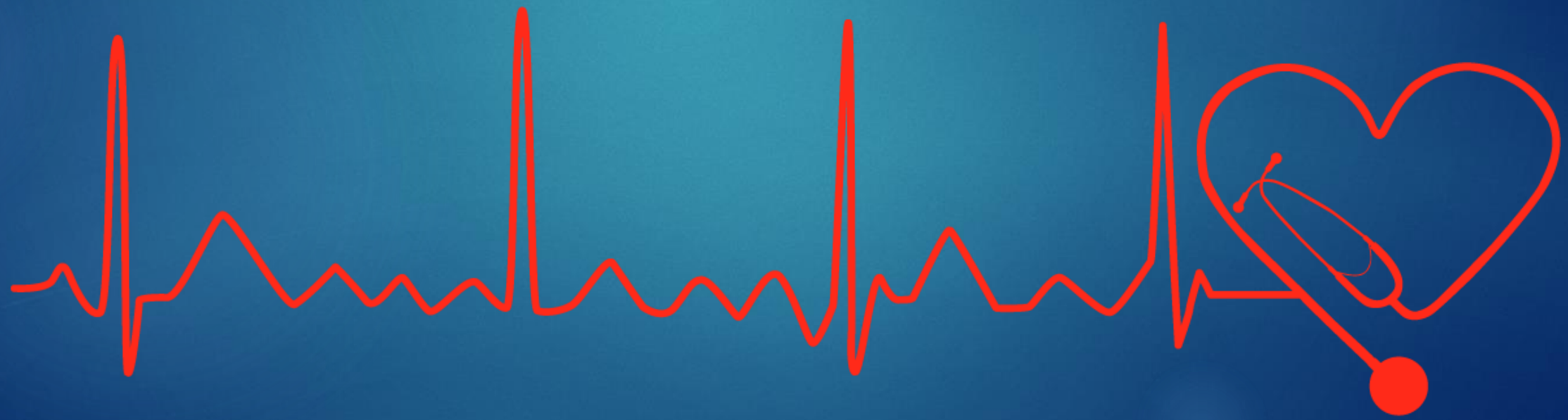
MEDICAL EMERGENCIES



Signs, Symptoms and Management

- Heart Conditions
- Stroke
- Asthma
- Diabetes
- Shock
- Choking
- Drowning
- Seizure
- Faint
- Allergy/anaphylaxis
- Poisons
- Bites and Stings
- Environmental Impact
- Hyperventilation

Heart Attack & Angina

‘Heart attack’ and **‘Angina’** are heart conditions that have similar signs and symptoms.

Symptoms

- Central chest pain (e.g. crushing, tightness, heaviness)
- Shortness of breath
- Indigestion type of pain in the upper abdomen
  (referred pain from the heart)
- Pain spreading to the jaw, neck, shoulder, left arm or right arm
- Heaviness or weakness in left arm
- Dizziness
- Nausea
- Pale skin and sweatiness
- Irregular pulse

Heart Attack & Angina
Management

- Assist the casualty to STOP and REST in position of comfort
- Talk and reassure the casualty. Ask them:

Are you prescribed heart medication?

Do you have angina?

Can you take aspirin?

- No heart medication and not diagnosed with heart problems:
  - Treat as a **HEART ATTACK** - Call emergency services, give Aspirin (if directed), monitor vital signs, prepare for CPR
- If the casualty has heart medication:
  - Assist casualty to take prescribed heart medication
  - If no relief after 5 minutes, give another dose of heart medication

STROKE

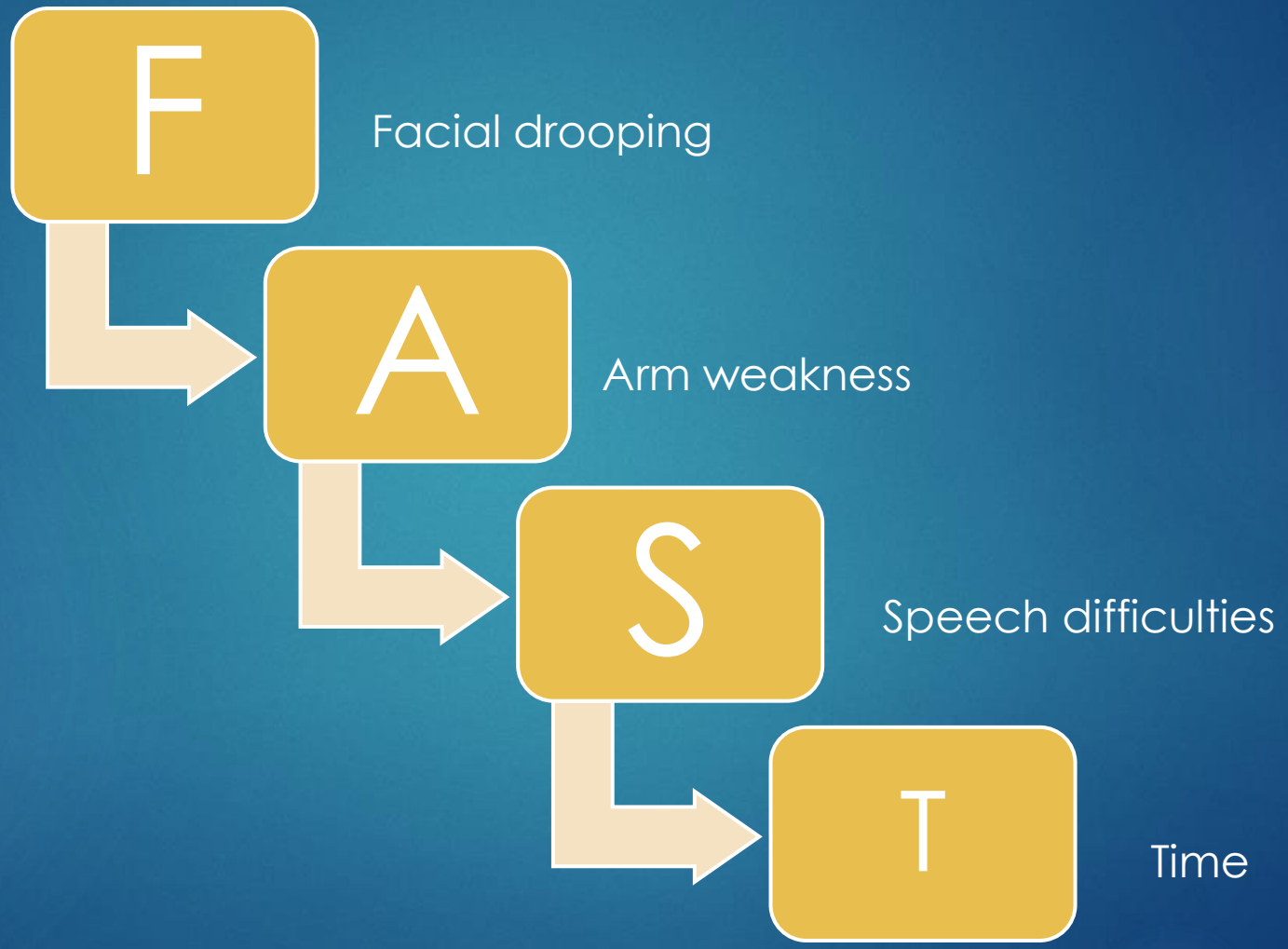
Occurs when the blood supply to part of the brain is disrupted, causing damage to brain tissue. This is caused by either a blood clot, blocking an artery or a ruptured artery inside the brain.

Symptoms

- Blurred vision
- Headache
- Confusion or dazed state
- Unequal-sized pupils
- Drooping of one side of the face
- Weakness or paralysis affecting one side of body
- Slurred speech
- Difficulty swallowing or drooling
- Loss of balance
- Incontinence of bladder / bowel

STROKE

Management



Stroke is **always** a medical emergency

- Follow the DRSABCD steps
- Call Triple Zero (000)
- Reassure the casualty; stay calm and speak softly
- Depending if they are conscious or unconscious:

If they are conscious:

Support head and shoulders on pillows

Loosen tight clothing

Maintain body temperature

Wipe away secretions from their mouth

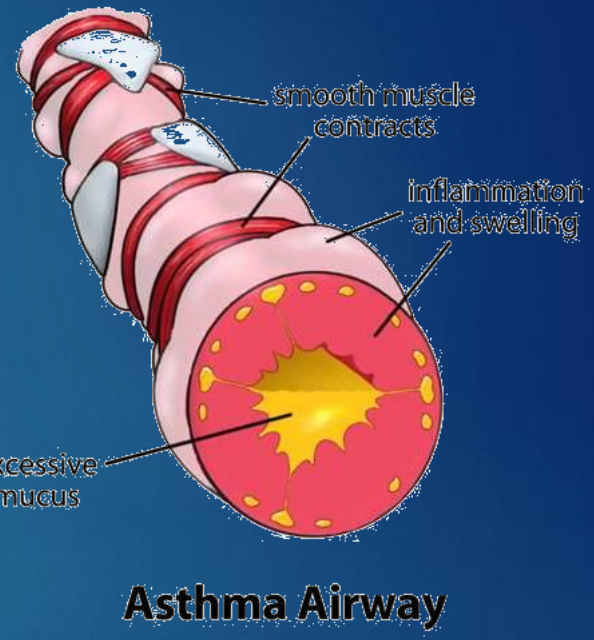
Ensure the airway is clear and open

If they are unconscious:

Place them in the recovery position

ASTHMA

- People with asthma have sensitive airways which react to certain trigger factors.
- The airway starts to swell
- The muscles around the airway contract
- The airway becomes full of mucus



TRIGGER FACTORS





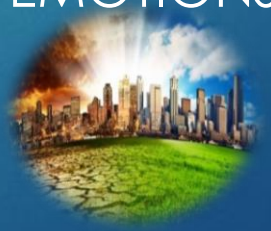




POLLENS
DUST
DUST MITES
ANIMALS / PETS
MOULD
FOODS / ADDITIVES
CHEMICALS

EXERCISE
COLDS / FLU
SMOKE
WEATHER CHANGES
DEODORANTS / PERFUMES
CERTAIN MEDICATIONS
EMOTIONS



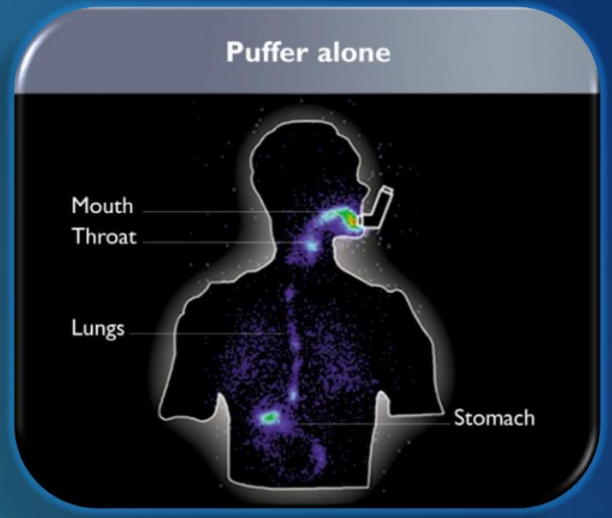



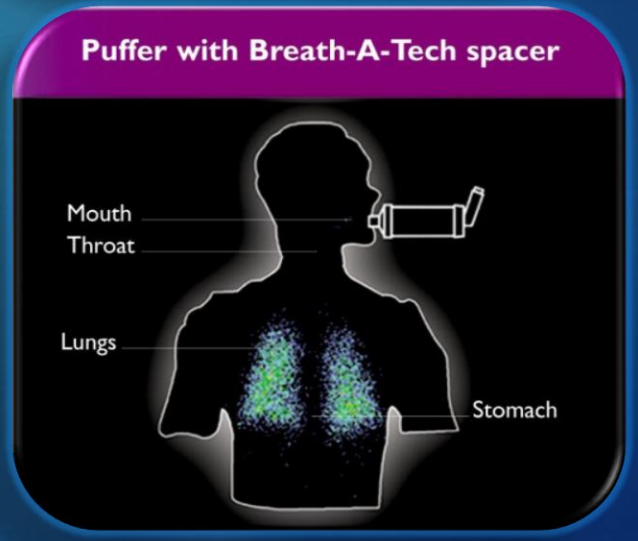

ASTHMA

SIGNS & SYMPTONS

MILD	MODERATE	SEVERE OR EXTREME
No problem speaking	Can only speak in short sentences	Can only say a few words or none at all
Quiet wheeze	Loud wheeze	May hear no wheeze at all
Minor trouble breathing	Clearly having trouble breathing	Gasping for breath, anxious, pale and sweaty, distressed
Small cough	Persistent cough	Variable cough, lips might be blue, skin sucking in of throat and rib muscles

VENTOLIN AND SPACERS





4-STEP ASTHMA FIRST AID PLAN

STEP 1

Sit the person down in a comfortable upright position

Remain calm and maintain control

Provide Reassurance

Don't leave the person alone

STEP 2

Give 4 separate puffs of a blue reliever

One puff at a time through a spacer

Taking 4 breaths from the spacer after each puff

STEP 3

Wait 4 minutes

If there is little or no improvement

repeat steps 2 and 3

STEP 4

If little or no improvement call an ambulance on 000

Continue with steps 2 and 3 while waiting for ambulance.

Commence CPR if needed.

DIABETES

Symptoms

- **HYPOGLYCEMIA (LOW)**
  - Rapid Onset
  - Pale & Clammy
  - Shallow Rapid Breaths
  - Drunken Appearance
  - Aggressive
  - Possible Seizures
- **HYPERGLYCEMIA (HIGH)**
  - Slow Onset
  - Flushed & Dry Skin
  - Deep Sighing
  - Thirst – Hunger
  - Excessive Urination
  - Fruity Smell on Breath

DIABETES

MANAGEMENT

HYPOGLYCEMIA - LOW

- Administer sugar immediately
- Coke, Fanta, lollies, chocolate, bananas
- Continue giving every 15 minutes until they improve

HYPERGLYCEMIA- HIGH

- Administer water to flush out the sugar

If condition does not improve, call 000 and follow DRSABCD

SHOCK

Symptoms

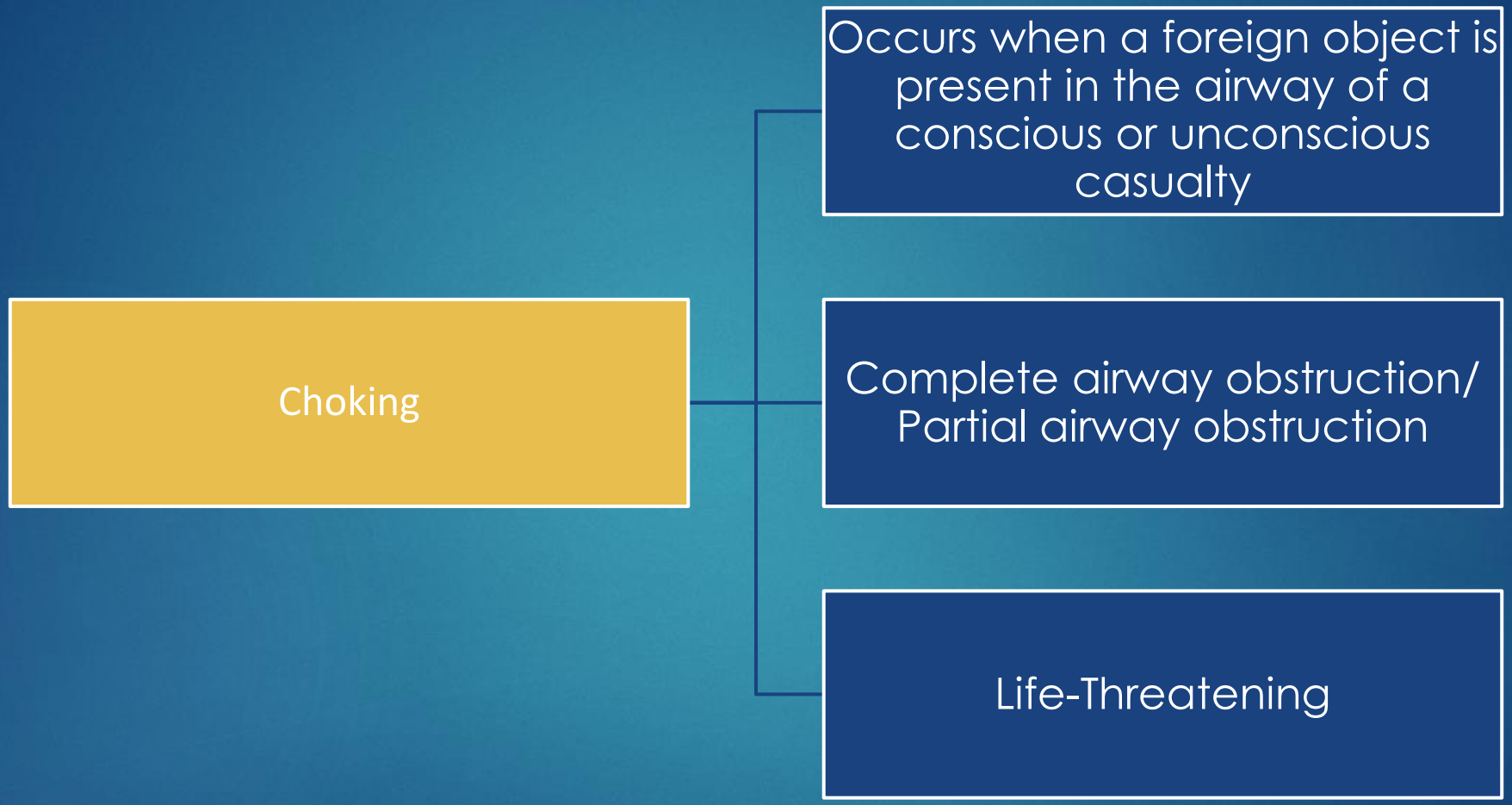
- Cool, clammy, pale skin
- Confusion, dizziness or reduced level of consciousness
- Nausea / vomiting
- Rapid and shallow breathing
- Thirst
- Weak, rapid pulse
- Cool, clammy, pale skin

Management

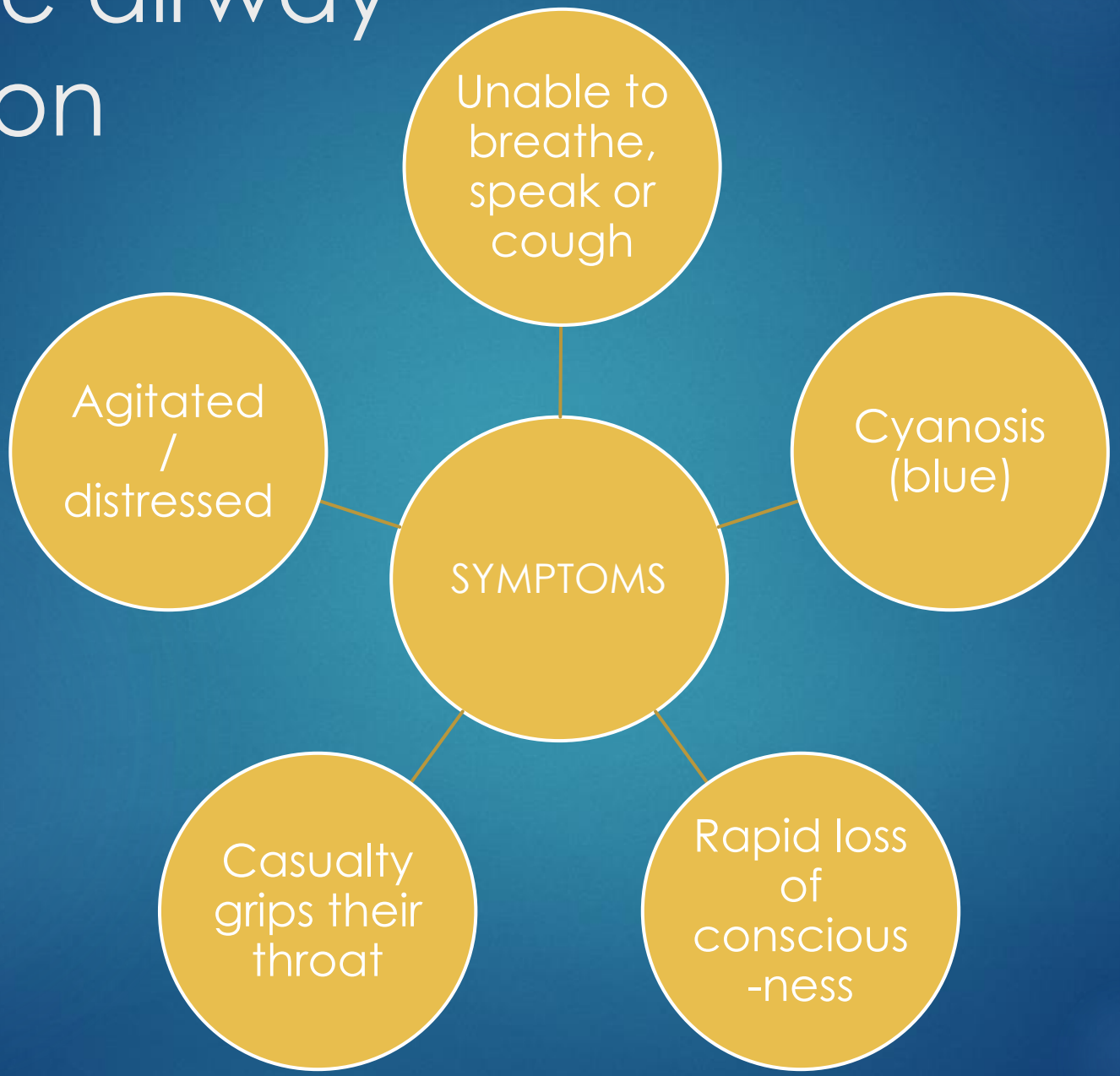
- Call emergency services immediately
- Control external bleeding
- Lie casualty flat on their back (i.e. supine)
- Keep casualty warm
- Reassure the casualty
- Monitor casualty's vital signs
- Give nothing by mouth (to avoid vomiting and/or surgery delay)

Children may have a normal pulse rate. A key indicator of shock is the colour and pallor of their skin.

CHOKING


Choking
Occurs when a foreign object is present in the airway of a conscious or unconscious casualty
Complete airway obstruction/ Partial airway obstruction
Life-Threatening

Complete airway obstruction



Management

- Call emergency services
- Deliver up to 5 back blows, checking and clearing casualty's mouth after each blow
- Deliver up to 5 chest thrusts, to standing or lying casualty against a firm surface (infants should be face up across your thigh)
- Alternate between back blows and chest thrusts
- If unconscious, commence CPR
- **DO NOT** apply abdominal pressure

Partial airway obstruction

Management

- Encourage casualty to keep coughing
- Reassure casualty
- DO NOT deliver back blows if cough is effective
- Call emergency services if blockage does not clear

What Not To Do

1. Don't ask them if they're ok. Instead ask them if they are choking

2. Don't attempt to perform the Heimlich manoeuvre – it can break ribs & cause damage

3. Don't put your fingers in mouth (blind swipe)

4. Don't give a breath first if you need to start CPR- start with compressions

5. Don't pick up a child and turn them upside down

- It always alarming how many people will try each of the above Don'ts, particularly the myth of the Heimlich manoeuvre. Just another reason not to take your First Aid advice from movies and TV!

Drowning

- Immersion in liquid that causes respiratory system impairment
- Drowning interrupts oxygen supply to the brain

Conscious casualty:

- If they can move, throw them a buoyant aid (life jacket, kickboard) or drag them from the water using a rope, towel, stick or umbrella.
- If paralysed, enter the water and support the neck to maintain spinal alignment

Unconscious casualty:

- Turn the casualty face up and remove them from the water

Drowning

Symptoms

- Coughing
- Chest pain
- Clenched teeth
- Frothy saliva
- Difficulty (or no) breathing
- Blue lips and tongue
- Unconsciousness

Management

- Call emergency services
- Roll casualty into recovery position to assess their airway and breathing
- Commence CPR (if required) and roll into recovery position if vomiting or regurgitation occurs
- Do not attempt to empty their stomach by external compression

SEIZURES

A Seizure may occur –

* In a person with epilepsy
* In almost any condition affecting the brain, **e.g. head injury, stroke, brain tumor, hypoxia**
* During withdrawal from alcohol, drug dependence and poisoning
* In children 6 months - 6 years, association with a high temperature **Febrile Convulsions**

SEIZURE

MANAGEMENT

- Protect from harm
- Note the time of the seizure
- Don’t put anything in the casualty's mouth.
- Avoid restraining the casualty
- Protect the head
- Recovery position as soon as possible
- 000

FEBRILE CONVULSIONS

MANAGEMENT

- Manage as for a seizure
- Plus remove excess clothing and apply cold compress
  - Do not allow shivering, nor put in cold bath

Faint

A brief episode of unconsciousness caused by a lack of blood flow to the brain.

Faint often occurs:

- In hot conditions with long periods of standing
- After sudden postural changes (e.g. from sitting to standing)
- During pregnancy
- From pain or emotional stress

Faint

Symptoms

- Dizzy or light headed
- Nausea
- Pale and sweaty
- Mild confusion or embarrassment
- Return of consciousness within a few seconds of lying flat

Management

- Lay casualty flat with legs raised
- Check for other injuries
- Roll pregnant woman turn onto left side
- Recovery position if unconscious
- Do not give food or drink
- Advise casualty to seek medical assessment

ALLERGIC REACTION
MILD TO MODERATE - USUALLY HARMLESS

Symptoms

* Hives or Welts on Skin
* Itching
* Abdominal pain
* Swelling of Face, Lips or Eyes
* Body releases histamines

Management

* Cold Compress – Ice
* Anti-Histamines

ANAPHYLAXIS

Is a severe allergic reaction where the airways rapidly swell – widening blood vessels (leading to shock) and interfering with breathing.

Triggers

There are numerous sources of antigen which may trigger anaphylactic reaction, common agents include -

INSECT BITES & STINGS	DRUGS Penicillin, Aspirin Anaesthetic Muscle Relaxants	FOOD Peanuts Dairy Seafood

Signs and symptoms

Signs

- Difficult/noisy breathing
- Swelling of tongue
- Swelling/tightness in throat
- Wheeze or persistent cough
- Hoarse Voice
- Persistent Dizziness
- Pale and floppy

ANAPHYLAXIS MANAGEMENT

- Remove allergen (if still present)
- Call for assistance
- Lay casualty flat. Do not allow to stand or walk. Do not hold infants upright
- Administer EpiPen into mid outer thigh without delay
- Call ambulance 000

Administering an EpiPen

1. Hold your hand in a fist around the EpiPen and pull off the blue safety release.
2. Hold the leg still and place the orange end onto the casualty's outer mid-thigh (with or without clothing).
3. Push down hard until a click is heard or felt.
   Hold the EpiPen in this position for 3 seconds.

Remember blue to the sky, orange to the thigh

EpiPen Jr
GREEN LABEL
recommended for children 7.5-20kg (approx. one to 5 years)

EpiPen
YELLOW LABEL
recommended for weight over 20kg (approx. 5 years to adult)

POISON

- INGESTED
- INHALED
- ABSORBED
- INJECTED

If casualty is **conscious** and not showing signs of illness, call –

THE POISONS INFORMATION CENTRE
131126

If casualty is **unconscious**, seizing, foaming at the mouth or any other life threatening condition – **call an ambulance on "000"**

Bites and Stings

Many Australian creatures (land and sea) can bite and/or sting

The following can be fatal Snakes, Funnel web spider, Blue-ringed octopus, Cone shell

Symptoms

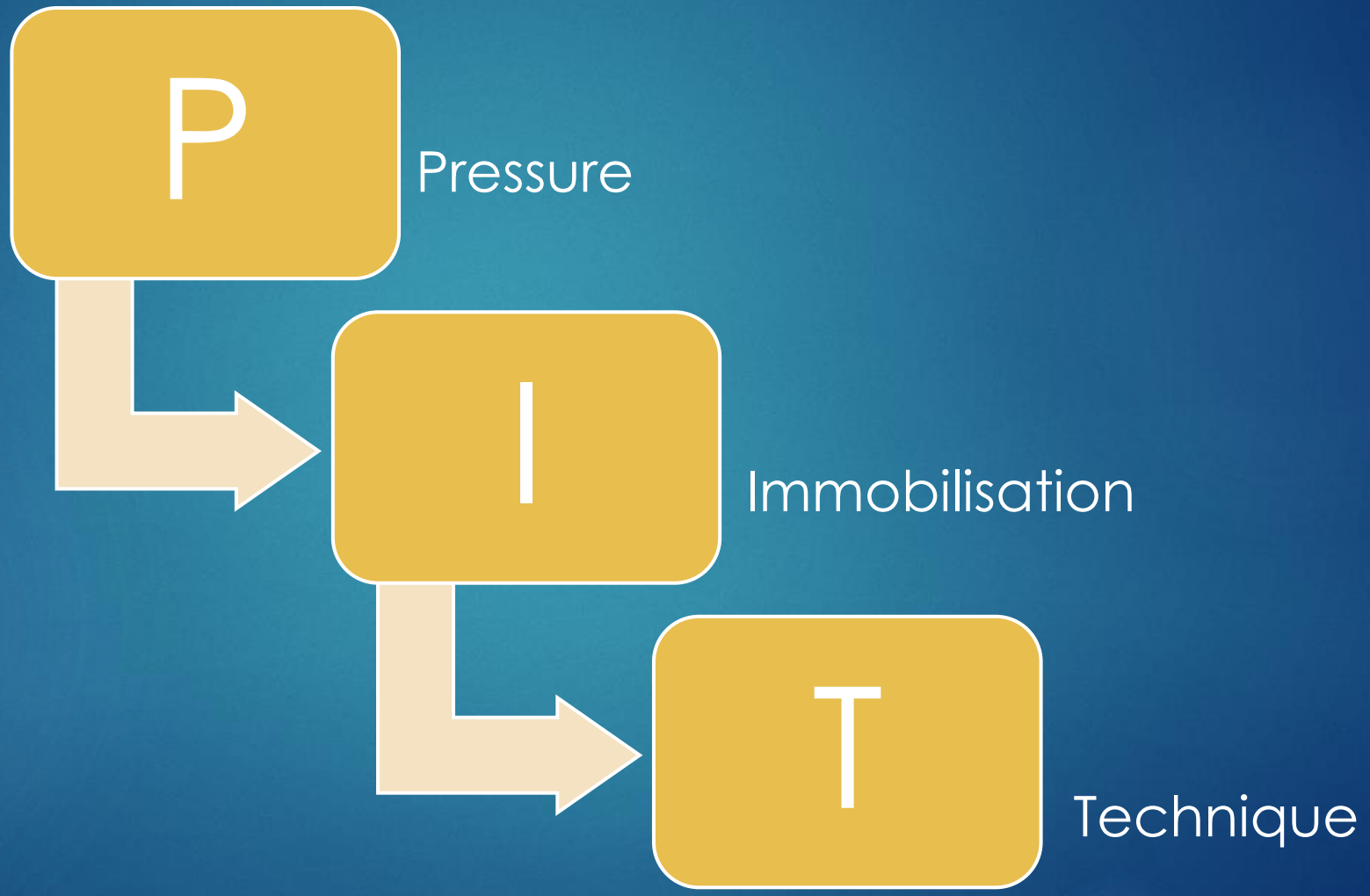
- Painless bite
- Droopy eyelids and blurred vision
- Difficulty breathing, speaking, swallowing
- Abdominal pain, nausea and vomiting
- Headache
- Tingling/numbness around mouth
- Profuse sweating and salivation
- Collapse and respiratory arrest

Management

- DRSABCD
- Assure casualty and advise rest
- Apply Pressure Immobilisation Technique (PIT) [next slide]
- Resuscitation (if needed) – takes priority over PIT

- SNAKE BITES
- FUNNEL WEB SPIDER
- CONE SHELL (SEA SNAIL)
- BLUE RING OCTOPUS

Bites and Stings Management



PIT slows the lymph flow and can inactivate some venoms

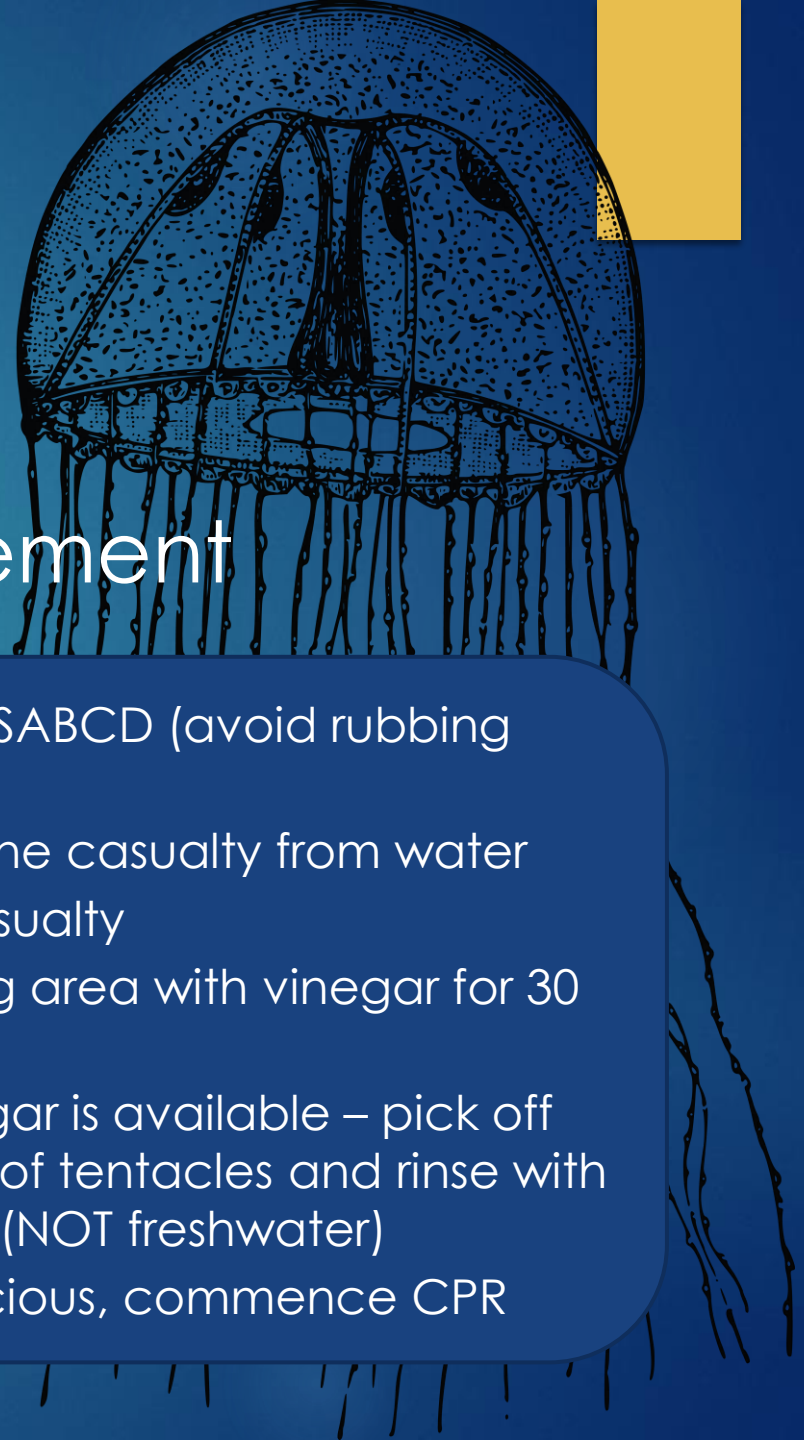
Bites and Stings- PIT

1	2	3
Apply a pressure bandage over the area of the bite. It should be firm enough that it is not easy to slide a finger between the bandage and the skin Mark an X on the bandage at the bite site	Apply a second bandage by winding upwards from the fingers or toes covering as much of the limb as you can. Do not remove clothes but bandage over the top to minimise unnecessary movement. Mark an X on the bandage at the bite site.	Splint the bandaged limb including the joints at either side of the bite area. Rest the casualty and the limb. Bring transport to the casualty rather than moving the casualty. Check circulation.

Bites and Stings

Many Australian creatures (land and sea) can bite and/or sting

The following can be fatal



Symptoms

Box jellyfish

- Severe immediate skin pain
- Frosted pattern of skin marks
- Collapse and cardiac arrest

Irukandji jellyfish

- Mild sting
- Severe generalised pain
- Nausea, vomiting, sweating
- Collapse and respiratory arrest

Management

- Follow DRSABCD (avoid rubbing sting)
- Remove the casualty from water
- Assure casualty
- Flood sting area with vinegar for 30 seconds
- If no vinegar is available – pick off remnants of tentacles and rinse with seawater (NOT freshwater)
- If unconscious, commence CPR

Bites and Stings

The following are not life-threatening (unless allergic)

Symptoms

Other spiders	Ticks
• Intense pain at bite site • Other symptoms differ depending on spider type	• Local irritation • Lethargy • Muscle weakness • Vision, breathing and swallowing problems

Bee / Wasp / Ant	Fish stings
• Intense pain at bite site • Redness / swelling	• Sharp barb • Painful wound • Bleeding

Management

For land animals:

- Remove insect / tick / scrape sting sideways
- Apply cold pack
- Apply PIT if allergic to bite/sting

For fish stings:

- Do not remove barb
- Apply hot water
- Use cold pack, if no pain relief

HYPOTHERMIA

COLD INDUCED ILLNESS

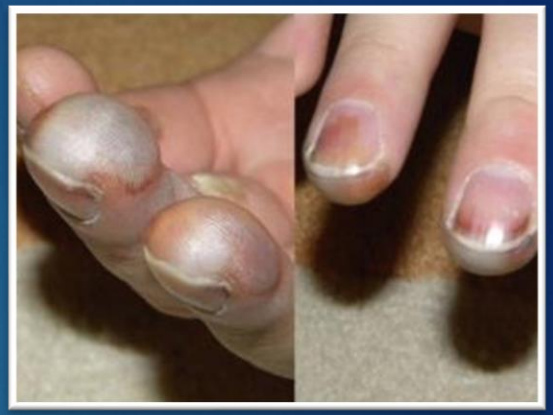
Core body temperature is 35 degrees or below.

- Remove wet clothing and replace with dry clothing
- Warm with blankets, jackets, towels, body heat
- Call “000”
- Give warm sugary drink to warm insides and pep the brain up with sugar.

COLD EXPOSURE

Exposure to cold conditions can lead to:

- **Frostbite:** Localised cold injury that occurs when the skin tissue freezes – hands and feet are typically at risk



Symptoms	Management
• White, waxy, hard skin – may be blotchy, swollen or blistering • Pain, itching or numbness	• Seek shelter • Treat hypothermia before frostbite • Gently remove clothing from affected area • Rewarm affected area slowly with body heat

Dehydration

Causes

- Increased sweating due to hot weather, exercise or fever
- Not drinking enough water
- Increased output of urine
- Excessive diarrhoea or vomiting
- Recovering from burns

- Water is essential for the human body to function
- The body cannot store water and must have fresh supplies every day

Symptoms

- Not sweating as much
- Body temperature keeps rising
- Tired and weak
- Headache
- Dry lips and nasal passages
- Mood swings, slow response
- Confusion / hallucinations
- Dark urine

Management

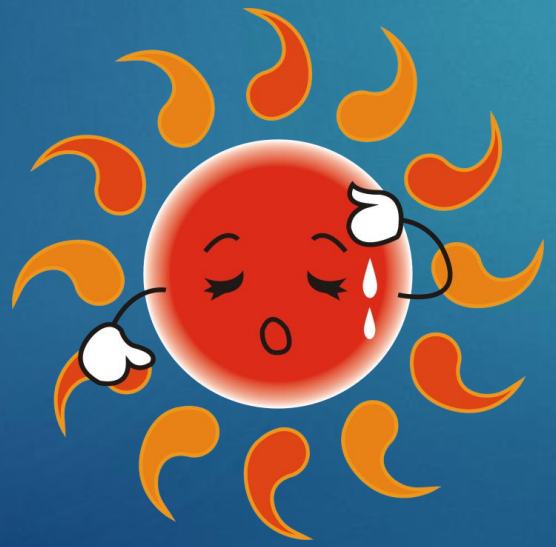
- Increase fluid intake

HEAT EXPOSURE

Exposure to hot conditions can lead to:•

- **Heat exhaustion**
  (mild – moderate hyperthermia):
  Body cannot lose heat fast enough.
  Profuse sweating occurs in an effort to lower temperature, leading to fluid loss and decreased blood volume (mild shock).

Heat stroke
(severe hyperthermia):
Body's normal cooling system fails. Body becomes too dehydrated, stops sweating and temperature rises to the point that internal organs are damaged.



- Move the casualty to a cool, shaded, ventilated area
- Lie the casualty flat with legs elevated
- Loosen and remove excess clothing
- Cool the casualty: Spraying with water, apply wrapped ice packs to neck/groin/armpits, drape wet sheet over body, fan
- If fully conscious, give the casualty cool water to drink
- Seek medical help or call emergency services if you are in doubt

HYPERTHERMIA

HEAT INDUCED ILLNESS

Heat Exhaustion

Heat Stroke

- Sweaty, pale, thirsty, headaches, dizzy, nausea, fainting, hot to touch
- **Heat Stroke -** Temperature rises above 40degs
- STRIP off as much clothing as possible
- SOAK with any available water
- Apply ice packs to the armpits and groin
- FAN vigorously by whatever means possible
- CALL 000

Hyperventilation

- Results from stress-related or deliberate over-breathing
- Upsets the balance of oxygen and carbon dioxide

Symptoms

- Rapid breathing and pulse
- Light-headedness
- Chest discomfort
- Blurred vision
- Tingling in fingers and toes
- Twitching hands and fingers
- Anxiety

Management

- Calm and reassure casualty
- Encourage slow and regular breathing (count breaths aloud)
- Seek medical aid to exclude other conditions
- DO NOT use a bag for rebreathing

END TOPIC 2