms close to your side
- *If weight is below waist level, push or pull from a kneeling position



Power lifting

- *Lock in your back.
- *Part your legs about shoulder-width
- *Bend your knees to lower your torso and arms
- *Grasp the stretcher with your hands facing up (power grip)
- *Straighten up your leg until you are standing
- *Keep the weight close to your body



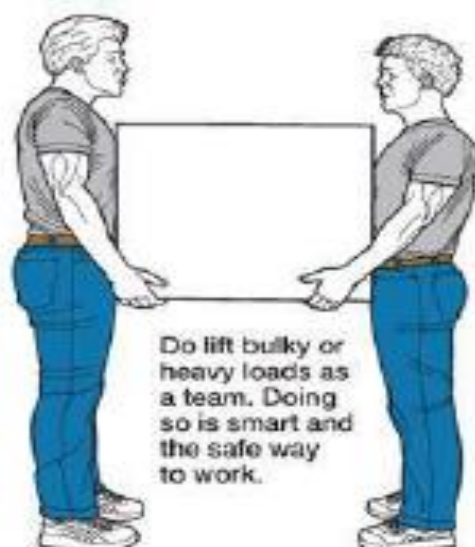
Power grip

- *Palm facing up & thumb extended upward
- *Hands apart by at least 25cm
- *Curl your fingers & thumbs tightly
- *Make sure that the thing is fully supported on your curved palm



LIFTING DO'S & DON'TS

DO LIFT AS A TEAM



Do lift bulky or heavy loads as a team. Doing so is smart and the safe way to work.

DO TURN WITH LEGS



Do move your legs and feet when turning or lowering the load. Avoid twisting at your waist.

DO USE YOUR LEGS

Do lift the load using your powerful leg and buttocks muscles. Your feet should be wide apart, head and back upright. Keep abdominal muscles tight and the load in close.



DO USE EQUIPMENT

Do use equipment like hand trucks, dolly's, or forklifts to do the heavy lifting. It's much less work and less risk of injury.



DON'T LIFT BULKY LOADS ALONE



Don't lift bulky or heavy loads alone. Doing so puts great stress on your low back muscles and spine.

DON'T TWIST WHEN LIFTING



Don't twist when lifting, lowering, or carrying any load as this increases your risk of back injury.

DON'T USE YOUR BACK

Don't lift the load with your rear end high and your head low. Use your leg muscles, not your weaker low back muscles.



DON'T LIFT HEAVY LOADS

Don't lift heavy loads when you can use equipment. It is less work and less stress on your low back.



Activities of daily living (ADLs)

Personal hygiene

(Bathing/ showering/ grooming/ oral, nail, hair care)



Continence management

(A person's ability to control when they go to toilet)



Dressing

(A person's ability to dress themselves)



Feeding

(Eating)



Ambulation

(Moving/ transferring/ mobility/ walking)



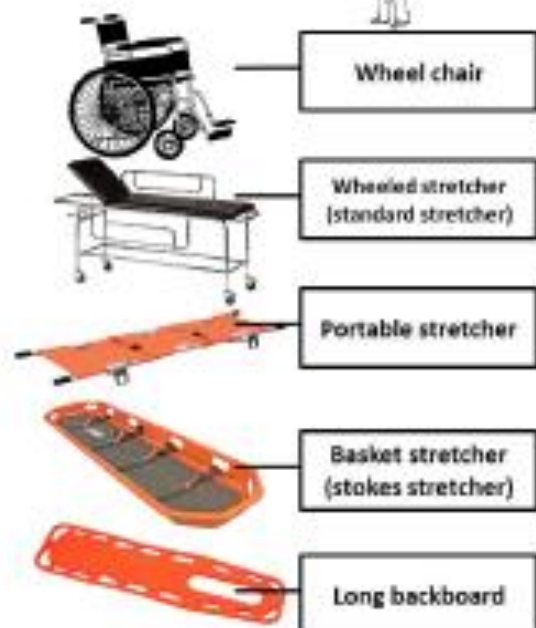
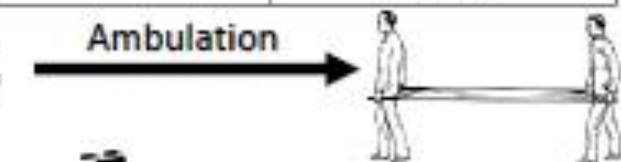
Note: It is important to practice good body mechanics while helping patients to insure your safety



Immobile patient
(can't move)



Ambulation



Possible carrying devices

Best of luck: Maitha Taleb Saeed



It is important to turn the patient to prevent "pressure ulcers" or "bed sores"
1) Right side/ 2) left side/ 3) on back



1,2,3...



To safely transfer a patient from stretcher to bed, at least 2 nurses are needed standing opposite to each other.



Ergonomics:

Designing & using objects in a healthy way



Using a transfer belt can help make moving patients safer.

Carrying techniques

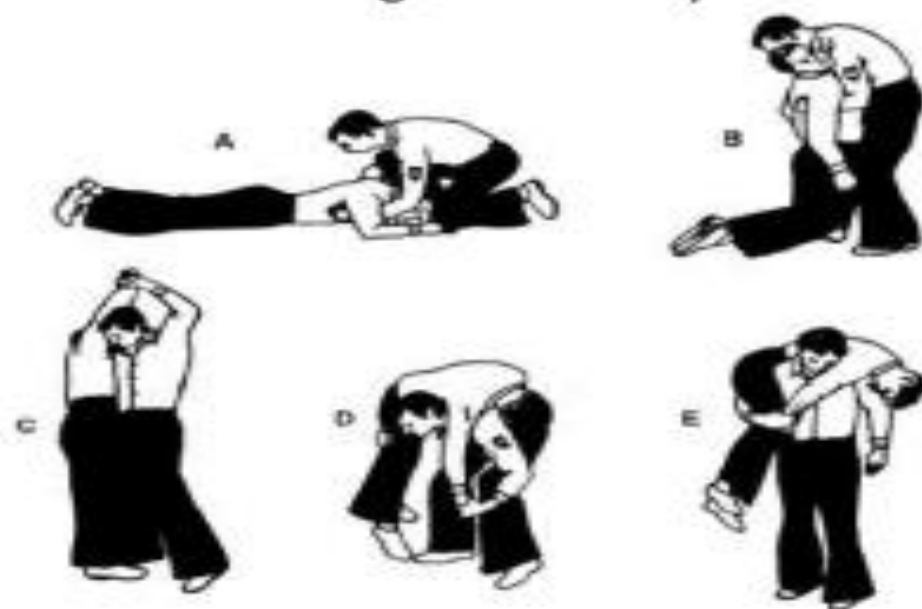
Pack-strap carry



Cradle carry



Firefighter's carry



One-(two-)person walking assist



Two rescuer extremity carry



Patient-carrying devices:



Wheel chair



**Wheeled stretcher
(standard stretcher)**



Portable stretcher



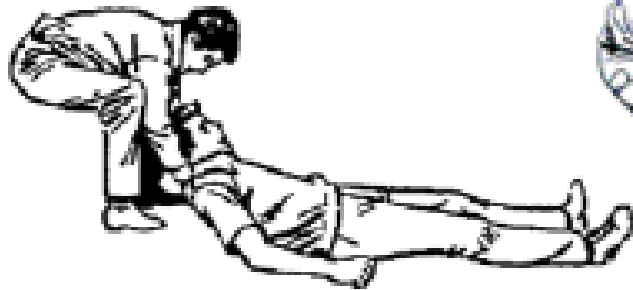
**Basket stretcher
(stokes stretcher)**



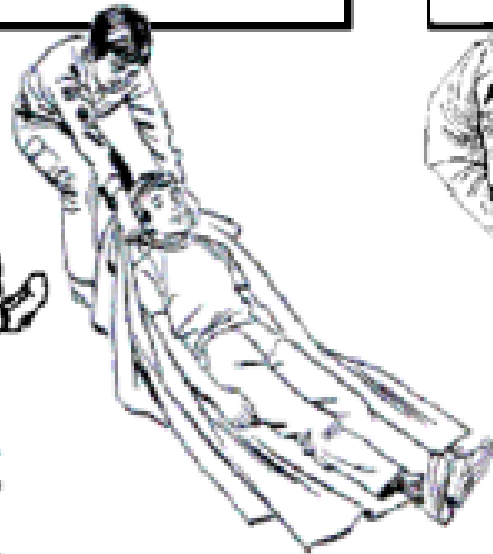
Long backboard

Drag techniques

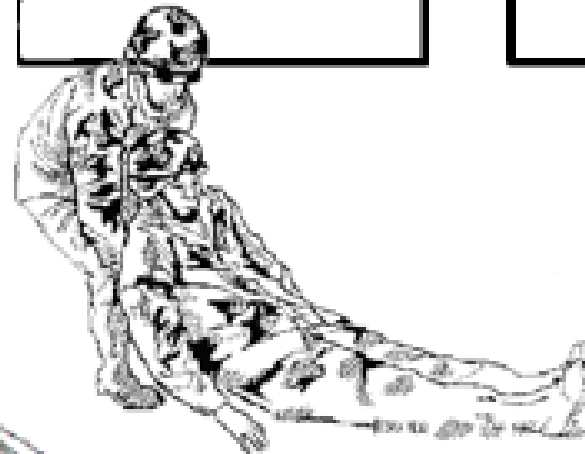
Clothes drag



Blanket drag



Shoulder drag



Ankle drag

