Paediatric First Aid

SMARTT

What is first aid?

The immediate care given to a person who has been injured, or who has become ill prior to the arrival of qualified medical assistance

The aims of first aid (3 P's)

- **P** Preserve Life
- **P** Prevent Worsening
- **P** Promote Recovery

What is paediatric first aid?

It is the direct care administrated to an infant or child who has been injured, or who has taken ill before ambulance arrive

Paediatric first aid

An infant is defined as being from the age of 0 - 1 and a child is defined as being from the age of 1 to the onset of puberty.

Role and Responsibilities of the Paediatric First Aider

Role and Responsibilities of the Paediatric First Aider

- Make sure the first-aid equipment is fit for purpose and in date
- Attend at the scene
- Make sure the scene is safe to go in
- Call 999/112
- Prioritising any type of treatment
- Clean up after the incident
- Record and report

First-aid equipment

First aid equipment

- plasters in a variety of different sizes and shapes (hypoallergenic)
- small, medium and large sterile gauze dressings
- sterile eye dressings
- triangular bandages
- crêpe rolled bandages
- safety pins
- disposable sterile gloves
- tweezers
- scissors
- alcohol-free cleansing wipes
- sticky tape (hypoallergenic)

First aid equipment

- thermometer (preferably digital)
- skin rash cream, such as hydrocortisone or calendula
- cream or spray to relieve insect bites and stings
- antiseptic cream
- painkillers such as paracetamol (or infant paracetamol for children), aspirin (not to be given to children under 16), or ibuprofen
- cough medicine
- antihistamine cream or tablets
- distilled water for cleaning wounds
- eye wash

Contacting the emergency services

contacting the emergency services

999/112

Contacting the emergency services

999: Emergencies Only

999 has been used in the UK for over 80 years and was the world's first single emergency number.

contacting the emergency services

999/112

Contacting the emergency services

112: Emergencies Only

112 was introduced in April 1995 in the UK. It was introduced across Europe in order to give a standard number for travellers to call across the EU.

contacting the emergency services

112

Contacting the emergency services via text

999: How to Text in an Emergency

The number for contacting the emergency services is: **999**

You can send a text to 999 (but you must pre-register for this service). To pre-register, text the word ‘register’ to 999.

You can only send a text from your own phone network. If you have a weak or intermittent signal on your home network sending a text to 999 could be a life saver.

Contacting the emergency services

111: None Emergencies Only

NHS 111 can help if you have an urgent medical problem that is not an emergency issue and you're not sure what to do.

The number for contacting the None emergency services is:

111

Contacting the emergency services

101: Non-emergency number for the Police only

The number for contacting the None emergency services is:

101

101 is only available if you are calling from within England, Wales, Scotland or Northern Ireland. Calls are charged at 15 pence per call.

Clearing up after an incident

Ensure that all used bandages and used items such as personal protective equipment are placed in a yellow clinical waste bags

Ensure that the area where any blood or other bodily fluids have been spilt is thoroughly cleaned

Restock any first-aid kit and replace any other equipment that may have been used during the incident

Record the incident.

Minimising the risk of infection

Its vital not transmit infections or contract infections yourself. To help protect the risk of infection and cross-contamination such precisions we can be taken:

- 😷 **Have good personal hygiene**
- 😷 **Use barrier devices and gloves**
- 😷 **Cover up cuts or sores**
- 😷 **Minimising your contact with blood and bodily fluids**
- 😷 **Changing gloves**
- 😷 **Washing hands thoroughly.**

Assessing an Emergency Situation Safely

Primary survey

A primary survey is a process of

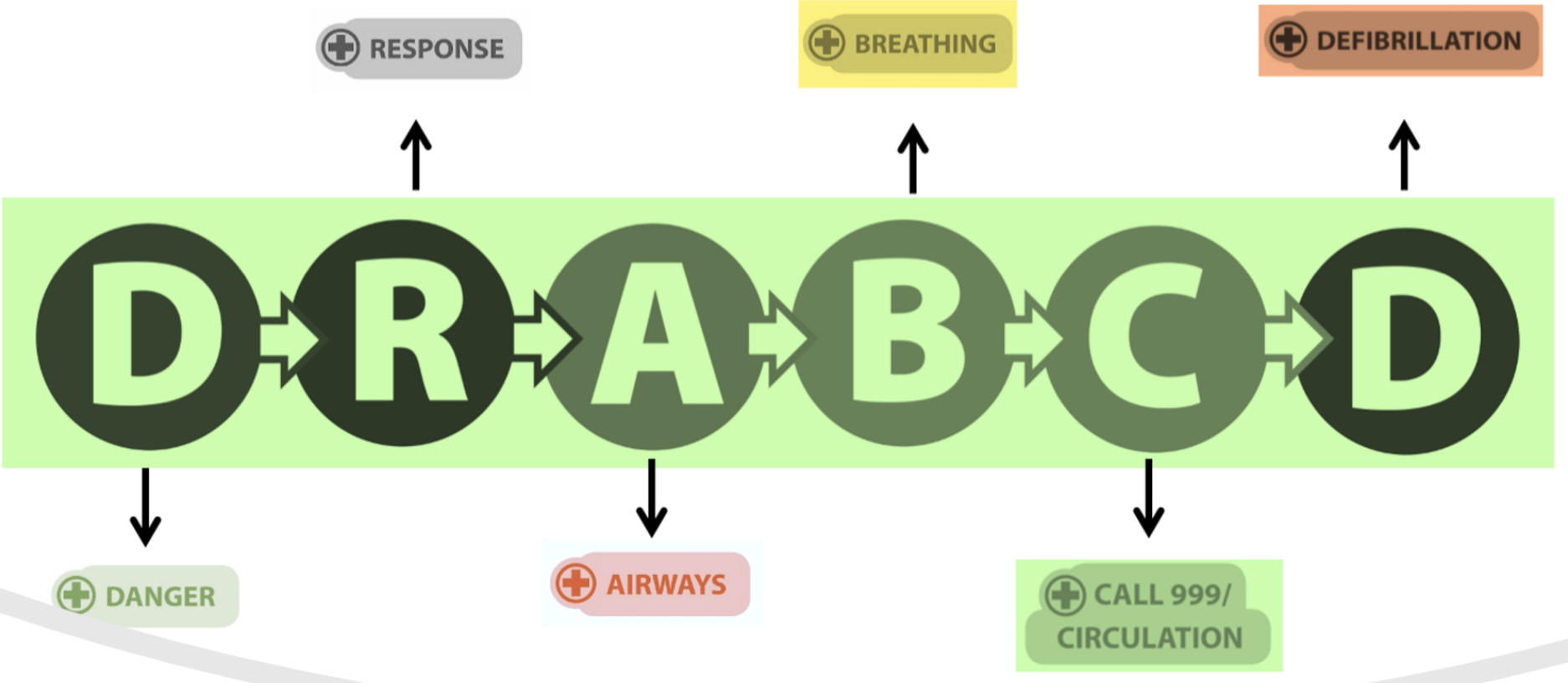
approach

identify

dealing with immediate conditions

This can be remembered by the acronym Doctor ABCD

Doctor ABCD


RESPONSE
BREATHING
DEFIBRILLATION
D
R
A
B
C
D
DANGER
AIRWAYS
CALL 999/
CIRCULATION

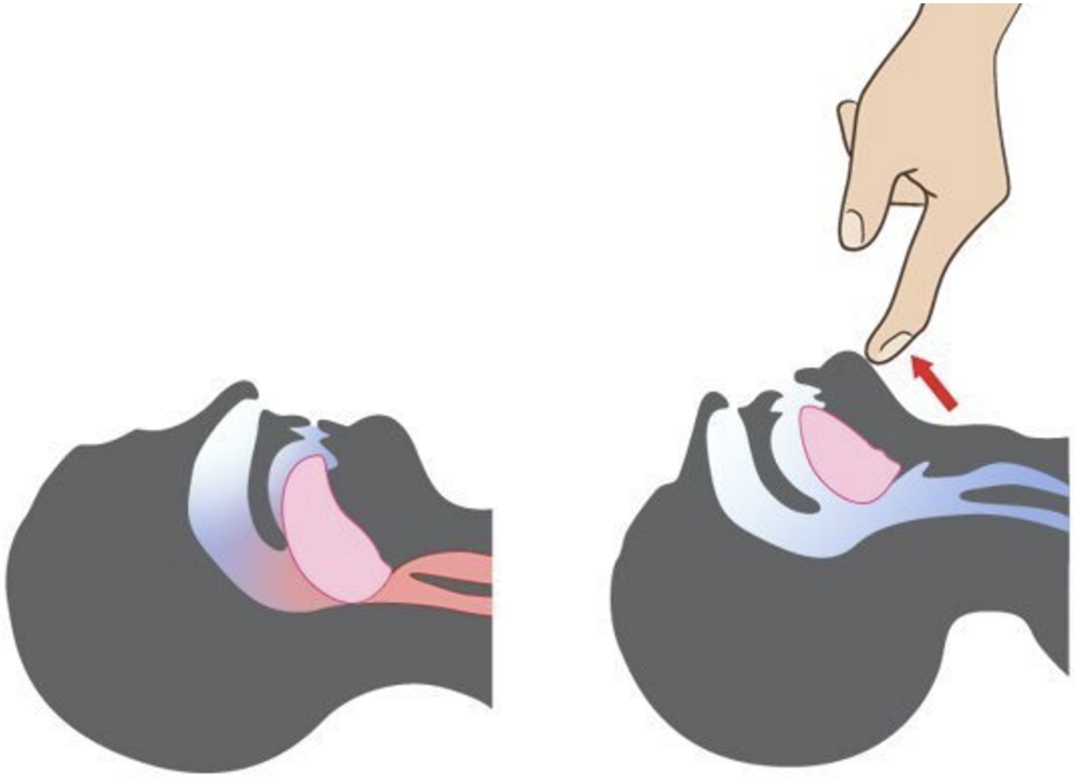
Remove or eliminating any danger to make it safe for you to approach

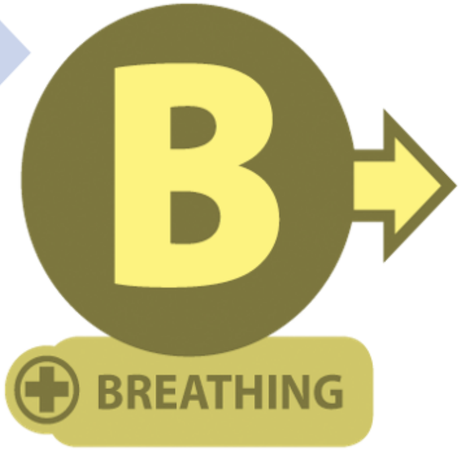
R

RESPONSE

Check to see if you can get any type of response from the child

Open the airway to assist the child to breath





Check the child is breathing normally for 10 seconds.

1. Look - Look out for if the casualty looks to be breathing abnormally, infrequently Slow noisy gasps, know as agonal gasp
2. Listen – for noise
3. Feel – for air

Compression only CPR. If you are untrained or unable to do rescue breaths, administer chest compression-only CPR.

Chest compressions should be at continuous rate and approximately 2 per second

Depth of CPR compressions:
Infant – one third of the depth of the chest, approx. 4cm
Child – one third of the depth of the chest, approx. 5cm.

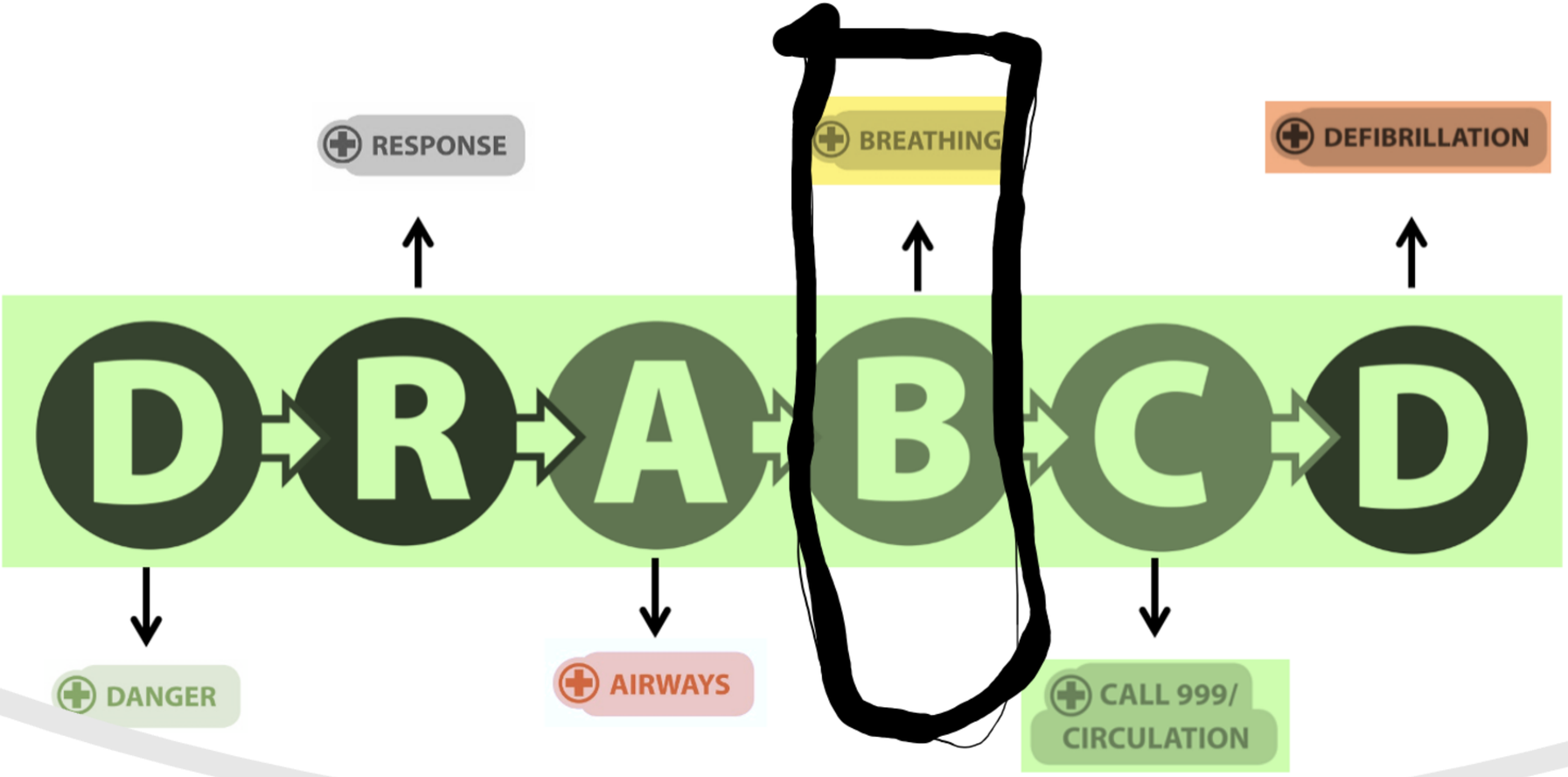
Automated External Defibrillator (AED)

D

DEFIBRILLATION

If you have an AED switch it on and follow the automated instructions. The AED is used in conjunction with CPR.

Doctor ABCD



If the casualty is breathing

The recovery position

Placing the casualty in the recovery position helps to:

- **Maintain a clear airway**
- **Assist with natural breathing**
- **Clear the airway of excretions such as vomit if the casualty is breathing, but unresponsive**

Recovery position
Adult & Child

Bring the arm furthest away, across the chest and place the back of their hand onto their near side cheek, lift the far side leg over and roll them over towards you.

Recovery position
Adult & Child

Bring the arm furthest away, across the chest and place the back of their hand onto their near side cheek, lift the far side leg over and roll them over towards you.

Recovery position
Adult & Child

Adjust the leg so that the knee and lower leg are at an angle – this will prevent the child rolling back on to their back

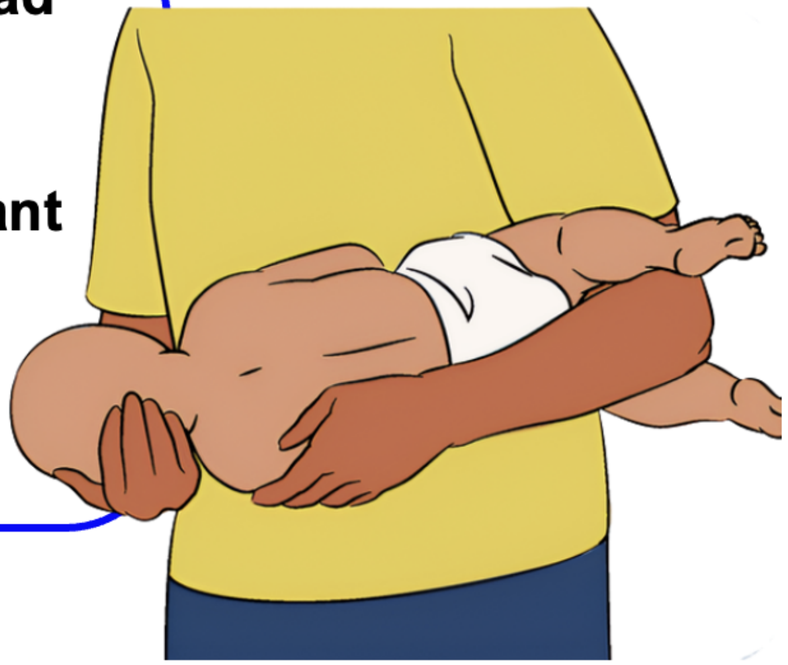
Recovery position
Adult & Child

Check breathing regularly, and be prepared to carry out CPR.

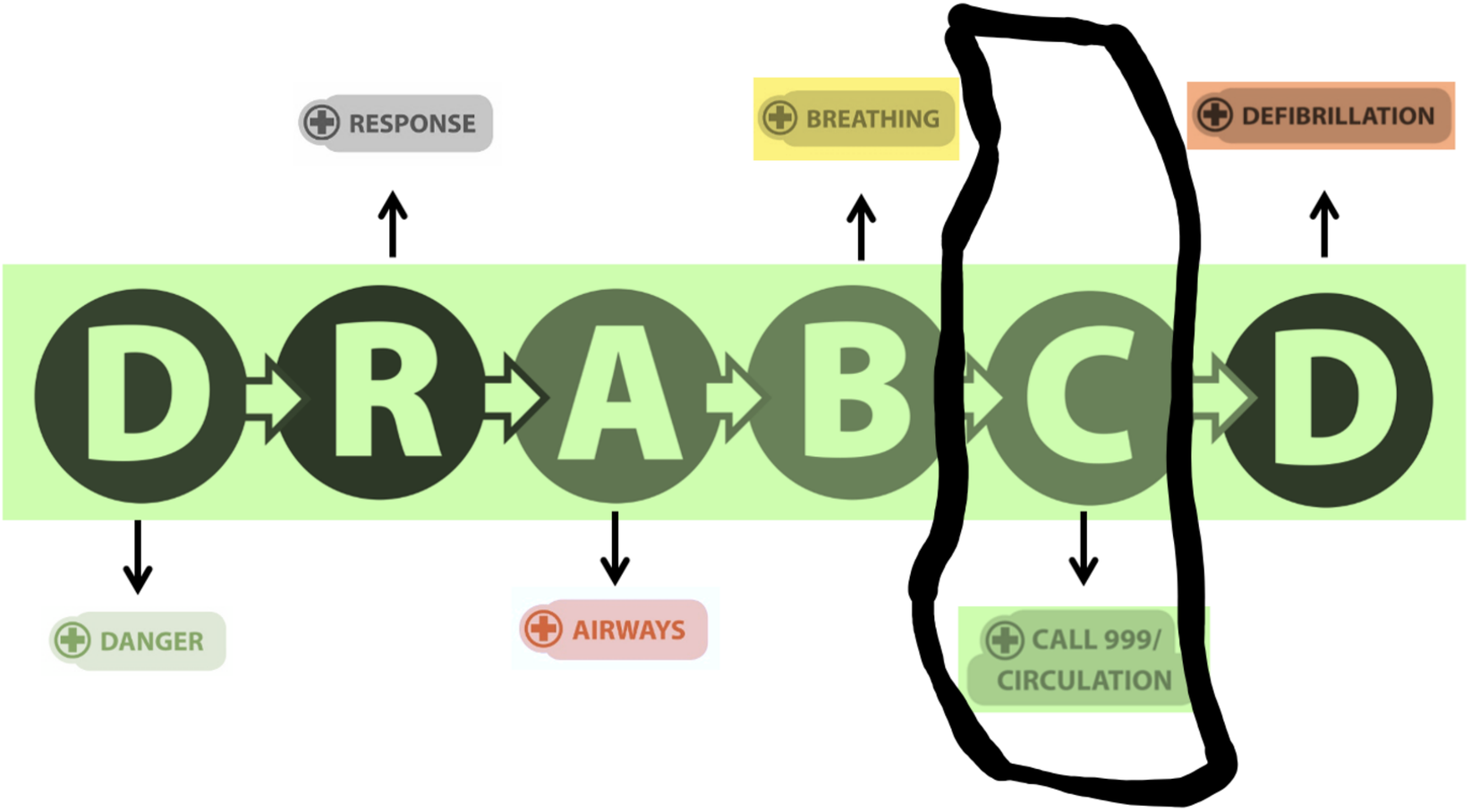
Recovery Position Infant

Hold the infant facing towards you with the head down.

This will allow fluids to flow away from the infant and will also help you monitor their breathing.



Doctor ABCD



If the casualty is NOT breathing

Cardiopulmonary Resuscitation (CPR)

CARDIO = 'heart'

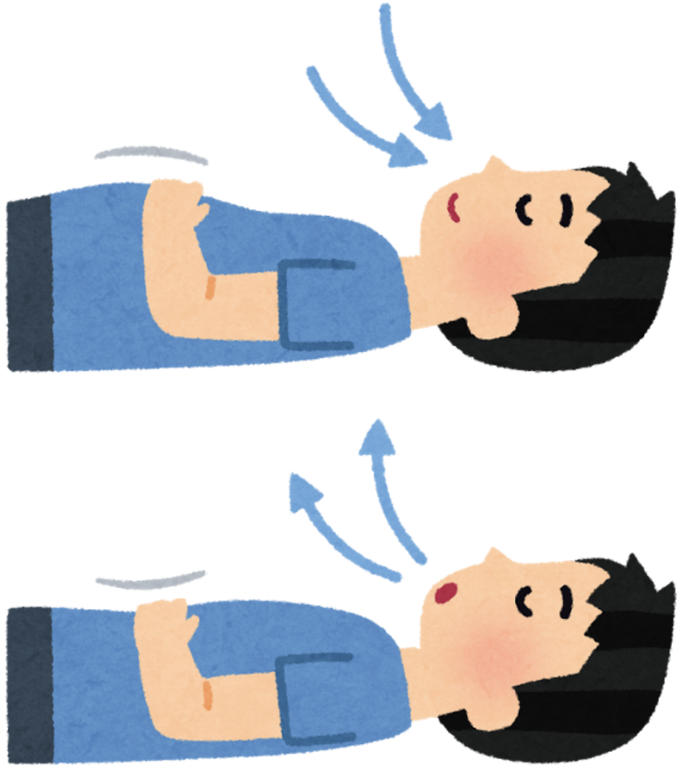
PULMONARY = 'lungs'

RESUSCITATION = 'revive'

Cardiopulmonary Resuscitation (CPR)

If the child is not breathing, start the principles of resuscitation 🏥

- ⛑️ Airway and breathing
- ⛑️ Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillation (AED).

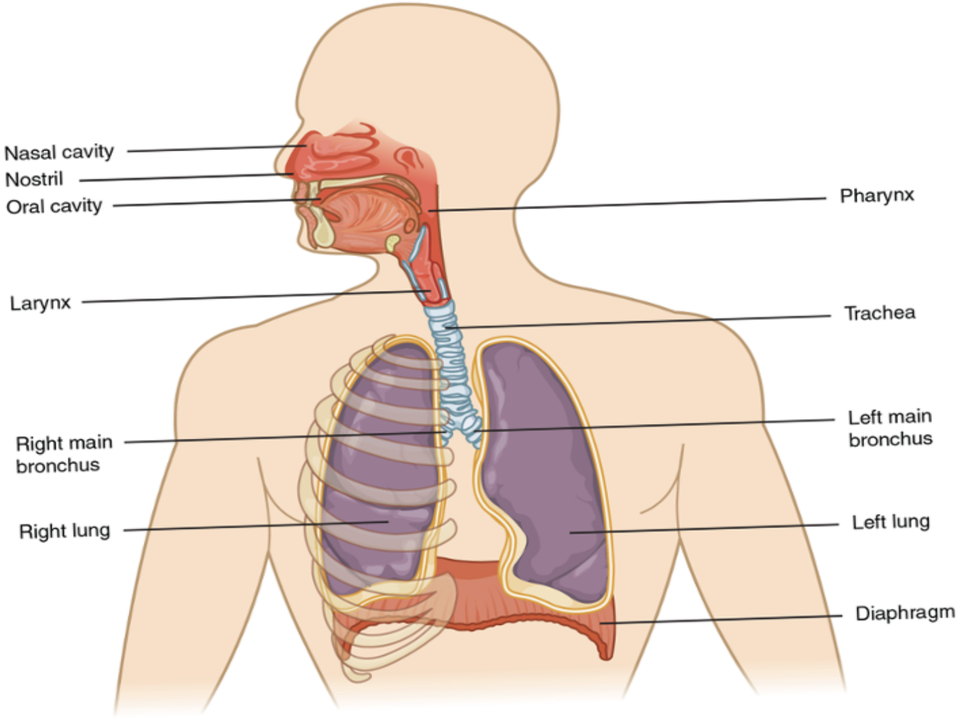


What's in the air that we breathe?

Air that we breathe in:	
Oxygen	20%
Carbon Dioxide	Trace
Nitrogen	79%
Other Gases	1%

Air that we breathe out:	
Oxygen	16%
Carbon Dioxide	4%
Nitrogen	79%
Other Gases	1%

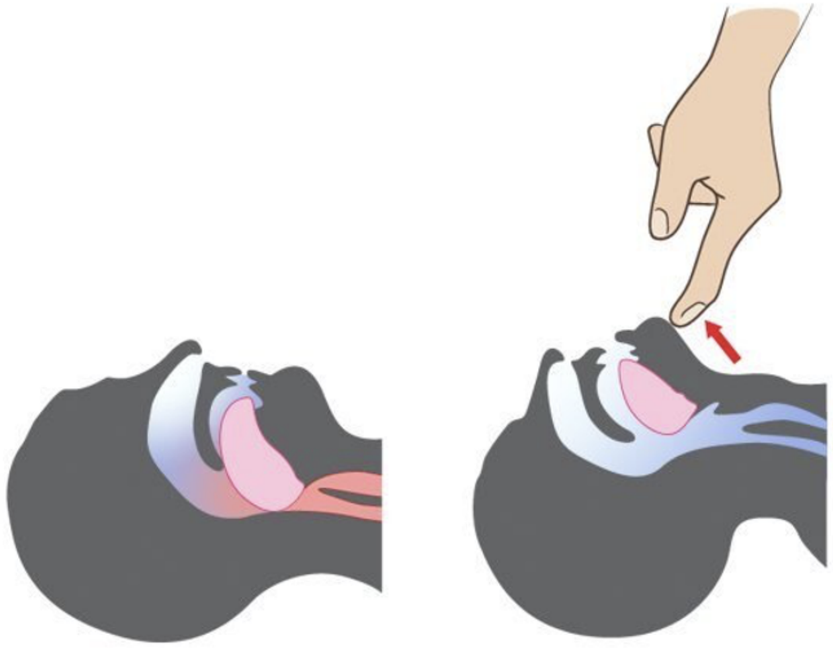
The respiratory system

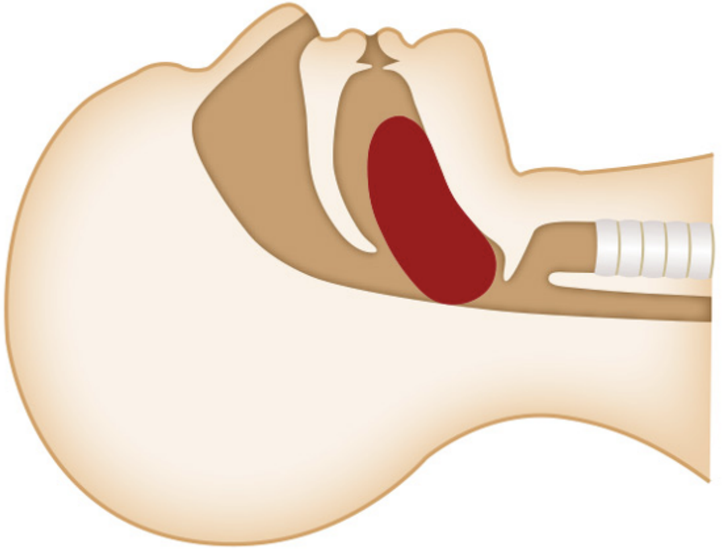


CPR for Infants
Airway
Breathing
Compressions

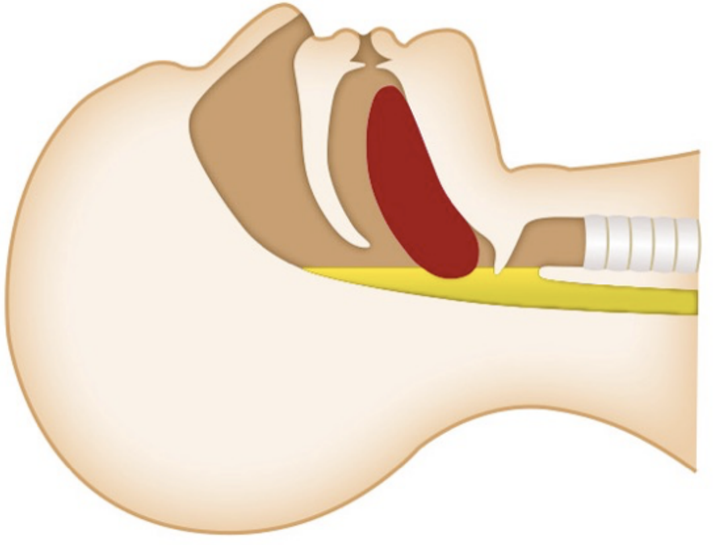
Administer CPR

It is vital that the airway remains open





Airway blocked by the tongue.



Airway blocked by vomit.

Checking for normal breathing

Whilst ensuring that the airway is open and maintained

Checking for 3 things;

1. **LOOK** down the infant's/child's chest for any movement
2. **LISTEN** for normal breathing
3. **FEEL** for breath

Note; Carry out this action for no more than 10 seconds.

CPR

5 initial rescue breaths for child/infant

You might have to seal your mouth around both the Infants mouth and nose

Chest Compressions

Place two fingers on the middle of infants/child's chest. **Give 30 compressions approximately 2 compressions per second**.

Each compression push the chest down by about one third of their body size approx. 4cm. Hold the infants head to stop their chin dropping down

Place two fingers at the centre of child's chest. **Administrate 30 compressions at a rate of approximately 2 compressions per second**.

Each compression push the chest down by about one third of their body size approx. 5cm .

Administer CPR

Compressions **MUST** only be given to a person who is not breathing or has an agonal gasp

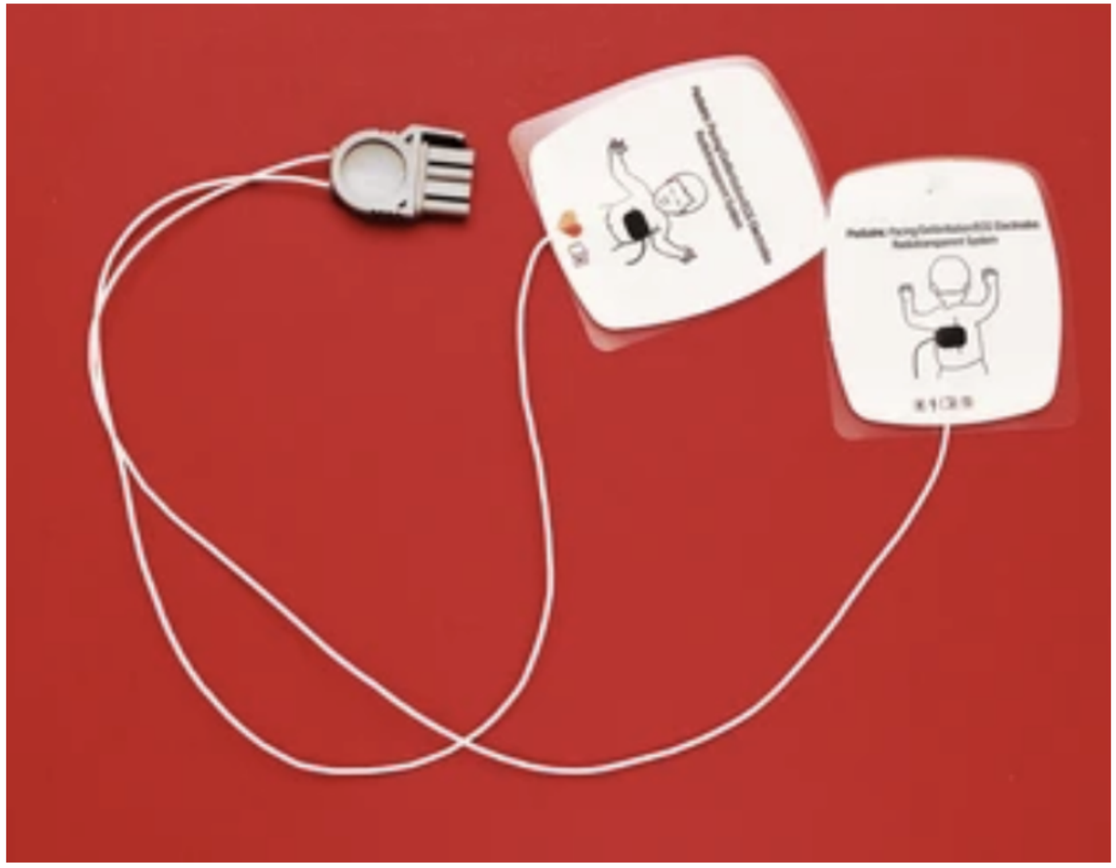
Automated External Defibrillator

Take the AED from the case and switch on

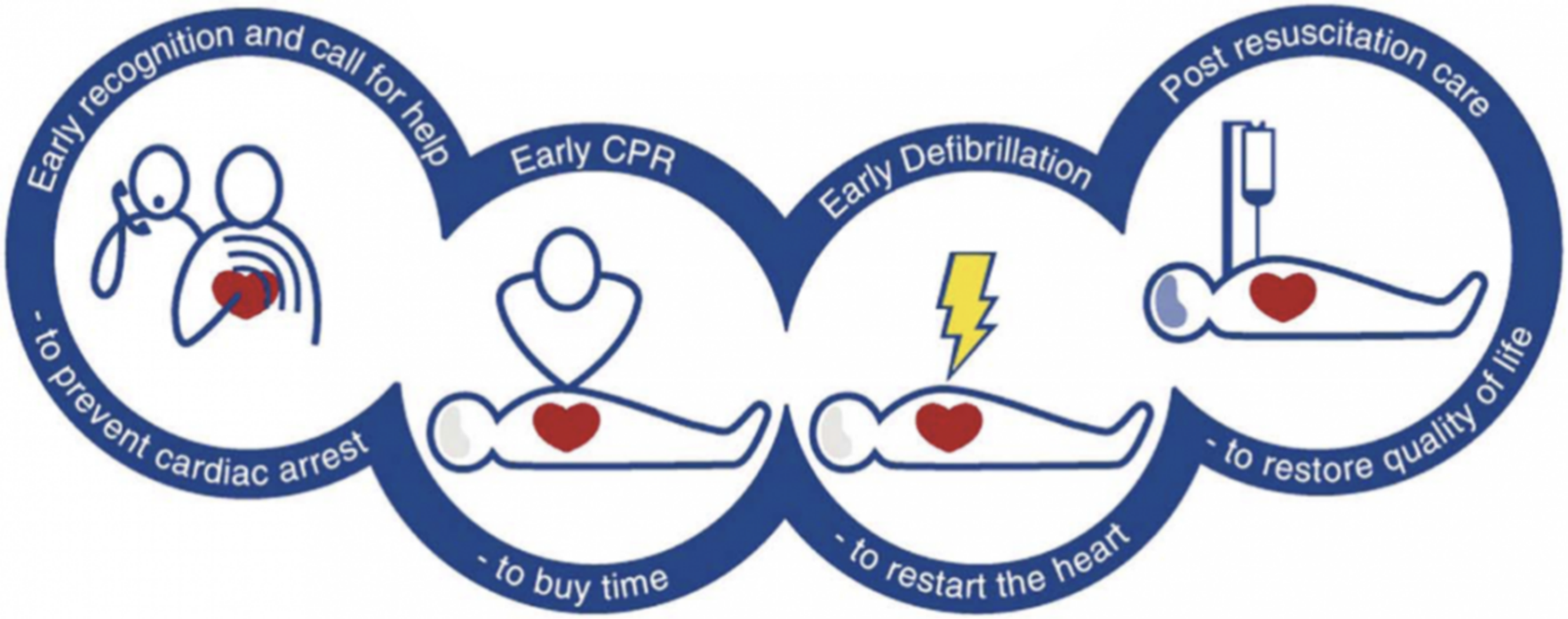
Follow the automated instructions

Apply the pads

The AED will analyse the heart rhythm and instruct you what do to next

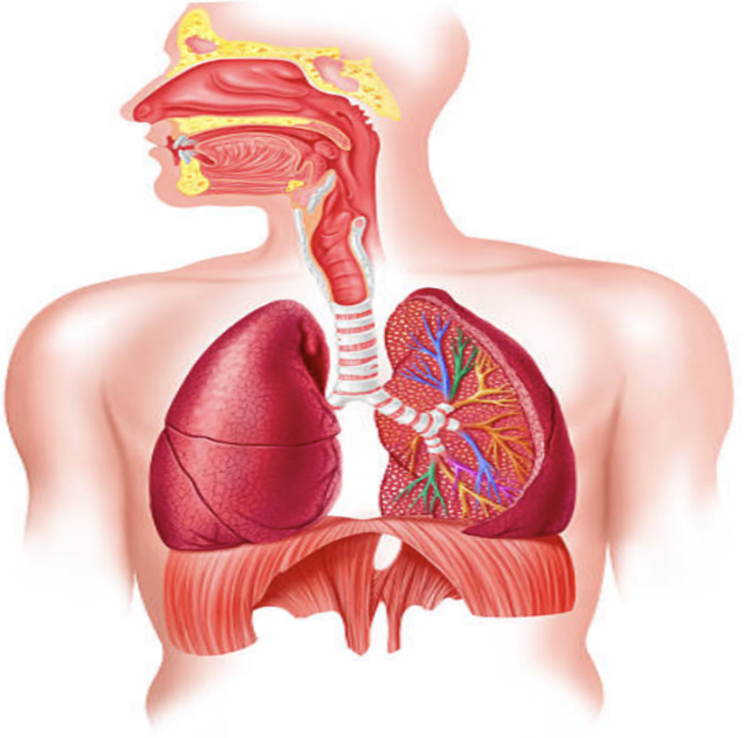


Chain of Survival



KEEP
CALM
AND
REMEMBER
DRABCD

Respiratory System



Choking

Choking can have many different causes such as,

- food
- foreign objects
- allergic reactions
- asthma attacks
- severe bleeding
- vomit/nausea
- infections

Choking

Recognition

- Grabbing at the throat area
- struggling to breathing or speak
- Cyanosis (blue/grey)
- Eyes enlarged and watering
- Signs of distress

How to deal with choking

Try and enough the infant/child to cough

If this does not work deliver Back Blows (INFANT)

Try seated or kneeling position greatly assists in safely supporting the infant.

Support the infant's head by making a cradle with your fingers and thumb and supporting the jaw.

Give 5 sharp back blows with the heel of your hand in the middle of the back between the shoulder blades.

Checking the obstruction to see if it has dislodged with each blow.

Back blows NOT successful (Infant)

Administrate Chest thrusts

Support the infant down your arm

Give 5 chest thrusts on the lower sternum (use one or two fingers to carry this out). (Chest thrusts are similar to chest compressions but sharper and delivered slower).

Continue with 5 back blows and up to 5 chest thrusts until medical help arrives.

If the infant becomes unconscious, give 5 initial rescue breaths and commence CPR.

If this does not work deliver Back Blows (child)

BACK BLOWS

Lean the child forward and support their upper chest

Give 5 sharp back blows with the other hand.
Checking the obstruction with each blow has not dislodged

If after 5 back blows the obstruction has not removed, then administer up to 5 abdominal thrust (previously known as the Heimlich maneuver)

Back blows NOT successful (Child)

ABDOMINAL THRUSTS

Stand, sit or kneel behind the child. Place your arms under the child's arms and clench your fists placing it between the belly button and the lower part of the sternum.

Grasp both hands and pull sharply inwards and upwards.

If the obstruction has not cleared, call 999/112 and continue with 5 back blows and 5 abdominal thrusts or until medical help arrives.

If the child becomes unconscious, give 5 initial rescue breaths and commence CPR.

Treating a choking child

If the child is small, it may be easier to lay the child across your knee in to administer back blows. Children should be taken to receive medical attention

if they have received abdominal thrusts or, even with a cleared obstruction, they still have difficulty in swallowing or still feel as though they have an object stuck in their throat.

The circulatory system

The circulatory system

The heart, blood vessels and blood for the main parts of the circulatory system. If the circulatory system malfunctions then this can lead to major life-threatening conditions and may cause health issues in the future. The amount of blood in an infant's or child's body is a lot less than an adult. With this in mind, extra care needs be taken with an infant or a child who is bleeding

Heart beats per minute:	Infants **110-130** Children **90-110**

The human body will malfunction if one third of blood has been lost. Blood pressure will fall very quickly and the situation will be critical.

BLEEDING

Types of bleeding

Internal bleeding

Happens when blood leaves from the circulatory system but remains inside of the body. Signs of internal bleeding can be visible, for example when the person coughs up blood or vomits blood

External bleeding

Happens when the blood escapes from the circulatory system to the outside of the body for example, a cut.

Arterial bleeding

Artery. bright red in colour and the blood will pump from the cut/wound at the same time with the persons heartbeat (this is known as oxygenated blood)

Venous bleeding

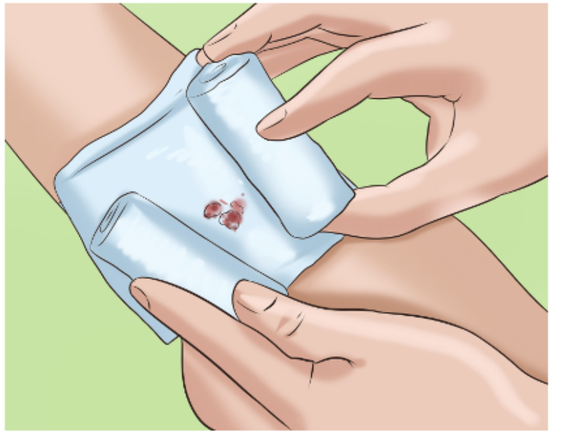
Vein. dark red in colour and will gush or flow from the cut/wound (this is known as deoxygenated blood)

Capillary bleeding

Oozes from the cut/wound from underneath the skin, for example, bruising/contusion.

Treatment of bleeding

- B Examine the wound
- B Apply direct pressure onto the wound to try and stem the bleeding
- B Apply a sterile dressing and elevate the injured part if possible
- B If blood seeps through the first dressing apply a second
- B Support and elevate the wound be prepared to treat for shock
- B Do not allow smoking, eating or drinking , contact Emergency Services and monitor



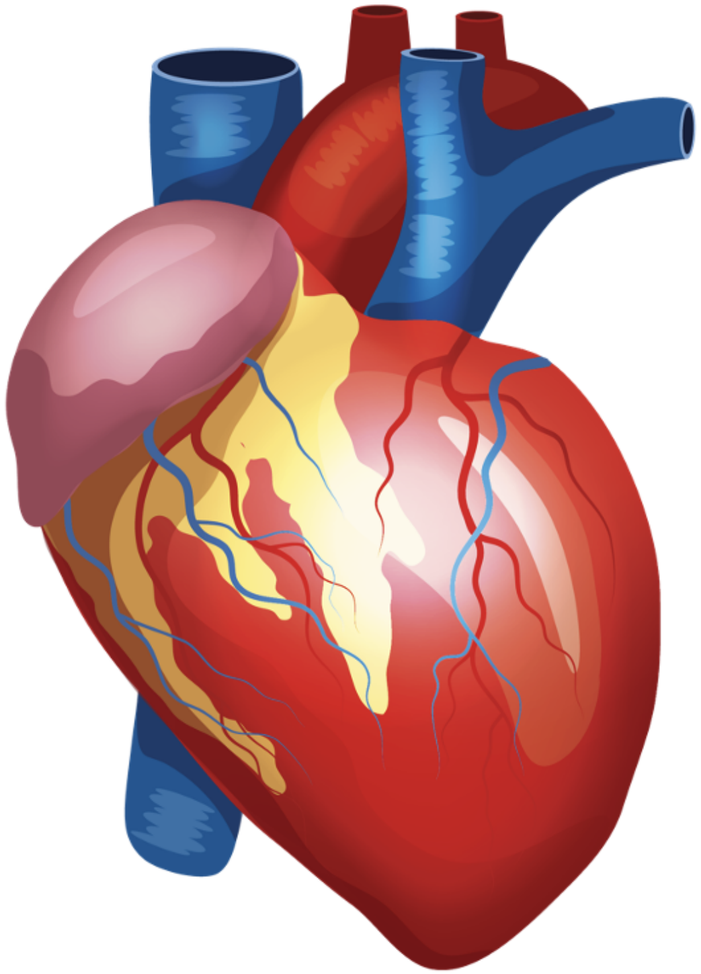
- If the blood seeps through a second dressing, then remove both dressings and start again.
- Elevate the wounded part and if needed treat for shock
- A triangular bandage can be folded to help support a limb. It also can be used to apply extra direct pressure over a sterile dressing

Wounds with an embedded foreign object

Use a rolled cloth or triangular bandage to make a donut ring

Call (999/112), monitor the infant or child and if required treat for shock

Shock



Physiological shock

Recognition

A number of things can trigger Physiological Shock such as:

- Major bleeding
- Diarrhoea and/or vomiting
- Poisoning
- Witness an accident
- Spinal or head trauma
- Heart attacks and strokes

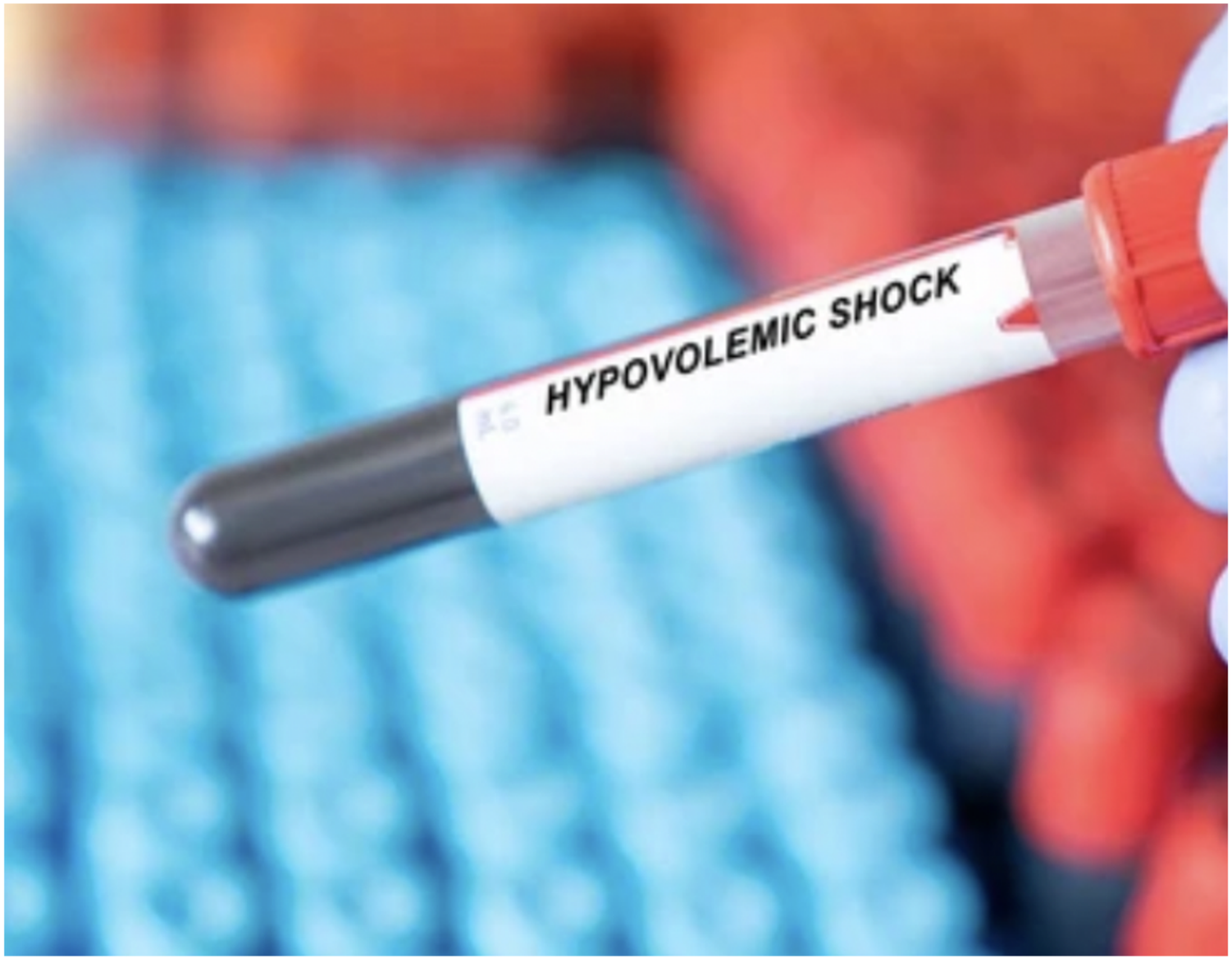
How To Recognise

- A possible visible wound
- Blue/grey, cold, and clammy skin
- Fast weak pulse
- Narrow breathing
- Nausea/sick and thirsty

Treatment

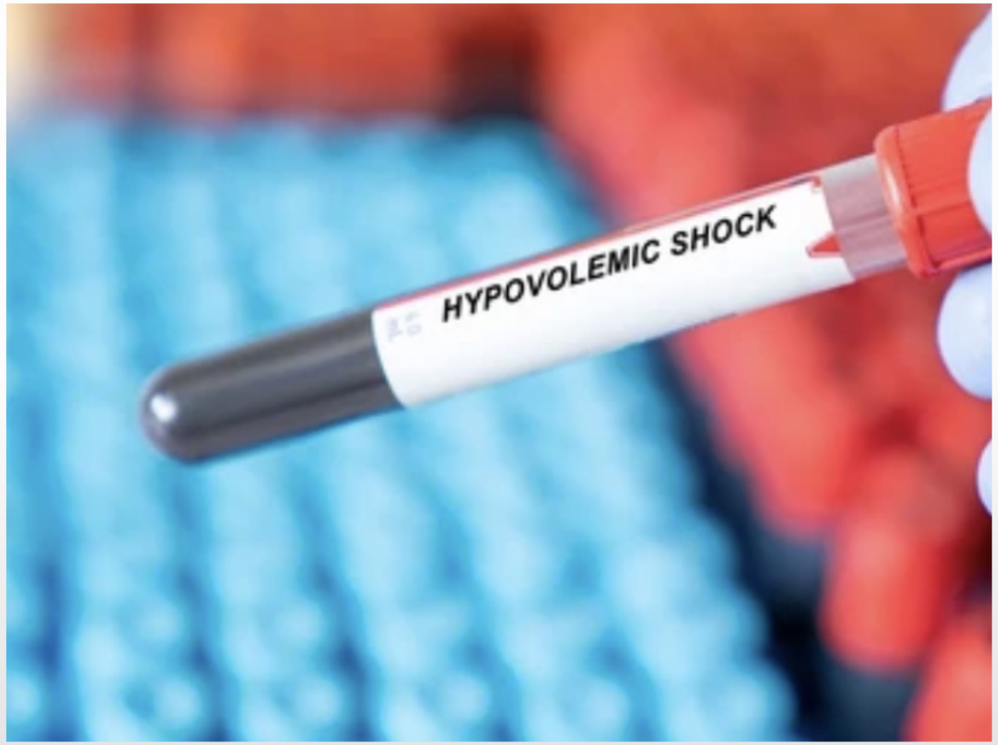
- Lay on a flat surface and raise the leg of the child and above the level of the heart
- Loosen any restricted clothing
- Keep the child warm and comfortable
- Monitor the child
- Never give food or drink as it may induce vomiting
- Call 999/112)

Hypovolemic shock



Hypovolemic shock may be caused by

loss of blood
diarrhoea
vomiting
heat stroke
Burns
poor fluid intake



Recognition

Pale and clammy skin

Fast breathing

Anxious

Weak pulse

Need to urination

General weakness

Treatment

Call 999/112

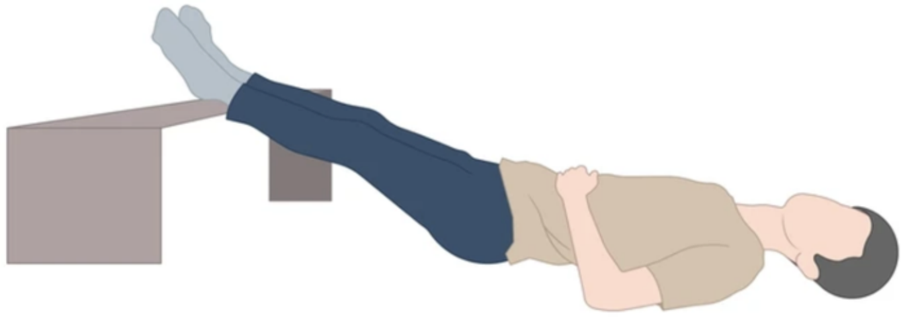
Treat for any bleeding

If possible lay the child down and raise their legs

Keep them warm

Do not give any fluids or food

Check their airway and breathing



Minor injuries

Minor injuries are not life-threatening conditions; however, if they are left untreated, they may lead to infection and other complications.

They are common for infants and children and are an unhappy part of growing up.

The most common minor injuries are:

- minor cuts
- grazes
- bruises

Minor cuts and grazes

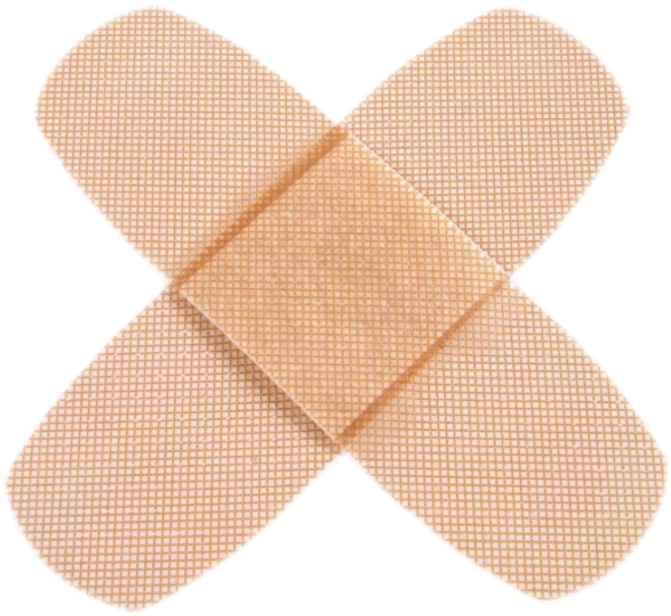
Minor cuts

Minor cuts seam top be the most painful and sometimes hardly bleed however.

Grazes

A graze (or abrasion) is a scraping or rubbing away of the skin surface. Grazes are superficial and usually heal within 2 weeks with self-care.

Treatment Minor cuts and grazes



- 👨‍⚕️ Check for any type of embedded objects
- 👨‍⚕️ Clean around the affected area with a sterile cleansing wipe
- 👨‍⚕️ Apply direct pressure to the wound
- 👨‍⚕️ Apply a dry sterile dressing or hypoallergenic plaster to the wound

Bruises

Contusions (bruises)

The medical term for a bruise is a contusion. **Injuries to bones, muscles, and the tissue just under the skin** can cause bruises.

Treatment

Rest *the area where the bruise is*

Apply **Ice, inside a bandage/sock**

Compress *the area*

Elevate *where at all possible*

Small splinters

Splinters are an object that is embed into the skin. It can be either fully or partially

Splinter can often be painful and are a common occurrence that can be caused by things like;

- 👌 pieces of glass
- 👌 wooden splinters
- 👌 plastic splinters
- 👌 metal splinters

Treatment (partially embedded)

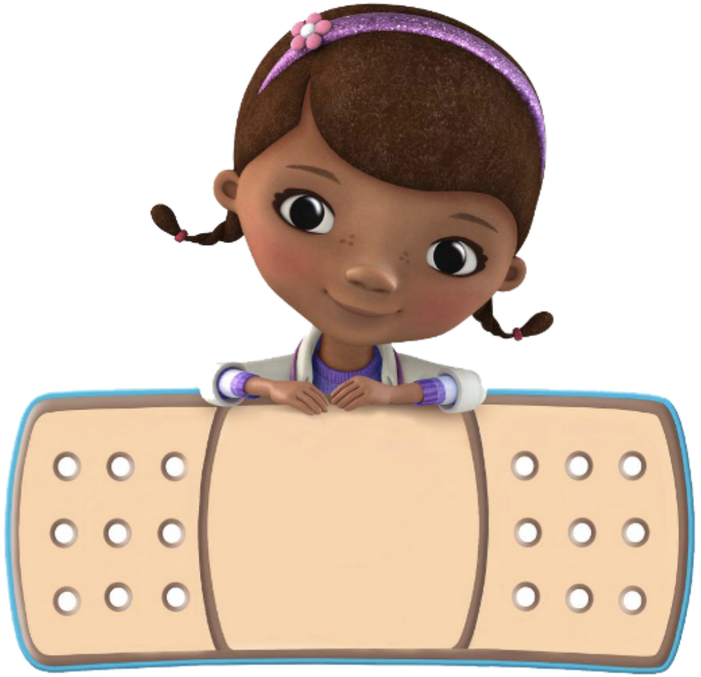
- Clean the area around the splinter
- check that your tweezers are sterile
- Draw the splinter out in the direction of the entry
- check for signs of possible infection.

Treatment (fully embedded)

Clean the area in and around the splinter

Fully embedded splinters use what's called the ‘drawing technique’

- 🖐put a plaster over the splinter and leave overnight
- 🖐remove the plaster and check if the splinter has been drawn



Nosebleed

Nosebleeds are often caused by:

- direct blow any where on the nose
- vessels in the nose bursting due to picking or blowing
- increase in high blood pressure

Treatment

- 👃try sitting the child down and get them to lean forward. For an infant you may have to position them
- 👃pinch the soft part of their nose. If they cant you will need to do it for them
- 👃keep the pressure for about 10 minutes and release slowly

Repeat if the bleeding is still present

don’t allow them to blow or pick their nose

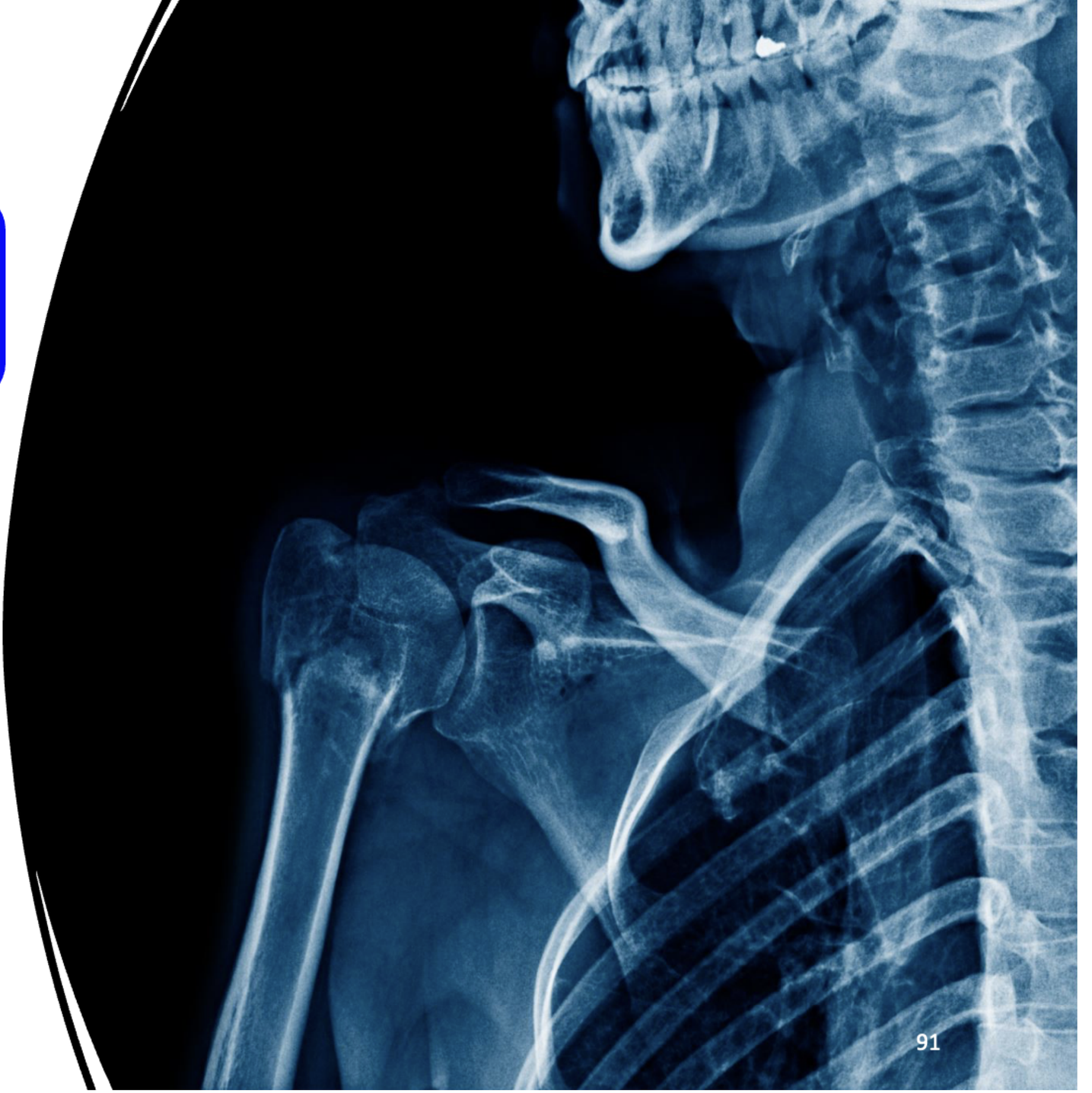
after 20 minutes and the nose is still bleeding then seek medical help

Paediatric Illness, Injuries & Emergencies

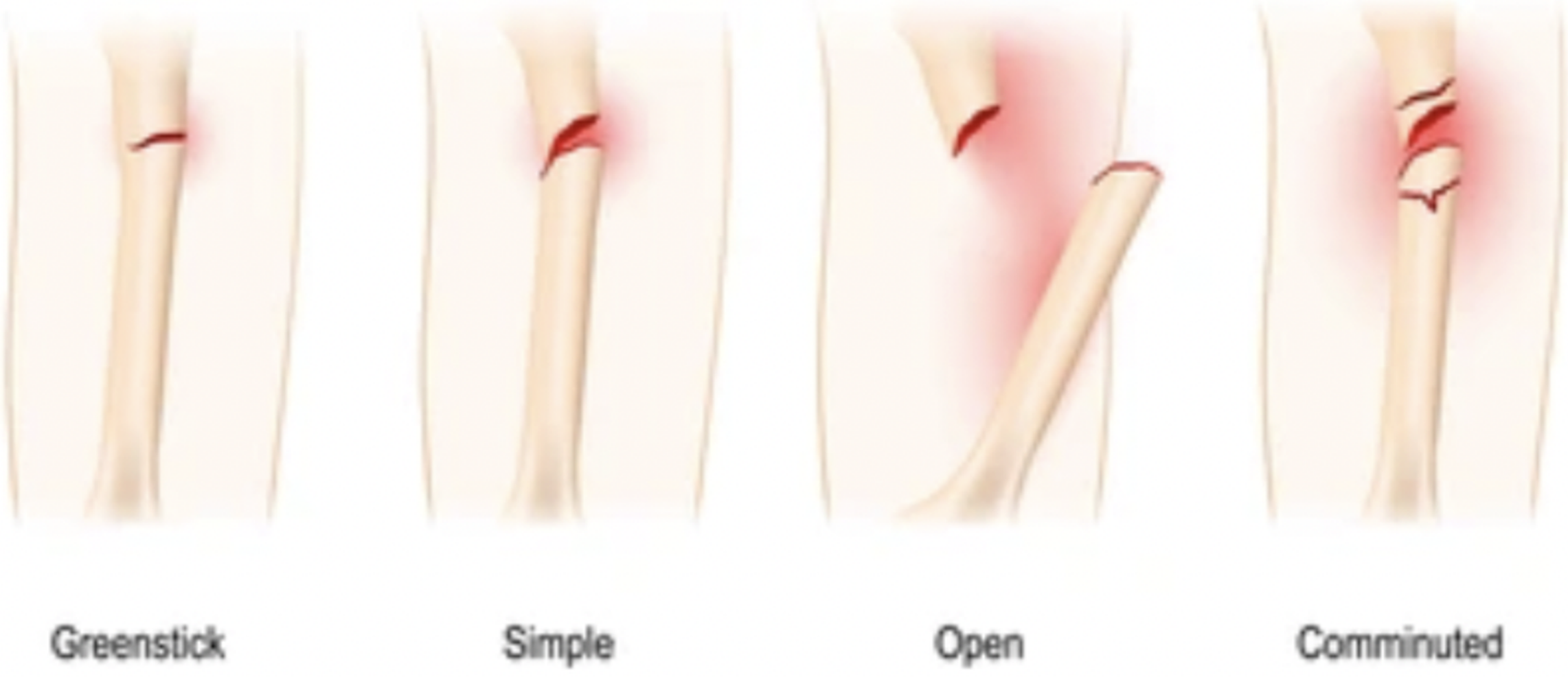
Muscles Joints & Bones,

Fractures

A fracture can be a chip, crack or break in a bone and often caused by direct or indirect force



Types of fractures for children



Recognition

- Painful with possible bruising or/and swelling
- an open fracture, maybe bleeding
- loss of mobility & deformity
- Nausea, pale and clammy skin
- Crepitus or creaking of the bone or joint
- not be able to move the injured limb.

Treatment for fractures

- ✓ **Put your PPE on**
- ✓ **Treat any any bleeding**
- ✓ **Immobilise in the position found**
- ✓ **Check for signs shock**
- ✓ **Call 999/112**

Dislocations

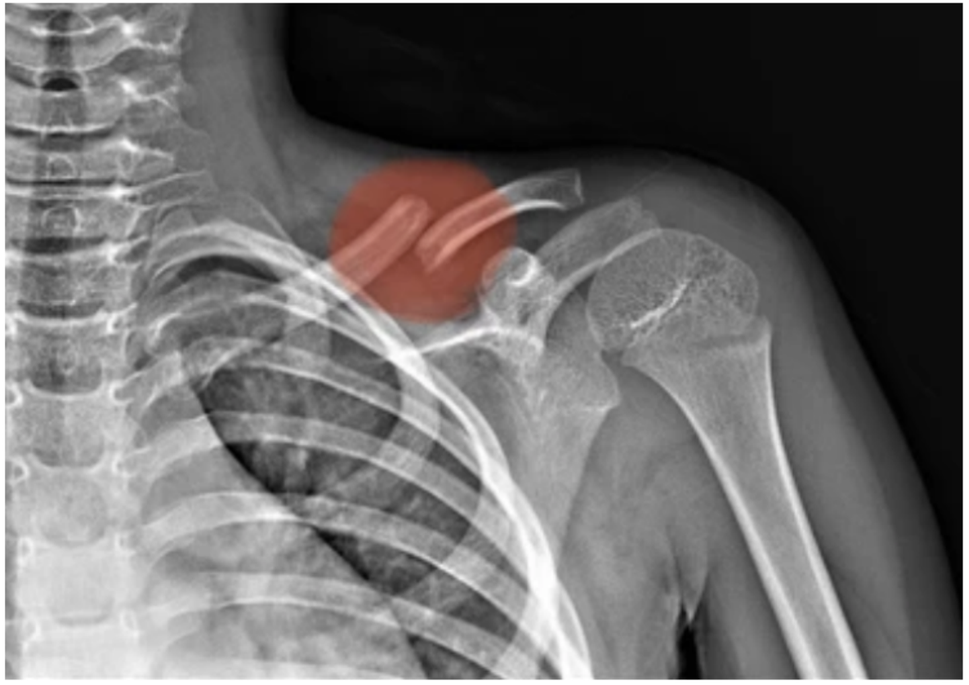
A joint dislocation occurs when there is an abnormal separation in the joint

Recognition

Painful

Swelling around the area

Loss of any movement



Treatment

- ✓ Put your PPE on
- ✓ Treat any bleeding
- ✓ Immobilise in the position found
- ✓ Check for signs shock
- ✓ Call 999/112

Treat dislocations the same as a fracture

Apply a sling to keep it elevated

Sprains and strains

The difference between a sprain and a strain is that **a sprain injures the bands of tissue that connect two bones together, while a strain involves an injury to a muscle or to the band of tissue that attaches a muscle to a bone**

Recognition

SPRAIN

Possible injury which is caused by the ligaments being over stretched

- Pain at the site on the injury
- Swelling around the injury
- Bruising
- Loss of mobility.

Treatment

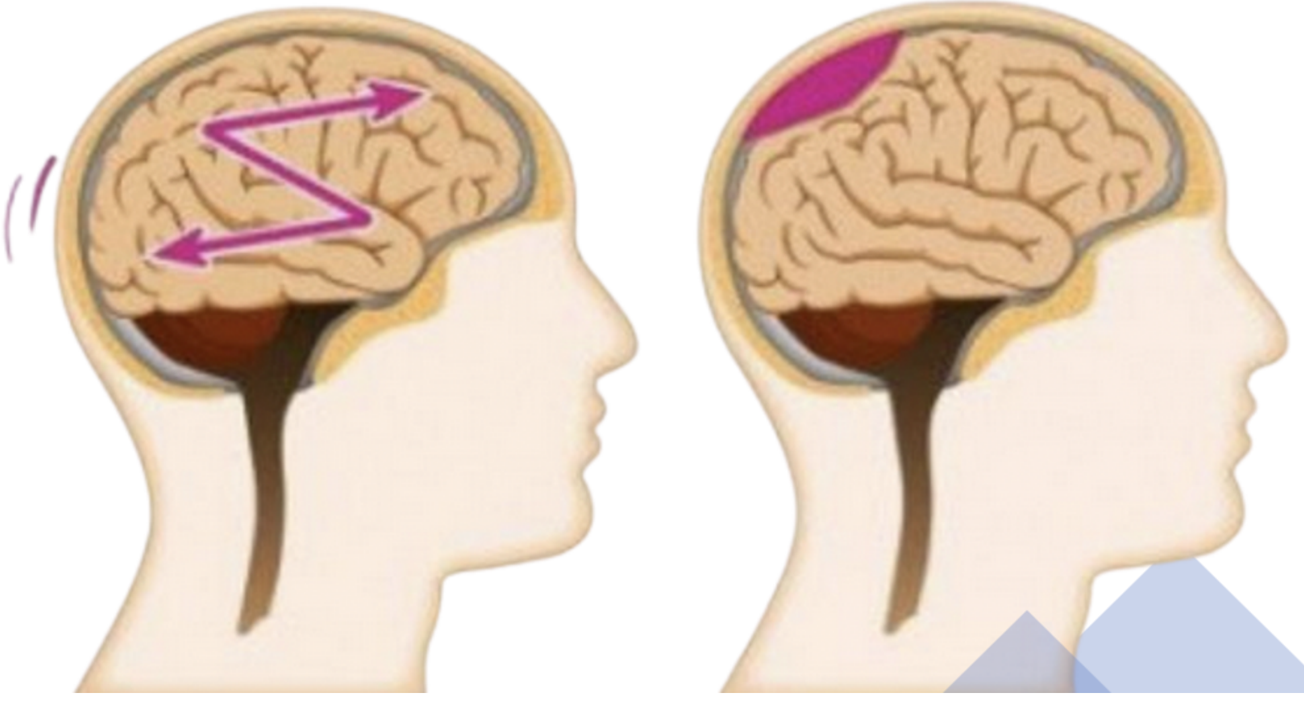
Head, Neck & Back Injuries

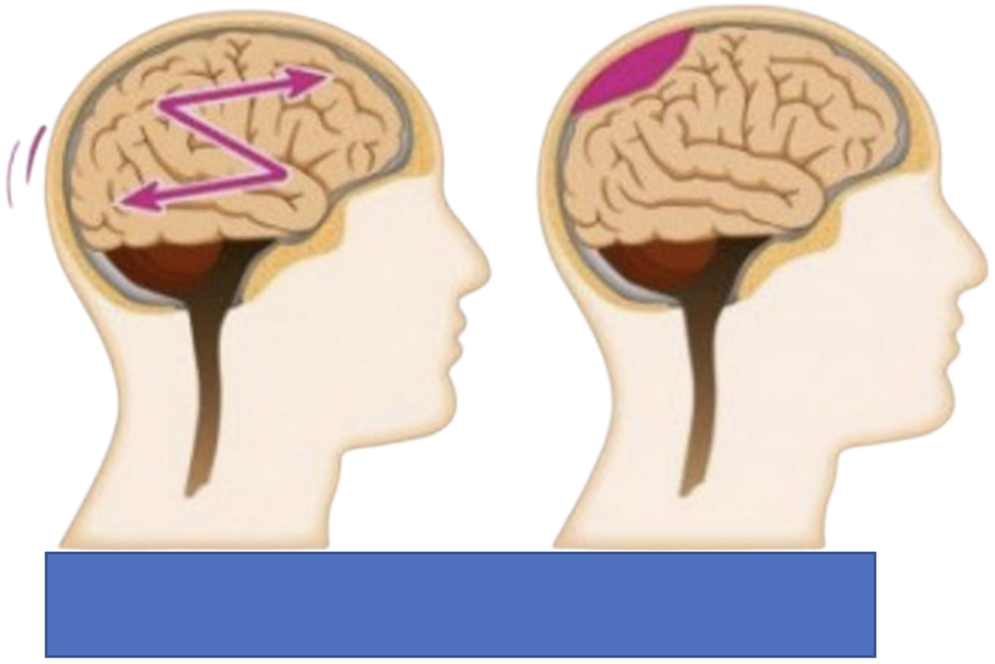
Main types of head injuries

- 🤕 cerebral compression
- 🤕 concussion
- 🤕 skull fracture.

cerebral compression

Cerebral compression is a build up of pressure on the brain. This is caused by the brain tissue swelling or a growth/build up of blood.





Recognition

- strong headaches
- drowsiness
- Fast pulse
- pupil sizes been unequal
- weakness or paralysis down the body
- Heavy breathing.

Concussion

- A brief loss of consciousness
- Dizziness
- Pain & Headache
- Short memory loss
- Blurry vision

Skull fracture

Can be open or closed and caused by a direct or indirect blow to the head

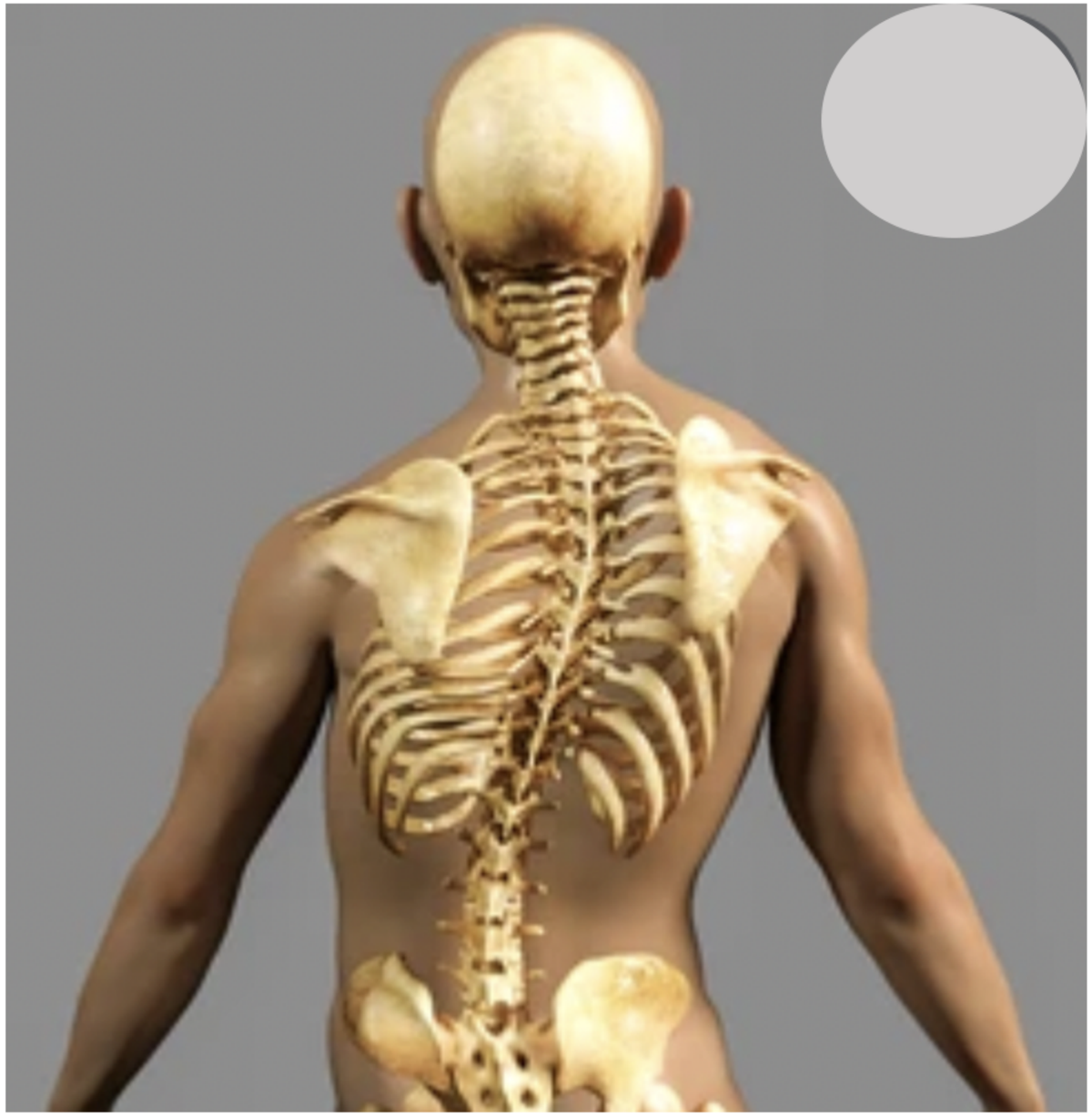
Recognition

- Signs of a wound
- Very Painful
- Depression visible in the skull
- Bruising and/or swelling
- Cerebrospinal fluid (CSF) discharging from the from ears and nose

Treatment in general

- Call 999/112
- Control any bleeding and CSF
- Place the child on a flat surface and their head and shoulders raised
- Monitor and be prepared to carry out CPR

Neck and back injury



A serious injury where the spinal cord becomes damaged.
It could result in paralysis or even death

Common causes of neck and back injuries in infants and children:

- 👧🏾 slips, trips and falls
- 👧🏾 birth injuries
- 👧🏾 car incidents
- 👧🏾 impact injuries from falls
- 👧🏾 severe head injuries.

Recognition

- Painful around at the site of the injury
- loss/lack of mobility
- weakness and pins and needles sensations
- loss of bladder control
- Possible signs of shock.

Treatment - conscious INFANT or CHILD

Call 999/112

Leave them in the position found and try keeping them still

Don't ask questions that require a shake of the head

Monitor and Keep them warm

Treatment – unconscious INFANT or CHILD

Check breathing; if not, commence CPR

If breathing NEVER move unless in danger

Call 999/112

Keep them warm and monitor

Keep the head and spine in line

Seizures

A seizure is **a sudden, uncontrolled electrical disturbance in the brain**. It can cause changes in your behaviour, movements or feelings, and in levels of consciousness. Having two or more seizures at least 24 hours apart that aren't brought on by an identifiable cause is generally considered to be epilepsy.

Causes of epilepsy in infants include:

- 👶🏾 lack of oxygen, from birth and infection of the brain
- 👶🏾 genetic
- 👶🏾 Unusual brain development in the mothers womb
- 👶🏾 Meningitis/septicaemia
- 👶🏾 febrile seizures

Partial (minor) seizures

A partial (focal) seizure **happens when unusual electrical activity affects a small area of the brain**. When the seizure does not affect awareness, it is known as a simple partial seizure. Simple partial seizures can be, Motor - affecting the muscles of the body. Sensory - affecting the senses.

Recognition

- Staring into thin air
- Mood swing changes
- The feeling of déjà vu
- Pins and needles
- Twitching

Treatment

- Ensure that they are safe and clear everything around
- Remain with them and time the episode
- If it is the first seizure get them medical attention immediately

Generalised seizure (major)

- Convulsive movements
- Rigidity and arching of the back
- Sudden unconsciousness, and often lets out a cry
- Cyanosis (blue/greyness around the lips)
- Possible loss of bladder or bowel control
- Frothy saliva may appear at the mouth. This could be blood-stained if they have bitten their tongue or lips

After a few minutes, the muscles may relax, and breathing will return to normal
They could recover not knowing what has just happened
They will be tired and could fall into a prolonged sleep

- Support or ease the casualty’s fall
- Make space around the casualty
- Keep bystanders away
- Protect the child's head
- Record the duration of the seizure
- **NEVER** restrain the child
- Do not put anything in their mouth

Call 999/112 if,
Seizures are repeated
Seizure lasts longer than 5 minutes
First seizure

Acute Conditions

Acute conditions are **severe and sudden in onset**.

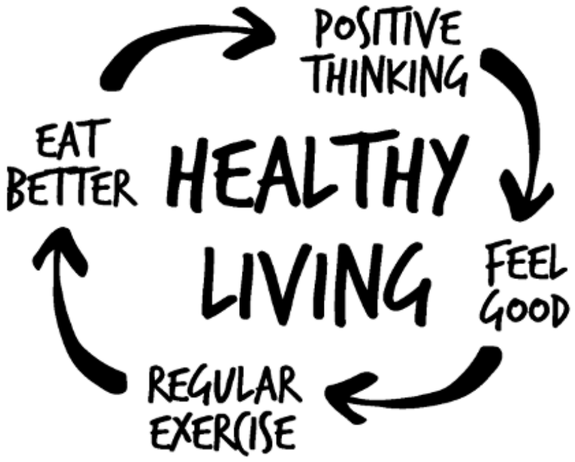
Sickle-cell anaemia

A severe hereditary form of anaemia in which a mutated form of haemoglobin distorts the red blood cells into a crescent shape at low oxygen levels. It is commonest among those of African descent.

Normal red blood cells

Sickled red blood cells

Protective measures can help assist minimising the possible risk of a sickle-cell anaemia occurring such as,



- drink plenty of water
- exercise regularly
- eat a healthy balanced diet

avoid common triggers such as,
extreme heat or cold
stressful events

Signs and symptoms

- Swelling in the hands and/or feet
- Drowsiness
- Fever and high temperature
- Associated infection (pneumonia or meningitis)
- Struggle to breath
- Jaundice

Treatment

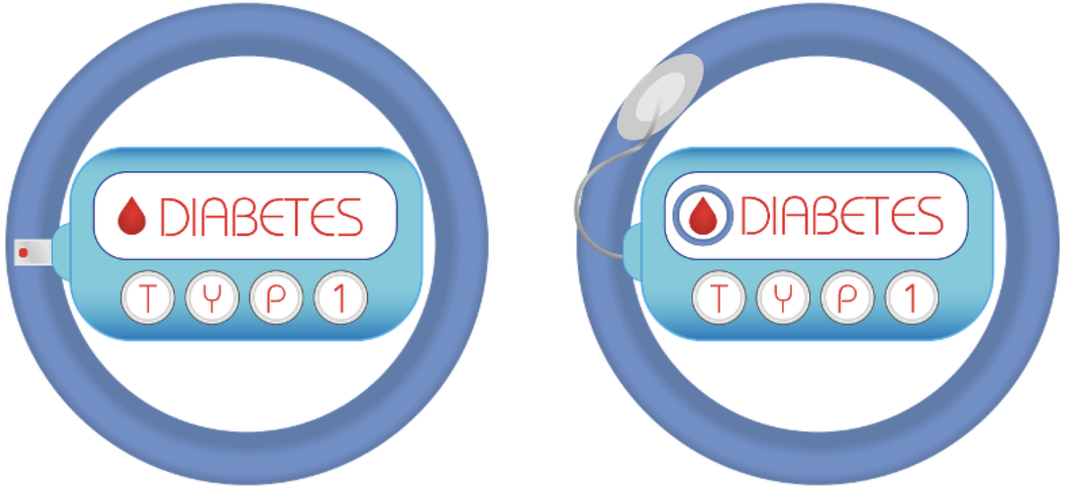
- Implement the child's care plan
- Give medication as in the care plan
- If the infant or child has severe pain call 999/112
- If no care plan is in place call 999/112 immediately.

Diabetes

Diabetes is a disease that occurs when your blood glucose, also called blood sugar, is too high or too low

Diabetes is placed into two categories:

- 👧🏼 hypoglycaemia
- 👧🏼 hyperglycaemia.



HYPOGLYCEMIA (too little sugar)

Shakiness

Dizziness

Nervousness

Sweating a lot

Hunger

Headache

Pale face

Clumsiness

Confusion

Trouble paying attention

Tingling around the mouth

Passing out (fainting)

HYPERGLYCEMIA (too much sugar)

Going to the bathroom a lot

Really thirsty

Feeling tired

Feeling weak

Blurry vision (hard to see clearly)

Feeling hungry even after a meal

Hypoglycemia

Ask the child to take their glucose tablets. If glucose tablets are not available, use other dietary forms of sugar (e.g. jelly babies/non-diet fizzy drinks).

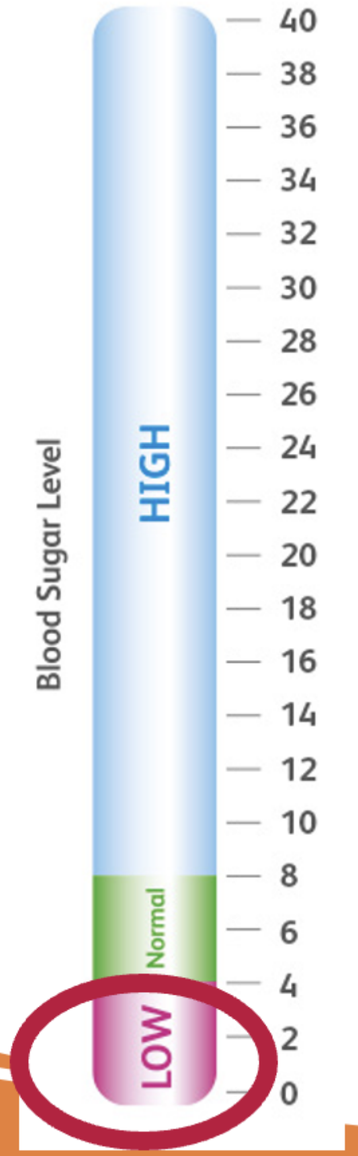
If there is no improvement in their condition then call 999/112

Hyperglycaemia

Encourage the child to take their medication

If the child has not been diagnosed then call 999

Monitor the child; if they become unconscious carry out CPR



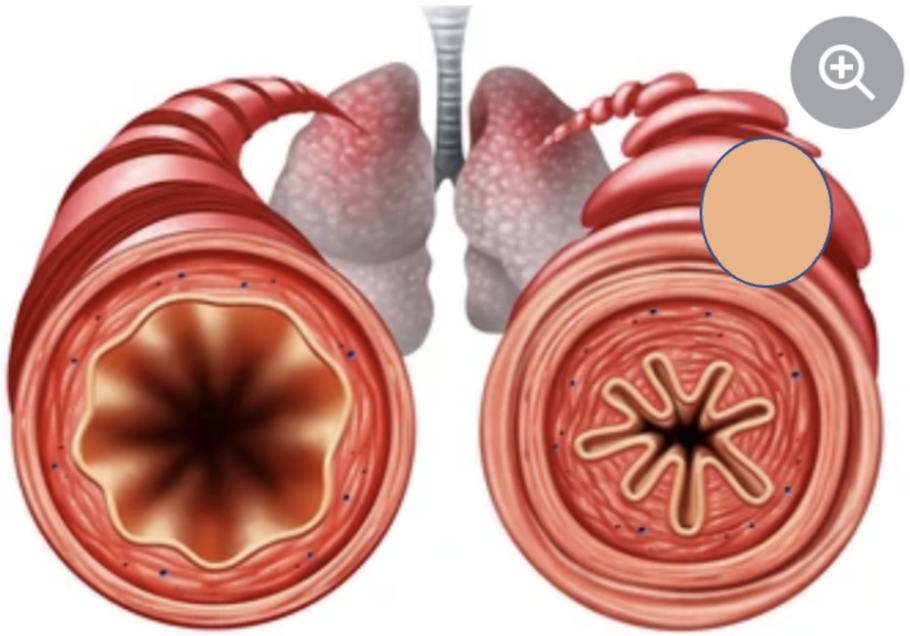
Overdosed on insulin

Or not eaten enough food;

Or over exercised.

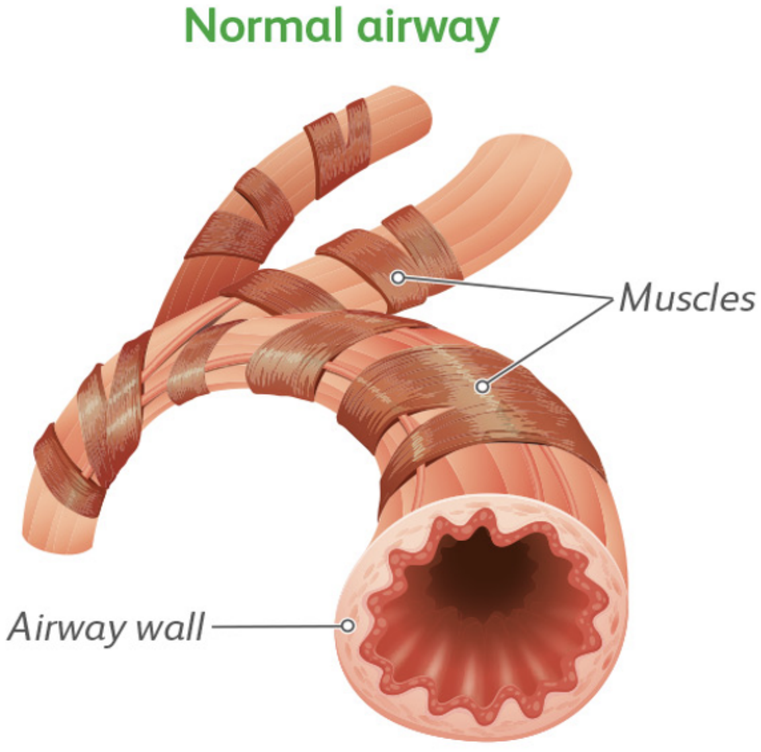
Asthma

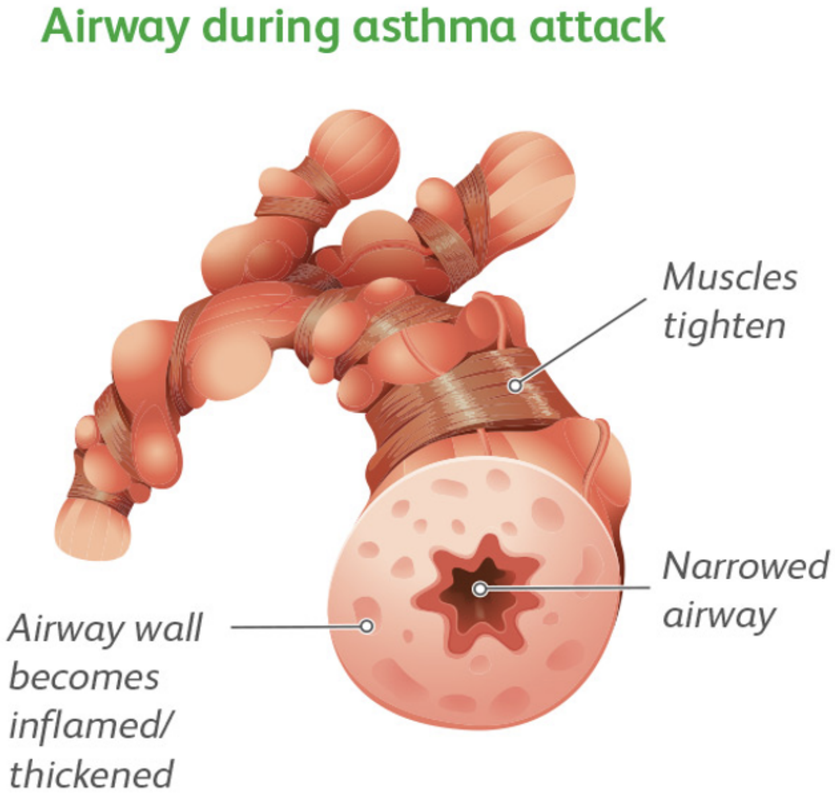
Asthma is a condition that affects the airway.
During an asthma attack the muscles around the respiratory system go into spasm



there are several 'asthma triggers' such as dust, pet fur and house dust

Asthma


Normal airway
Muscles
Airway wall


Airway during asthma attack
Muscles tighten
Narrowed airway
Airway wall becomes inflamed/ thickened

Signs

- 🫁 Gasping for breath
- 🫁 Wheezing
- 🫁 Tightness in the chest area
- 🫁 Coughing
- 🫁 Cyanosis (grey/blue lips and skin colour)

Treatment

- Help them to sit down
- Make sure they use/take their medication (inhaler)
- Reassure them
- If the attack is prolonged call 999/112
- Be prepared to carry out CPR

Silence in asthma

is not good.

It is **deadly**.

DO:

- Keep the casualty upright
- Use a spacer device if possible

DO NOT:

- Lay the casualty down
- Take them outside in cold air

Meningitis and Septicaemia

Meningitis

Meningitis is the inflammation of the membranes and linings which protects and surrounds the spinal cord and brain

Septicaemia

Meningitis and septicaemia can occur together. Septicaemia (blood poisoning) is the bacterial infection of the blood caused by meningitis.

Red Flag early warning signs!

- Cold hands and feet
- Pain in the limbs or joints
- Abnormal skin colour (pallor or mottling)

Other signs, which can occur later:

- Fever and vomiting
- Rash that doesn't fade with tumbler test
- Drowsiness or lowered levels of consciousness
- Severe headache
- Stiff neck
- Dislike of bright lights

			Meningitis	Sepsis
Earlier Signs	• Initial source of infection	Spreads from a localised infection e.g. meningitis, a chest infection, or urinary infection		✓
	• High temperature *(fever)* • Chills / shivering	Brain raises body thermostat to try fight infection	✓	✓
	• Low temperature	Less commonly, body temperature can become very low		✓
	• Rapid heartbeat / fast pulse	To try maintain blood pressure		✓
	• Fast breathing	Response to impaired respiration		✓

			Meningitis	Sepsis
Severe Sepsis	• Severe difficulty in breathing	Damaged blood flow in the lungs		✓
	• Pale, mottled skin • Blue tinges to skin (*cyanosis)*	Reduced blood flow to the skin		✓
	• Confused, agitated or delirious • Slurred speech • Dizzy or faint • Sleepy, vacant or difficult to wake	Reduced blood flow to the brain Pressure on the brain with meningitis	✓	✓
	• Cold hands and feet • Pain in limbs or joints	Blockages in blood flow to the limbs		✓
	• Rash *(anywhere on the body)* may start like pin pricks Does not fade when squashed with a glass tumbler	Damaged capillaries bleeding under the skin *With meningitis, this may happen if the infection spreads into the bloodstream, causing sepsis.*	✓	✓

Septicaemia Rash

Glass test

- press a glass over the spots/rash
- if the spots/rash don't fade under the pressure of the glass then this could indicate meningococcal septicaemia Call 999/112 immediately
- if the spots/rash fade when the glass is rolled over the skin, the condition may not be as serious, however keep checking as it may develop into a rash that does not fade.

Anaphylactic shock

Anaphylaxis is a serious, potentially fatal allergic *reaction* and medical emergency that is rapid in onset and requires immediate medical attention.

Triggers

Signs of Anaphylactic shock

- Swollen eyes, lips, hands, and feet
- Itching
- Sore, red, itchy eyes
- Changes in heart rate
- Anxiety or apprehension
- Itchy skin or nettle-rash (hives)
- Unresponsive due to very low blood pressure
- Abdominal cramps, vomiting or diarrhoea
- Nausea and fever

ALLERGY SYMPTOMS

Anaphylaxis has three main characteristics:

1. A rapid onset – the casualty usually becomes very ill, very quickly.

2. A life-threatening **Airway**, **Breathing** or **Circulation** problem *(or a combination of them)*.

3. A skin rash, flushing and/or swelling *(but not all casualties have this)*.

Treatment

- Call **999/112**
- Allow/Assist to take their own medication
- If they can't you may use the autoinjector
- Remove cap and hold in your fist
- Press firmly on the casualty’s thigh for 3 secs, or as directed on autoinjector
- Remove and depending on autoinjector massage area for 10 seconds
- Procedure can be repeated after 5 minutes
- Be prepared to carry out CPR

Auto injectors

Emerade EpiPen Jext

Emergency Anaphylaxis Kit

Contents

Autoinjectors (AAI)

Instructions on auto injector usage

Instructions on auto injector storage

Manufacturer's information

List of autoinjectors, identified by batch number and expiry date

Monthly checklist

Replacement of auto injector arrangements

Pupil list of who auto injectors can be administered too

Please Click here to see our online training on Safe use and control of Anaphylaxis and Auto injectors

Febrile convulsions

A febrile convulsion is a fit or seizure that occurs in children when they have a high fever. This can happen in children aged 6 months to 6 years. The fit can last a few seconds or up to 15 minutes and is followed by drowsiness. Most fits last less than 2 to 3 minutes.

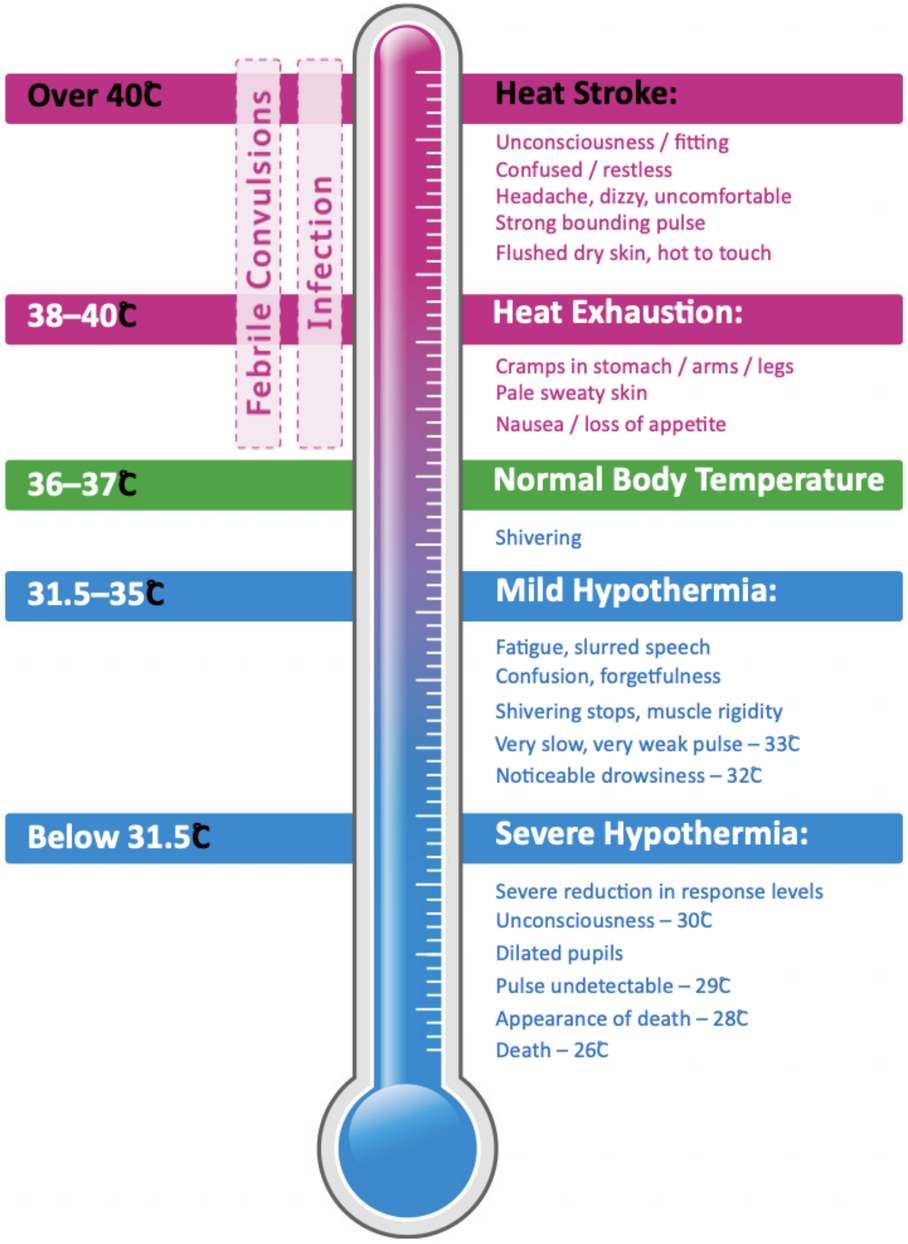
Signs

loss of consciousness and stiffening

legs and arms jerk as well as the the head

Pale skin colour

After a couple of minutes, the convulsion will subside, and the infant/child will go limp and skin colour will return to normal


Over 40℃
Febrile Convulsions
Infection
Heat Stroke:
Unconsciousness / fitting
Confused / restless
Headache, dizzy, uncomfortable
Strong bounding pulse
Flushed dry skin, hot to touch
38–40℃
Heat Exhaustion:
Cramps in stomach / arms / legs
Pale sweaty skin
Nausea / loss of appetite
36–37℃
Normal Body Temperature
Shivering
31.5–35℃
Mild Hypothermia:
Fatigue, slurred speech
Confusion, forgetfulness
Shivering stops, muscle rigidity
Very slow, very weak pulse – 33℃
Noticeable drowsiness – 32℃
Below 31.5℃
Severe Hypothermia:
Severe reduction in response levels
Unconsciousness – 30℃
Dilated pupils
Pulse undetectable – 29℃
Appearance of death – 28℃
Death – 26℃

Treatment

👩‍⚕️Protect the child from possible injury by removing danger around them

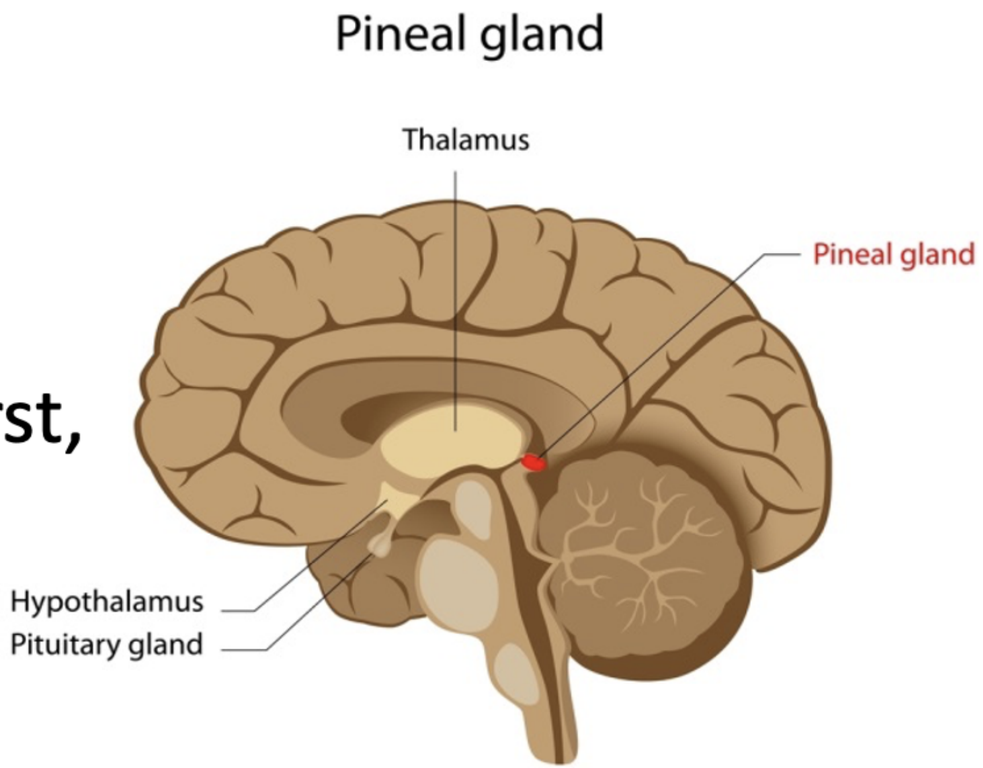
👩‍⚕️ Time the convulsion

👩‍⚕️ Cool them down by removing excess clothing and opening a window may also help

👩‍⚕️ When the convulsion subsides, open the airway and check for normal breathing and then place the infant/child in the recovery position.

Hot and Cold Injuries

The hypothalamus which is in the brain controls body temperature and acts like a thermostat , hunger, important aspects of parenting and attachment behaviours, thirst, fatigue, sleep, and circadian rhythms.



The normal working range for the human body is between 36.5°C and 37°C

Heat Exhaustion

If the body temperature rises between 37.5c - 40c then heat exhaustion occurs. Caused by loss of body salts and water typically through excessive sweating.

Heat Exhaustion

Recognition

- Skin feels hot and flushed
- Excessive sweating
- Child may feel tired and confused
- Urine will be darker than normal
- Feeling of nausea and vomiting

Treatment

- Move the infant or child to a cool place
- Give water to rehydrate
- Remove all excessive clothing
- Monitor their responses
- Seek medical attention call 999/112

Heat Stroke

Heat Stroke occurs when the body temperature exceeds 40c

Recognition

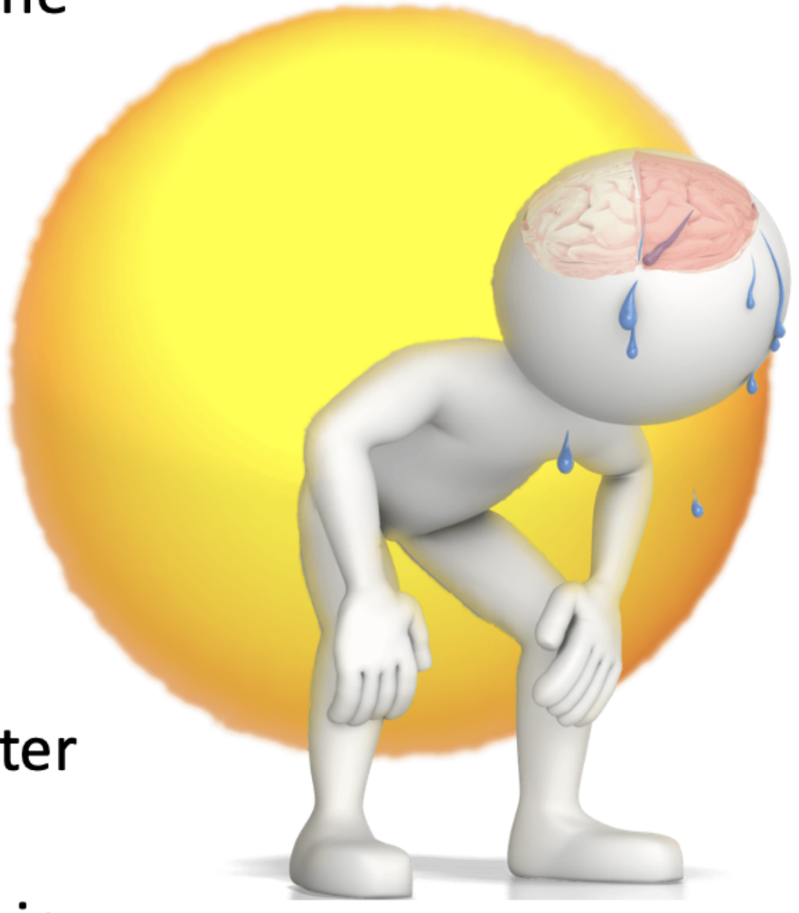
- Hot, dry skin with no sweating
- Rapid breathing and heart rate
- Confusion, difficulty speaking
- Nausea
- Seizures
- Possible loss of responsiveness

Treatment heat stroke

- Call 999/112
- Move to a cool area and remove excessive
- Cool the skin, by showering or wet towels
- Give the water (isotonic sports drinks)
- If seizures start, move nearby objects out of the way to prevent injury
- If they are unresponsive place in the recovery

Preventing heat exhaustion and heatstroke

- ❑ Keep children out of the sun during the hottest parts of the day, usually between 12am and 4pm
- ❑ Keep them in the shade, apply sunscreen to them and promote wearing a hat
- ❑ **NEVER** leave them in a parked car
- ❑ Do not allow any physical exertion
- ❑ Encourage to take plenty of cold drinks, avoiding drinks that may contain caffeine
- ❑ Give cold foods, particularly salads and fruit with high water content
- ❑ Keep a damp cloth on the back of their neck and keep their environment cool.



Hypothermia

Hypothermia occurs when the core temperature drops below 35C.

Recognition

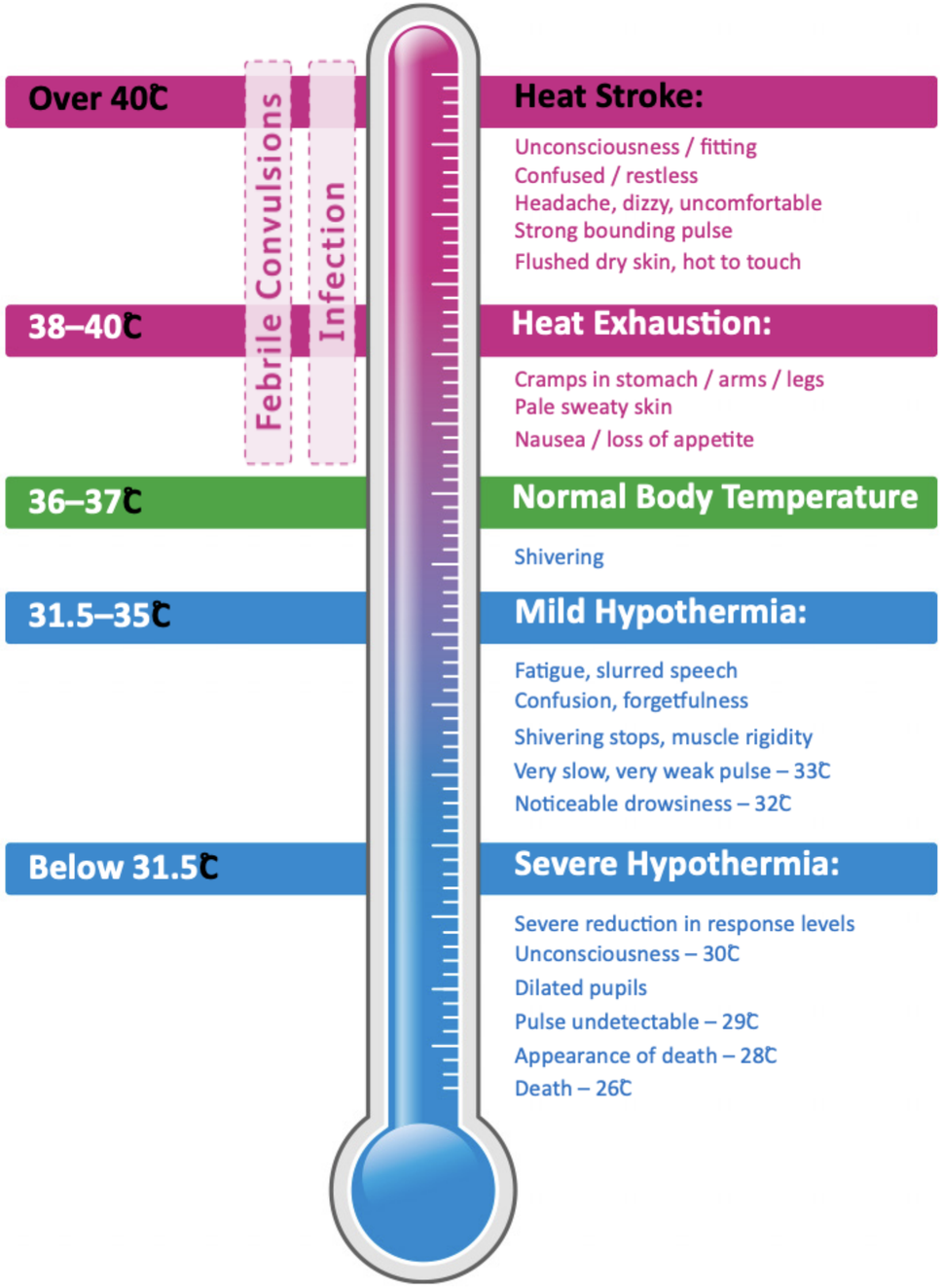
- Shivering
- Cold, pale skin
- Tiredness and low energy
- Lack of coordination
- Drowsiness
- Slurred speech

Hypothermia

Treatment

- Remove the child from the source of the cold;
- Remove wet clothing and dry them
- Wrap them in blankets, towels and coats and ensure the room is warm (24-25°C)
- If the infant or child is outdoors, then insulate them from the ground
- If possible and give warm or high energy foods such as chocolate
- If condition does not improve or worsens call 999/112

Warm the child up slowly. Do not place them near any direct heat as blood may draw to the skin's surface and could put stress on the heart.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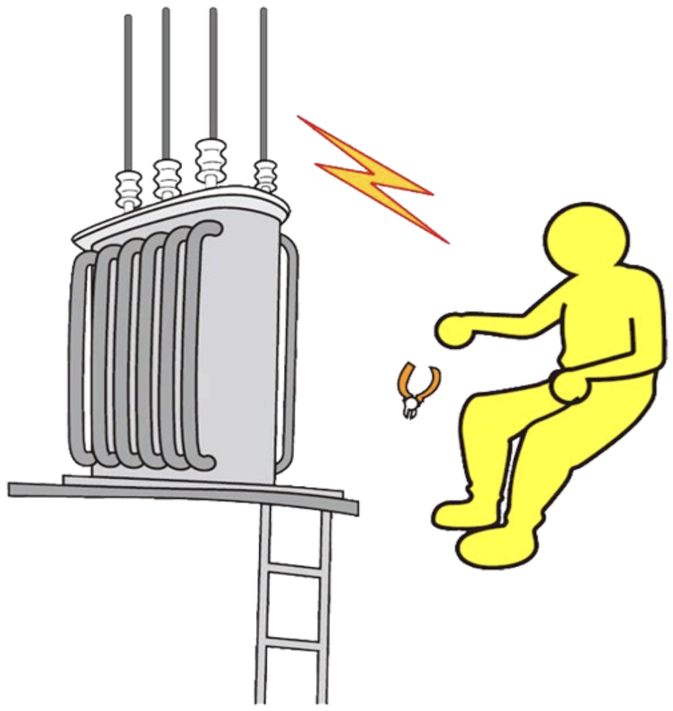
Severe Hypothermia:
Severe reduction in response levels
Unconsciousness – 30℃
Dilated pupils
Pulse undetectable – 29℃
Appearance of death – 28℃
Death – 26℃

STAGES
NOSE
TOES
FINGERS
EARS
HEALTHY SKIN
1ST DEGREE
2ST DEGREE
3ST DEGREE
FROSTBITE
FIRST AID
REMOVE ANY WET CLOTHES
WARM WATER FOR HANDS
BLANKET
DRINK WARM TEA
WARM WATER FOR LEGS
CALL THE DOCTOR

Treating low voltage injuries

- Switch off from the MAINS supply
- Break the contact between the electricity and the casualty
- If unable to do this insulate yourself before attempting to free the casualty from the supply
- Look for entry and exit wound and treat any injuries

Call 999/112



Treating high voltage injuries

Keep everyone at least 18 meters away from the electrical source

Call 999/112

When safe to approach assess the casualty

Burns and Scalds

Burns and scalds are damage to the skin caused by heat. A burn is caused by dry heat, for example, by an iron or fire. A scald is caused by something wet, such as hot water or steam. Burns may also be caused by chemicals and electricity.

Burns and scalds – radiation

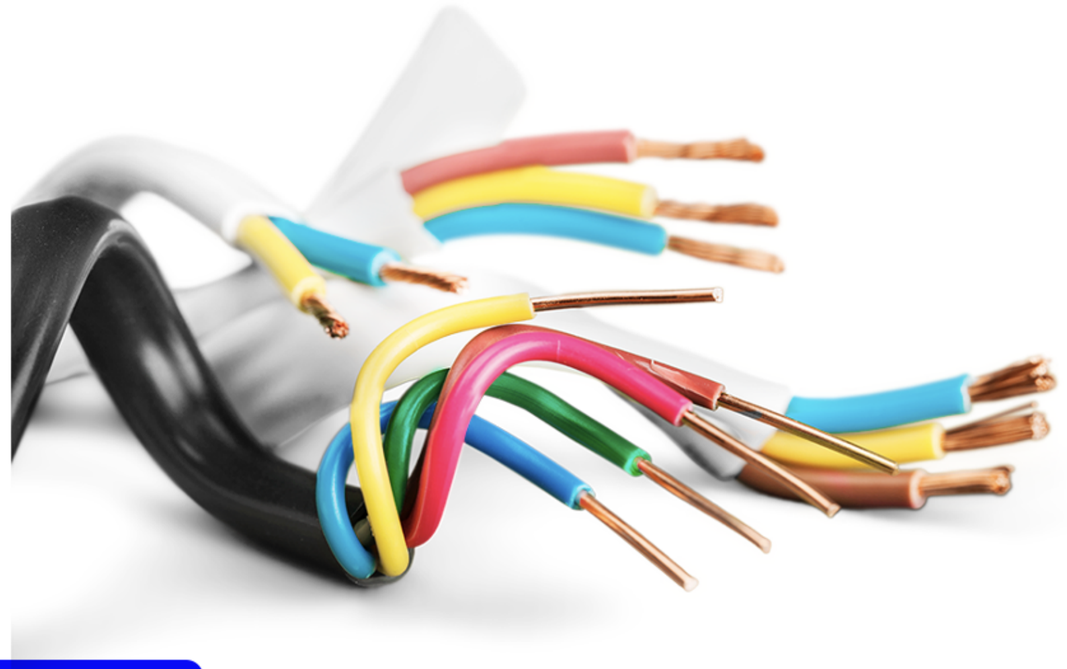
Examples:

Direct sunburn

Ultraviolet lamps/lights

Over exposure to X-rays.

Burns and scalds – electricity



Examples:

Domestic appliances

Lightning

High voltage

Electrical cables.

Burns and scalds – extreme colds

Examples:

Extreme freezing temperatures

Frozen objects

Refrigerants.

Burns and scalds – chemicals

Examples:

Acids & alkalis

Domestic & industrial cleaning products

Industrial chemicals

Burns and scalds – dry heat

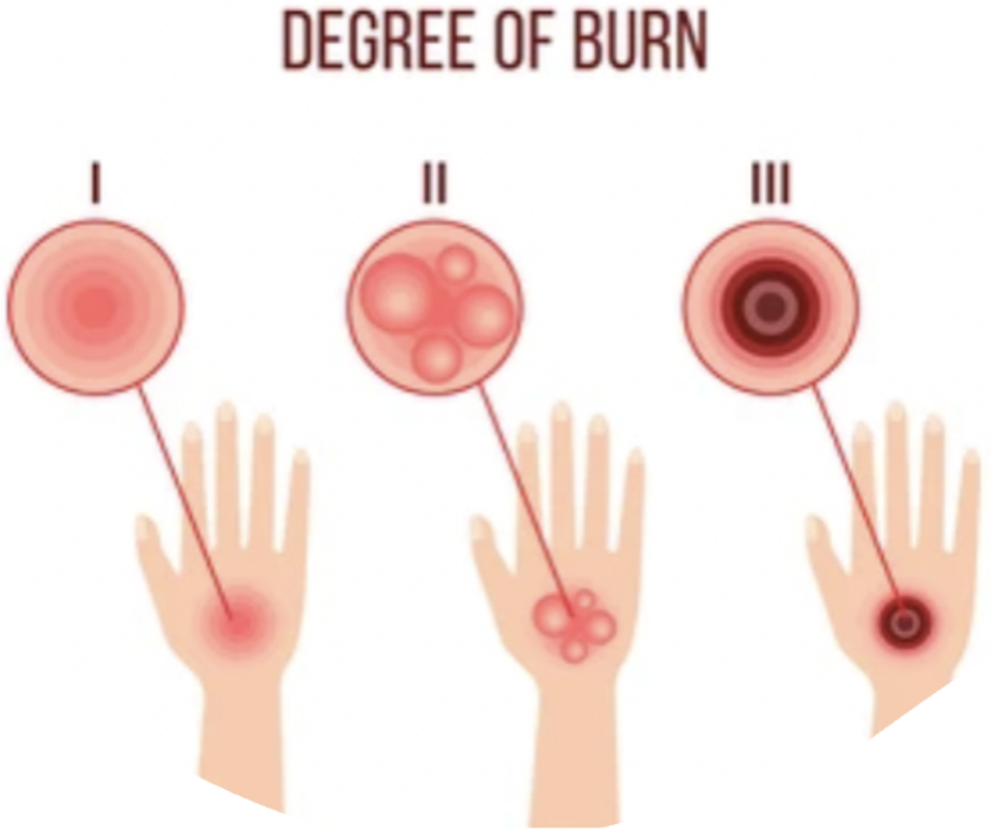
Examples:

Hot surface/plates

Direst fire

Friction

Appliances



Burns management

Superficial burn (1st degree burn)

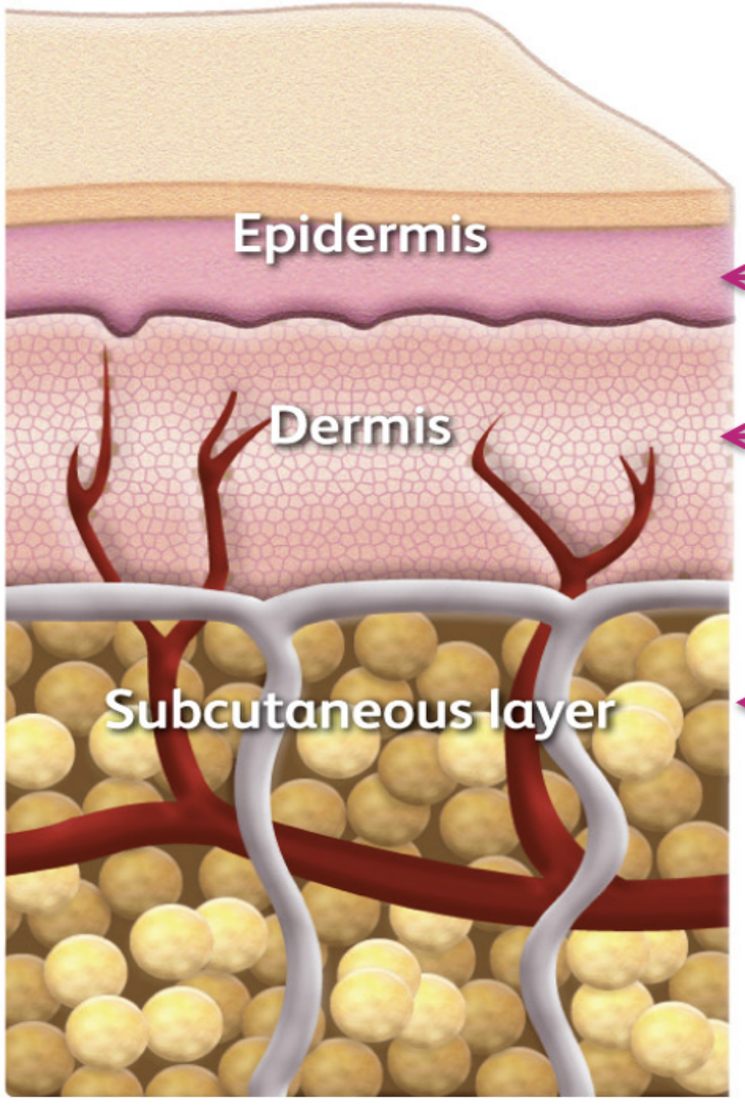
The outer layer of skin is burnt causing redness, tenderness and inflammation. Typical factors causing this would be sunburn or touching a hot iron. The skin is not broken or blistered.

Partial thickness burn (2nd degree burn)

The outer layer of the skin is burnt and broken causing blistering, swelling, pain and rawness.

Full thickness burn (3rd degree burn)

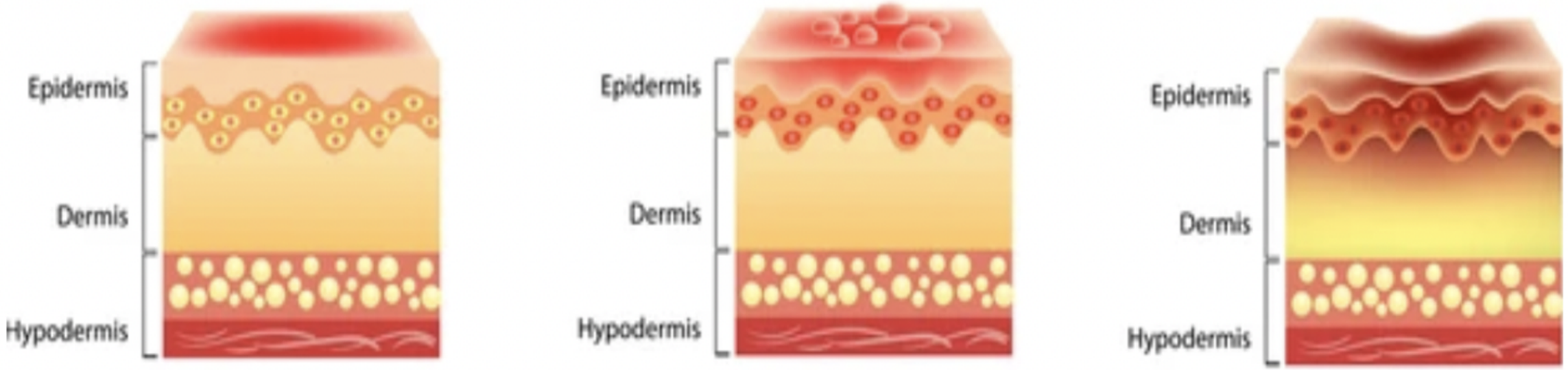
All the layers of skin have been damaged causing the skin to look pale, charred and waxy with fatty deposits. There may also be damage to the nerves.



Superficial

Partial Thickness

Full Thickness



1st degree burn	2nd degree burn	3rd degree burn

Superficial burn (1st degree burn)

Recognition

- Painful
- Redness, tenderness and possible swelling
- Possible blistering around the burn

Superficial burn (1st degree burn)

- Move away the burn
- Cool the area of the burn with water (20 mins)
- Remove any restrictive clothing or jewellery
- **NEVER** remove anything that is stuck on the burn
- Cover the burn with a sterile dressing or if unavailable then place a layer of cling film over the burn
- Seek medical attention immediately if the burn covers more than 5% of the body. *(SEE FIGURE OF BURNS)*

Partial-thickness burn (2nd degree burn)

Recognition

- The skin will be raw and swollen
- The burn will be very painful
- Blisters and clear fluid may be present

Partial-thickness burn (2nd degree burn)

- Move away the burn
- Cool the area of the burn with water (20 mins)
- Remove any restrictive clothing or jewellery
- **NEVER** remove anything that is stuck on the burn
- Cover the burn with a sterile dressing or if unavailable then place a layer of cling film over the burn
- Seek medical attention immediately if the burn covers more than 5% of the body. *(SEE FIGURE OF BURNS)*

Full-thickness burn (3rd degree burn)

Recognition

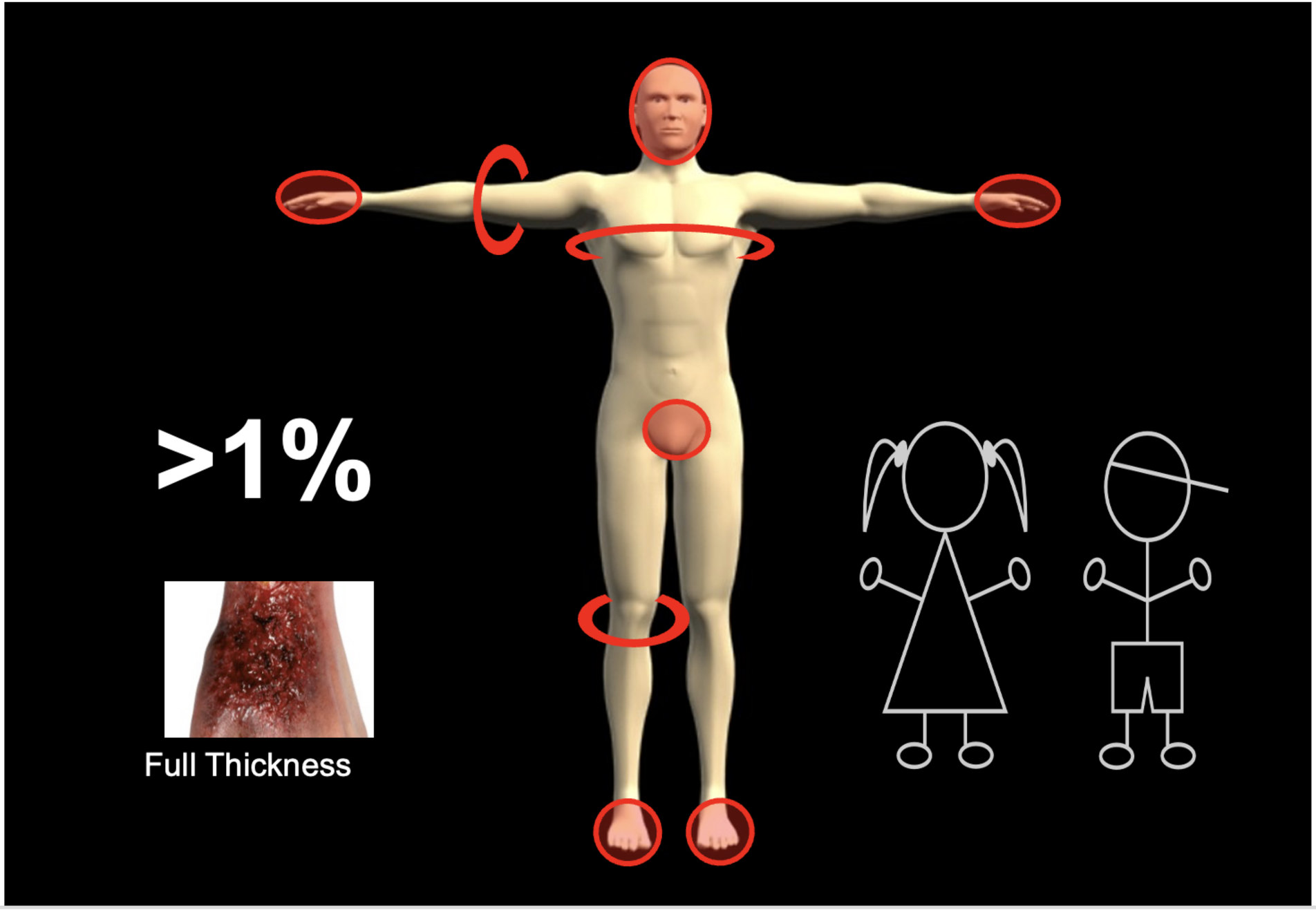
- The burn will look a brown/black colour and looks scorched
- The texture will look dry and leathery
- Stiffness in and around the burned area
- Pain at the site of the burn

Full-thickness burn

- 👨‍⚕️ ensure that the source has been disconnected or turned off
- 👨‍⚕️ Remove clothing, if not stuck to the burnt skin, and then flush the area of the wound with water for a minimum of 20 minutes
- Remove any restrictive clothing or jewellery
- 👨‍⚕️ **NEVER** remove anything that is stuck on the burn
- 👨‍⚕️ Cover the burn with a sterile dressing or if unavailable then place a layer of cling film over the burn
- 👨‍⚕️ Seek medical help immediately

Hospital treatment if

- Burns to children and infants regardless of depth
- Full thickness burns
- Burns that extend around the arm or leg or to the face, genitals, hands and feet
- All partial thickness burns larger than 1% of the body surface
- All superficial burns larger than 5% of the body surface
- Mixed depth pattern


>1%
Full Thickness

Chemical burns to the eye

- 👁️ Wash the chemical from the eye for a at least 20 minutes with fresh running water
- 👁️ Make sure the chemical does not run into the other eye
- 👁️ Cover with sterile eye pad and seek medical assistance

Poisoning

Poisoning happens when you take into your body, a substance that damages your cells and organs and injures your health.

Poisons can enter the body in several ways:

Inhaled Gases, fumes etc

Swallowed Food, alcohol, drugs etc

Injected Drugs, medicine, sting's etc

Absorbed Chemicals, vapors etc - through the skin

Instilled Chemicals and gases etc - via the eyes

Poisoning

Poisons can include:

- 💉💊💀 household chemicals
- 💉💊💀 alcohol and drugs
- 💉💊💀 industrial chemicals
- 💉💊💀 foods and plants

Recognition in general

- Pains in the stomach
- Decreased vision
- high/low heart rate
- Smell of poisons or chemicals
- Burns or rashes
- Nausea
- Hard to breathing

Treatment in general

💉💊💀 Call 999/112

💉💊💀 Remove either the cause or child from the area

💉💊💀 Try and identify what the poison is

💉💊💀 Be prepared to carry out CPR

DO NOT encourage vomiting or moving around.

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Phonetic Alphabet

A	Alpha	M	Mike	Y	Yankee
B	Bravo	N	November	Z	Zulu
C	Charlie	O	Oscar		
D	Delta	P	Papa		
E	Echo	Q	Quebec		
F	Foxtrot	R	Romeo		
G	Golf	S	Sierra		
H	Hotel	T	Tango		
I	Indigo	U	Uniform		
J	Juliette	V	Victor		
K	Kilo	W	Whiskey		
L	Lima	X	X-ray		

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